

**HIGHER MEDICAL TRAINING**

**CURRICULUM**

**FOR**

**REHABILITATION MEDICINE**

**INCLUDING SPINAL**

**CORD INJURIES**

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## **FOREWORD**

This document outlines the curriculum to be followed by specialist registrars in rehabilitation medicine including those wishing to prepare for consultant practice in Spinal Cord Injury. It details the general principles of rehabilitation, and specifies the knowledge, skills and experience which should be acquired during the obligatory and optional modules within the four year training programme. It also outlines the knowledge (which should be acquired by attendance at courses, conferences and observational attachments) of those aspects of rehabilitation which have not been covered elsewhere in the specialist registrar's training.

The regional programme director in rehabilitation medicine will design the training specifically for each specialist registrar in consultation with the postgraduate dean and the consultants who will supervise training at different stages. Formal assessments of progress will be made at the end of each attachment by the supervising consultant, and annually by a regional assessment committee. These assessments are designed to be helpful and constructive to the specialist registrar.

Examples of the documentation which will be used in these assessments are contained within the Training Record file issued to each trainee on enrolment. *It is the trainee's responsibility to ensure that all original assessment reports are kept safely within the Training Record file.* The SAC in Rehabilitation Medicine will receive copies of the annual reviews and associated papers. The Training Record will be submitted at the end of the training programme and will be used to determine the trainee's application for a Certificate of Completion of Specialist Training (CCST).

## **BACKGROUND**

Rehabilitation physicians require a broad range of clinical skills, not only medical, but also psychological, technical and social. A sound knowledge and experience of the wide variety of disorders encountered is required together with skills to co-ordinate a range of medical and paramedical expertise, social agencies and personal support services. Increasingly, Rehabilitation Medicine is practised full time though it will continue to be practised in conjunction with other specialities in some posts. These specialities particularly include rheumatology and neurology. Spinal Cord Injuries, formerly a separately defined specialty is now, for training purposes, amalgamated with Rehabilitation Medicine. For general information on Higher Medical Training, trainees should consult the JCHMT Training Handbook (revised May 1999).

## **Entry Requirements**

Most candidates for Higher Medical Training in Rehabilitation Medicine will normally have completed a minimum of two years General Professional Training in approved clinical posts and obtained the MRCP (UK) or (I). The definition of General Professional Training is given in the JCHMT handbook.

A period of experience in neurology, rheumatology, geriatric medicine or rehabilitation medicine before entry to Higher Medical Training is considered desirable although not essential.

Rehabilitation medicine, however, does require a broad range of clinical skills and thus a background in other specialities can provide an entirely acceptable entry qualification into the specialty. The FRCS, AFRCs, MRCS (since 1997), MRCPsych, MRCPGP or another relevant and equivalent clinically based UK qualification will be entirely acceptable for entry into the specialty. Candidates possessing any such qualification will be required to have completed prior basic professional training according to the regulations pertaining to that particular specialty. Other relevant and equivalent overseas qualifications may also be considered - individuals wishing to enter the specialty with such qualification should contact the JCHMT Office directly.

## **Duration and Organisation of Training Programme**

The normal duration of training in Rehabilitation Medicine is four years. No SpR can obtain a CCST in Rehabilitation Medicine until satisfactory completion of the compulsory elements of the training programme. The SAC will expect to see evidence of broad based experience and thus some exposure to the optional modules of the programme is deemed highly desirable. However, the SAC realises that some individuals will want to specialise in a particular aspect of rehabilitation medicine (eg spinal cord injury, amputee rehabilitation or neurological rehabilitation). In such circumstances the programme can be skewed to accommodate such requirements (see later). Up to one year in other relevant specialities (eg neurology, rheumatology, geriatric medicine) is also allowable as part of the four year programme. Overall, the SAC wish to be as flexible as possible in approval of individual training, but always subject to completion of the compulsory training elements and evidence of broad experience.

Individual elements of the training programme will be supervised by named consultant trainers and the whole programme overseen by the Regional Programme Director. Individual programmes may be adjusted during the training period in order to accommodate developing interests. Such changes will usually be made after consultation with consultant trainers and the Programme Director. The SAC may also need to be involved in case a change in CCST date is necessary.

### **On-Call Requirements**

The SAC does not wish to be prescriptive about on-call requirements. Many elements in the rehabilitation training programme, particularly the optional modules, will not have any on-call responsibilities. However, it is likely that the compulsory clinical elements will carry on-call responsibility. It would be unusual for a CCST to be issued if the trainee had not been exposed to any on-call requirements but no precise regulations are laid down on this point.

### **INTRODUCTION**

The World Health Organisation examined the consequences of disease and produced the International Classification of Impairments, Disabilities and Handicaps (WHO 1980) as a theoretical framework within which the consequences might be categorised as follows:

*Impairment* - "In the context of health, an impairment is any loss or abnormality of a psychological, physiological or anatomical structure or function".

*Disability* - "In the context of health, disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in a manner, or within the range, considered normal for a human being".

*Handicap* - "In the context of health, handicap is a disadvantage for a given individual that limits or prevents the fulfilment of a role that is normal (depending on age, sex and social and cultural factors) for that individual".

According to the WHO, therefore, the practice of rehabilitation includes all measures aimed at reducing the impact of disabling and handicapping conditions, and at enabling disabled people to achieve optimum social integration. The disabled person's environment and family situation determine the outcome of any programme of rehabilitation to a great extent. This fact appears to be under-valued in the WHO model, which has led to it being criticised by organisations of people with disabilities.

A distinction is often drawn between "medical" and "social" models of disability. The medical model (often now termed the individual model) locates the "problem" within the individual and implies that it stems from their functional limitations or psychological losses. The social model of disability views individual limitations (of whatever kind) as only one factor contributing to disability: far more important is society's failure to ensure that the needs of disabled people are taken fully into account in its social organisation.

The negative connotations of the medical model constitute a critique of social and professional attitudes which have often been negative and patronising towards the disabled people. However, this polarisation of views is more apparent than real, for the relative importance of different perspectives varies between individuals and at different stages of recovery from injury or disease in the same person. It cannot be doubted that disabled people, like everyone else, have a right to high quality health care and to the best professional advice which is available.

Many doctors are comfortable only within the narrow boundaries of their speciality. This approach is never adequate to meet the needs of disabled people and is particularly inappropriate for people with complex disabilities. Rehabilitation medicine is one of the specialities which focus not only on the diagnosis and management of disease, but also on the amelioration of disability and handicap. *Rehabilitation medicine is thus a specialty of medicine involved with the prevention and reduction of disability and handicap arising from impairments, and the medical management of disability from a physical, psychosocial and vocational point of view.* The focus of the speciality is on people with complex disabilities; many of these are younger adults although the expertise of a rehabilitation medicine consultant can often make a contribution to the management of children and of elderly people.

This document defines the knowledge, skills, experience and attitudes which should be acquired in the course of training to be a Consultant in Rehabilitation Medicine. Doctors involved in the management of disability fulfil not only the traditional diagnostic and therapeutic roles common to all medical practitioners, but have a major role co-ordinating programmes of rehabilitation for disabled people. Furthermore, they often need to act as an advocate on behalf of the disabled person to help them gain access to services they require. Where a service in their area is under-developed, they should seek to promote its development. The case for such development will be supported by research and audit work which they carry out, and be furthered by the education and teaching they give to others.

## **THE ROLE OF THE CONSULTANT IN REHABILITATION MEDICINE**

There have been a number of official reports over the years which have considered the role of the consultant in rehabilitation medicine. The following summary of the duties of a consultant in rehabilitation medicine is based on the most recent of these, the Scott Report, "Rehabilitation Services in Scotland" (SOHHD, 1993): - "*The overriding function of the Consultant in Rehabilitation Medicine will be to encourage a positive attitude to rehabilitation and disability throughout the hospital and community services, across the boundaries of the many agencies involved and in the community at large*". More specifically the role will include the following:

### **Clinical**

To take responsibility for identifying a diagnosis, medical needs and providing appropriate medical interventions for disabled people in both the acute hospital and community settings.

To take responsibility, as part of a multidisciplinary team, for the clinical management of disabled people referred directly by general practitioners and other hospital consultants.

These people will include those referred for rehabilitation of common clinical problems, those who require the special expertise and facilities of the consultant and team, and individuals with complex disabilities that the referring clinician has not the time, expertise, contacts or facilities to manage him/herself.

To identify and assess disability and co-ordinate a definitive programme of rehabilitation using a multidisciplinary team approach if appropriate;

To ensure that there are agreed short term and long term objectives for the management of those with physical disability including appropriate co-ordinated discharge and follow up arrangements and liaison with others involved in the care of disabled people e.g. community care workers, disablement employment advisers;

To provide a consultation and advice service to other clinicians, including general practitioners, who are planning and implementing rehabilitation programmes for disabled people under their care in hospital or in the community;

To provide the best quality rehabilitation service possible within the resources available.

To develop multidisciplinary audit.

In order to undertake these duties the consultant will need appropriate facilities (usually including beds) and staff, including junior doctors, nurses, therapists, other paramedical staff appropriate to the work of the unit, and a secretary.

### **Managerial**

1 To agree working relationships with general practitioners and with colleagues in other specialities, in particular geriatric medicine, paediatrics, psychiatry, neurology, cardiology, vascular surgery, orthopaedics.

2 To assist managers to develop service specifications and operational plans relating to rehabilitation and disability and to participate in service specification negotiation with commissioners.

3 To liaise with the various Health Authorities responsible for the purchase and provision of hospital and community health services to physically disabled people; to assist in identifying and developing rehabilitation services required at local level; and to act as a point of contact for representatives of commissioners from neighbouring Health Authorities which provide acute, rehabilitation and long term services for physically disabled people.

4 To establish liaison with other agencies, such as Social Services, Housing, Education, Employment, Voluntary Agencies and the private sector, involved in the provision of services to physically disabled people in the community.

5 To take on responsibility for some or all of the following, depending on the existing local organisation of services eg:-

- rehabilitation ward or unit

- wheelchair assessment and provision
- special seating
- amputee rehabilitation units
- disabled school leavers
- community teams
- orthotics services and others as appropriate

### **Education and Research**

To undertake research into the benefits of a wide variety of methods and treatments including the development of outcome measures and the evaluation of equipment and appliances

To develop undergraduate and postgraduate teaching in the specialty of rehabilitation medicine and to contribute to the training of nurses and professions allied to medicine, other health and related professionals and disabled people and their carers, in both a hospital and community setting.

### **GENERIC SKILLS AND ATTITUDES PERTAINING TO ALL HIGHER MEDICAL TRAINING**

#### **INTRODUCTION**

Defining the objectives of the generic skills of the SpRs in training in any of the medical specialties has relied on two documents; the first is "Good Medical Practice" produced by the GMC; the second is the generic curriculum being developed for the SHOs. The JCHMT has set out the generic knowledge skills and attitudes (or, more readily assessed, behaviour) that it believes are common to all of the medical specialties. It is intended that the document should be incorporated in all specialty curricula, amended if appropriate to individual specialty requirements. All SpRs must be able to meet these objectives. No time scale is offered for these competencies but they must all be attested for before completion of training. However failure to achieve satisfactory progress in meeting many of these objectives at an early stage would be cause for concern about the SpRs ability to be adequately trained.

The generic curriculum has been set out in the following headings:

1. Good clinical care
  - a) History, Examination, Investigations, Treatment (therapeutics) and Correspondence
  - b) Managing chronic disease
  - c) Time management and decision making
2. Communication skills.
3. Maintaining good medical practice.
  - a) Learning

4. Maintaining trust
  - a) Professional behaviour
  - b) Ethics and Legal Issues
  - c) Patient education and disease prevention
5. Working with Colleagues
6. Team working and Leadership skills
7. Teaching
8. Research
9. Clinical Governance
  - a) Risk management
  - b) Evidence, Audit & Guidelines
10. Structure and Principles of management
11. Information use and management
12. Cross specialty skills
  - a) Admissions and discharges
  - b) Discharge planning
  - c) Resuscitation
  - d) Nutrition

## 1. GOOD CLINICAL CARE

### A) HISTORY, EXAMINATION, INVESTIGATIONS, TREATMENT [THERAPEUTICS] & NOTEKEEPING SKILLS:

Objective: To be able to carry out specialist assessment of patients by means of clinical history taking and physical examination and use of relevant treatments and investigations.

| Subject                                | Knowledge  | Skills  | Attitudes   |
|--|--|---|---|
| (i) History                            | Define the patterns of symptoms found in patients presenting with disease.   | Be able to take and analyse a clinical history in a relevant succinct and logical manner.<br>Be able to overcome difficulties of language, physical and mental impairment.<br>Use interpreters and advocates appropriately. | Show empathy with patients.<br>Appreciate the importance of psychological factors of patients and relatives.<br>Appreciate the interaction of social factors and the patient's illness.   |
| (ii) Examination                       | Define the patho physiological basis of physical signs. Define the clinical signs found in diseases.   | Be able to perform a reliable and appropriate examination.  | Respect patients' dignity and confidentiality.<br>Acknowledge cultural issues.<br>Appropriately involve relatives.<br>Appreciate the need for a chaperone.  |
| (iii) Investigations including imaging | Define the pathophysiological basis of investigations.<br>Define the indications for investigations.<br>Define the risks and benefits of investigations.<br>Know the cost effectiveness of individual investigation. | Ability to interpret the results of investigations.<br>Ability to perform investigations competently where relevant.<br>Ability to liaise and discuss investigations with colleagues and to order them appropriately.       | Understand the importance of working with other health care professionals and team working.<br>Show a willingness to provide explanation to patient as to rationale for investigations, and possible unwanted effects.                        |
| (iv) Treatment (Therapeutics)          | Explain the scientific theory relating to Pharmacology and the pathophysiology of pain.  | Ability to accurately assess the patients needs.<br>Ability to initiate the appropriate prescription of analgesia, blood products and medication.<br>Ability to manage transfusion reactions and side-effects.              | Show appropriate attitudes towards patients and their symptoms and be conscious of religious or other philosophical contexts particularly in the arena of blood products.<br>Clearly and openly explain treatments and side effects of drugs. |

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| <p>(v)<br/>Note keeping,<br/>letters etc</p> | <p>Be able to write discharge summaries, discharge letters, outpatient letters, medico- legal reports.<br/>Use of email, internet and the telephone.<br/>Define the structure, function and legal implications of medical records &amp; medico-legal reports.<br/>Know the relevance of the data protection pertaining to patient confidentiality</p> | <p>Record concisely, accurately, confidentially and legibly the appropriate elements of the history, examination, results of investigations, differential diagnosis and management plan.<br/>Date and sign all records.</p> | <p>Appreciate the importance of timely dictation cost effective use of medical secretaries and the growing use of electronic communication. Be aware of the need for prompt and accurate communication with primary care and other agencies.<br/>Show courtesy towards medical secretaries and clerical staff.</p> |
|--|---|---|--|

*B) MANAGING CHRONIC DISEASE*

Objective: To be able to carry out specialist assessment and treatment of patients with chronic disease and to demonstrate effective management of chronic disease states

| <b>Subject</b>                        | <b>Knowledge</b>   | <b>Skills</b>   | <b>Attitudes</b>   |
|---------------------------------------|--|---|--|
| <p>Management of chronic disease.</p> | <p>Define:<br/>The clinical presentation and natural history of patients with chronic disease.<br/>The role of rehabilitation services, pain control and palliative care.<br/>The concept of quality of life and how it can be measured.</p> | <p>Maintain hope whilst setting long term realistic goals.<br/>Develop long term management plans.<br/>Act as patient advocate in negotiations with support services.<br/>Have skills in palliative care including care of the dying.</p> | <p>Treating each patient as an individual.<br/>Appreciate the effects of chronic disease states on patients and their relatives.<br/>Develop and sustain supportive relationships with patients with chronic disease.<br/>Appreciate the impact of chronic disease on patients and their relatives.<br/>Appreciate the importance of co-operation with primary care.</p> |

*C) TIME MANAGEMENT AND DECISION MAKING:*

Objective: To demonstrate that the trainee has the knowledge, skills and attitudes to manage time and problems effectively.

| <b>Subject</b>       | <b>Knowledge</b>   | <b>Skills</b>  | <b>Attitudes</b>   |
|----------------------|--|--|--|
| (i) Time management  | Know which patients/tasks take priority.                         | Start with the most important tasks.<br>Work more efficiently as clinical skills develop.<br>Recognise when he/she is falling behind and re-prioritise or call for help. | Have realistic expectations of tasks to be completed by self and others.<br>Willingness to consult and work as part of a team. |
| (ii) Decision making | Understand clinical priorities for investigation and management. | Analyse and manage clinical problems.  | Be flexible and willing to change in the light of changing conditions.<br>Be willing to ask for help.                          |

**2. COMMUNICATION SKILLS:**

Objective: Demonstrate effective communication with patients, relatives and colleagues in the circumstances outlined below.

| <b>Circumstance</b>       | <b>Knowledge</b>  | <b>Skills</b>  | <b>Attitudes</b>  |
|---------------------------|---|--|---|
| (i) Within a consultation | Know how to structure the interview to identify the patient's: concerns / problem list / priorities expectations understanding acceptance | Listen.<br>Use open questions followed by appropriate closed questions.<br>Avoid jargon and use familiar language.<br>Be able to communicate both verbally and in writing to patients whose first language may not be English in a manner that they understand.<br>Use interpreters appropriately.<br>Give clear information and feedback to patients and share information with relatives when appropriate<br>Reassure 'worried well' patients. | Demonstrate an understanding of the need for:<br>involving patients in decisions<br>offering choices<br>respecting patients views<br>dress and appearance should be appropriate to the clinical situation and patient sensibility |

|                                    |   |  |   |
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| (ii) Breaking bad news             | Know how to structure the interview and where it should take place.<br>Be aware of the normal bereavement process and behaviour.<br>Have awareness of organ donation procedures and role of local transplant co-ordinators. | Be able to break bad news in steps appropriate to the understanding of the individual and be able to support distress.<br>Avoid jargon and use familiar language.<br>Encourage questions.<br>Maintain appropriate hope whilst avoiding inappropriate optimism. | Act with empathy, honesty and sensitivity.  |
| (iii) Complaints                   | Have awareness of the local complaints procedures.<br>Have an awareness of systems of independent review.   | Manage dissatisfied patients / relatives.<br>Anticipate potential problems.  | Act with honesty and sensitivity and promptly.<br>Be prepared to accept responsibility. |
| (iv) Communication with Colleagues | Know:<br>how to write a problem orientated letter & discharge summary to communicate with members of the MDT<br>when to phone a GP<br>when to phone a patient at home   | Use appropriate language.<br>Select an appropriate communication method.   | Be prompt and respond courteously and fairly.   |

### 3. MAINTAINING GOOD MEDICAL PRACTICE

Objective: To inculcate the habit of life long learning

| Subject            | Knowledge                                   | Skills   | Attitudes   |
|--------------------|---|--|---|
| Life long learning | Define continuing professional development. | Recognise and use learning opportunities.<br>To use the potential of study leave to keep oneself up to date. | Be:<br>self motivated.<br>eager to learn,<br>Show:<br>Willingness to learn from colleagues.<br>willingness to accept criticism. |

### 4. MAINTAINING TRUST

#### A) PROFESSIONAL BEHAVIOUR:

Objective: To ensure that the trainee has the knowledge, skills and attitudes to act in a professional manner at all times.

| Subject                          | Knowledge  | Skills  | Attitudes  |
|----------------------------------|--|---|--|
| (i) Continuity of care           | Understand the relevance of continuity of care.  | Ensure satisfactory completion of reasonable tasks at the end of the shift/day with appropriate handover<br>Documentation of/for handover.<br>Make adequate arrangements to cover leave.  | Recognise the importance of:<br>punctuality<br>attention to detail.  |
| (ii) Doctor-patient relationship | Understand all aspects of a professional relationship.<br>Establish the limiting boundaries surrounding the consultation.<br>Deal with challenging behaviour in patients which transgress those boundaries, eg | Help the patient appreciate the importance of cooperation between patient and doctor.<br>Develop the relationship that facilitates solutions to patient's problems.<br>Deal appropriately with behaviour falling outside the boundary of the agreed doctor patient relationship. in patients, e.g. aggression, violence, sexual harassment. | Adopt a non-discriminatory attitude to all patients and recognise their needs as individuals.<br>Seek to identify the health care belief of the patient. Acknowledge patient rights to accept or reject advice.<br>Secure equity of access to health care resources for minority groups. |

|                                  |  |  |   |
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|                                  | aggression, violence, racism and sexual harassment.  |  |   |
| (iii) Recognises own limitations | Know the extent of one's own limitations and know when to ask for advice.  |  | Be willing to consult. and to admit mistakes.                         |
| (iv) Stress                      | Know the effects of stress<br>Have a knowledge of support facilities for doctors.  | Develop appropriate coping mechanisms for stress and ability to seek help if appropriate.                        | Recognise the manifestations of stress on self & others.              |
| (v) Relevance of outside bodies  | Have an understanding of the relevance to professional life of:<br>The Royal Colleges<br>GMC<br>Postgraduate Dean<br>Defence unions<br>BMA<br>Specialist Societies | Recognise situations when appropriate to involve these bodies/individuals.                                       | Be open to constructive criticism.<br>Accept professional regulation. |
| (vi) Personal health             | Know of occupational health services.<br>Know of one's responsibilities to the public.<br>Know not to treat oneself or one's family.                               | Recognise when personal health takes priority over work pressures and to be able to take the necessary time off. | Recognise personal health as an important issue.                      |

*B) ETHICS AND LEGAL ISSUES:*

Objective: To ensure the trainee has the knowledge and skills to cope with ethical and legal issues which occur during the management of patients with general medical problems.

| <b>Subject</b>   | <b>Knowledge</b>   | <b>Skills</b>   | <b>Attitudes</b>   |
|--|--|---|--|
| (i) Informed consent   | Know the process for gaining informed consent<br>Understand appropriateness of consent to post mortem.<br>How to gain consent for a research project                                 | Give appropriate information in a manner patients understand and be able to gain informed consent from patients<br><br>Appropriate use of written material  | Consider the patient's needs as an individual  |
| (ii) Confidentiality   | Be aware of relevant strategies to ensure confidentiality.<br>Be aware of situations when confidentiality might be broken  | Use and share all information appropriately<br><br>Avoid discussing one patient in front of another<br><br>Be prepared to seek patients wishes before disclosing information  | Respect the right to confidentiality.  |
| (iii) Legal issues, particularly those relating to: death certification role of the Coroner/ | Know the legal responsibilities of completing death certificates.<br>Know the types of deaths that should be referred to the Coroner/ Procurator Fiscal.<br>Know the indications for | Completion of death certificates.<br>Liaison with the Coroner/Procurator Fiscal.<br>Check whether the patient has an advance directive or living will.<br>Able to obtain suitable evidence or know whom to consult if in doubt. | Show attention to detail and recognise pressures of time.<br>Respect living wills and advance directives.<br>Act with compassion at all times. |

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| Procurator<br>Fiscal<br>mental illness<br>advance<br>directives and<br>living wills<br>DVLA | section under the mental health act.<br>Know the conditions that patients should report to the DVLA.<br>Know responsibilities in serious criminal matters. |  |  |
|---|--|--|--|

*C) PATIENT EDUCATION AND DISEASE PREVENTION:*

Objective: To ensure that the trainee has the knowledge, skills and attitudes to be able to educate patients effectively.

| <b>Subject</b>   | <b>Knowledge</b>   | <b>Skills</b>  | <b>Attitudes</b>   |
|--|--|--|--|
| (i) Educating patients about: disease investigations therapy | Know investigation procedures including possible alternatives / choices.<br>Be aware of strategies to improve adherence to therapies.      | Give information to patients clearly in a manner that they can understand including written information.<br>Encourage questions.<br>Negotiate individual treatment plans including action to be taken if patient deteriorates or improves. | Consider involving patients in developing mutually acceptable investigation plans.<br>Encourage patients to access:<br>further information<br>patient support groups |
| (ii) Environmental & lifestyle risk factors                  | Understand the risk factors for disease including:<br>diet<br>exercise<br>social deprivation<br>occupation<br>substance abuse<br>behaviour | Advise on lifestyle changes.<br>Involve other health care workers as appropriate.  | Suppress any display of personal judgement.  |

|                               |  |   |  |
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| (iii) Smoking                 | Know:<br>Effects of smoking on health<br>Implications of addiction<br>Smoking cessation strategies   | To be able to advise on smoking cessation and supportive measures.<br>Identify 'ready to quit' smokers.   | Consider the importance of support during smoking cessation.   |
| (iv) Alcohol                  | Understand the effects of alcohol on health and psychosocial well-being.<br>Know of local support groups /agencies.  | Advise on drinking cessation.   | Suggest patient support groups as appropriate.<br>Suppress any display of personal judgement.                                  |
| (v) Illicit Drugs             | Know the effects of common illicitly taken drugs.<br>Legislation and Support Services.<br>What to do if a patient takes an overdose of drugs.                                  | Be able to use detoxification services.<br>Understand prevention policies and liaise with psychiatric services.<br>Deal with other prevention and liaison services. | Provide sympathetic help.<br>Suppress any display of personal judgement.   |
| (vi) Epidemiology & screening | Know the methods of data collection and their limitations.<br>Know diseases that are notifiable.<br>Know principles of 1 <sup>o</sup> & 2 <sup>o</sup> prevention & screening. | Assess an individual patient's risk factors.<br>Encourage participation in appropriate disease prevention or screening programmes.                                  | Consider the:<br>positive & negative aspects of prevention<br>importance of patient confidentiality<br>Respect patient choice. |

## 5. WORKING WITH COLLEAGUES:

Objective: To demonstrate good working relationships with Colleagues

| Subject   | Knowledge  | Skills  | Attitudes  |
|---|--|---|--|
| (i) Interactions between: hospital & GP hospital & other agencies e.g. social services medical and surgical specialties | <p>Know:</p> <p>The roles and responsibilities of team members.</p> <p>How a team works effectively.</p> <p>The roles of other clinical specialties and their limitations.</p> <p>The role of surgery and its limitations.</p> | <p>Delegate, show leadership and supervise safely</p> <p>Be able to communicate effectively.</p> <p>Handover safely.</p> <p>Seek advice if unsure.</p> <p>Recognise when input from another specialty is required for individual patients.</p> <p>Be able to work effectively with GPs, other medical and surgical specialists and other health care professionals.</p> | <p>Show respect for others opinions.</p> <p>Be conscientious and work co-operatively.</p> <p>Respect colleagues, including non medical professionals, and recognise good advice.</p> <p>Recognise own limitations.</p> |

## 6..TEAM WORKING & LEADERSHIP SKILLS

Objective: To demonstrate the ability to work in clinical teams and to have the necessary leadership skills

| Subject   | Knowledge   | Skills   | Attitudes   |
|---|---|--|---|
| <p>Clinical teams.</p> <p>Respect others opinion</p> <p>Effective leadership skills</p> | <p>Roles &amp; responsibilities of team members.</p> <p>How a team works.</p> <p>Ensuring colleagues understand the individual roles and responsibilities of each team member.</p> <p>Own professional status and specialty</p> <p>A knowledge of the field.</p> <p>The capacity to perceive the need for action and initiate that action</p> | <p>Respect skills and contribution of colleagues to be conscientious and work constructively.</p> <p>Respect for others opinion.</p> <p>To recognise your own limitations</p> <p>Objective setting; Lateral thinking; Planning; Motivating; Organising; Setting example; Negotiation skills.</p> | <p>Recognise own limitations.</p> <p>Enthusiasm; integrity; courage of convictions; imagination; determination; energy; and professional credibility.</p> |

## 7. TEACHING AND EDUCATIONAL SUPERVISION:

Objective: To demonstrate the knowledge, skills and attitudes to provide appropriate teaching, learning and assessment opportunities for

| <b>Subject</b>   | <b>Knowledge</b>   | <b>Skills</b>  | <b>Attitudes</b>   |
|--|--|--|--|
| (i) To have the skills, attitudes and practices of a competent teacher | Identify adult learning principles.<br>Identify learner needs.<br>Structure of a teaching activity.<br>Varied teaching strategies.<br>Identify learning styles.<br>Principles of evaluation. | Facilitate learning process.<br>Identify learning outcomes.<br>Construct educational objectives.<br>Design and deliver an effective teaching event.<br>Communicate effectively with the learners.<br>Use effective questioning techniques.<br>Teach large and small groups effectively.<br>Select and use appropriate teaching resources.<br>Give constructive effective feedback.<br>Evaluate programmes and events<br>Use different media for teaching that are appropriate to the teaching setting. | Demonstrate a willingness and enthusiasm to teach.<br>Show respect for the learner.<br>Demonstrate a professional attitude towards teaching.<br>Show commitment to teach.<br>Demonstrate a learner centred approach to teaching. |
| (ii) Assessment  | Know the principles of assessment<br>Know different assessment methods<br>Define formative and summative assessment  | Use appropriate assessment methods<br>Give constructive, effective feedback  | Be honest and objective when assessing performance.  |
| (iii) Appraisal  | Know the principles of appraisal<br>Know the structure of the appraisal interview  | Conduct effective appraisals   | Show respect for the person being appraised.   |

## 8. RESEARCH [Where undertaken]

Trainees are encouraged to undertake a period of full time research and have a good knowledge of research methodology. There should be active involvement with research projects throughout the training period.

| Subject  | Knowledge  | Skills   | Attitudes   |
|--|--|--|---|
| To be able to plan and analyse a research project. | Know how to design a research study.<br>Know how to use appropriate statistical methods.<br>Know the principles of research ethics.<br>Know how to write a scientific paper.<br>Sources of research funding. | Undertake systematic critical review of scientific literature.<br>Ability to frame questions to be answered by a research project.<br>Develop protocols and methods for research.<br>Be able to use databases.<br>Be able to accurately analyse data.<br>Be able to write a scientific paper.<br>Have good written and verbal presentation skills. | Demonstrate curiosity and a critical spirit of enquiry.<br>Ensure patient confidentiality.<br>Demonstrate a knowledge of the importance of ethical approval and patient consent for clinical research.<br>Humility. |

## 9. CLINICAL GOVERNANCE

Objective: Demonstrate an understanding of the context, the meaning and the implementation of Clinical Governance.

| Subject  | Knowledge   | Skills   | Attitudes   |
|--|---|--|---|
| (i) The organisational framework for Clinical Governance at local, health authority and national levels. | Define the important aspects of Clinical Governance.<br>Medical and clinical audit.<br>Research and Development.<br>Integrated care pathways. | Be an active partaker in clinical governance.<br>Be able to undertake medical and clinical audit. Be actively involved in audit cycles.<br>Be active in research and development.<br>Critically appraise medical data research.<br>Practice evidence based medicine.<br>Aim for clinical effectiveness (best practice) at all times. | Make the care of your patient your first concern.<br>Respect patients privacy, dignity and confidentiality.<br>Be prepared to learn from mistakes, errors and complaints.<br>Recognise the importance of team work.<br>Share best practice with others. |

|   |  |   |  |
|---|--|---|--|
| <p>Understanding of the benefits a patient might reasonably expect from Clinical Governance.</p> <p>Creating an environment where mistakes and mismanagement of patients can be openly discussed and learned from</p> | <p>Evidenced based practice.<br/>Clinical effectiveness.<br/>Clinical risk systems.<br/>To define the procedures and the effective action when things go wrong in own practice or that of others.<br/>Complaints Procedures..</p>                                  | <p>Educate self, colleagues and other health care professionals.<br/>Be able to handle and deal with complaints in a focused and constructive manner. Learn from complaints.<br/>Develop and institute clinical guidelines and integrated care pathways. Be aware of advantages and disadvantages of guidelines.<br/>Report and investigate critical incidents.<br/>Take appropriate action if you suspect you or a colleague may not be fit to practice.</p> |  |
| <p>(ii) Risk management</p>   | <p>Knowledge of such matters as H&amp;S policy, policies on needlestick injuries, note keeping, communications and staffing numbers.<br/>Knowledge of risk assessment, perception and relative risk<br/>Know the complications and side effects of treatments.</p> | <p>Confidently and authoritatively discuss risks with patients and to obtain informed consent.<br/>Able to balance risks and benefits with patients.</p>  | <p>Willingness to respect and accept patients views and choices<br/>Willingness to be truthful and to admit error to patients, relatives and colleagues.</p> |

|                |   |   |  |
|----------------|---|---|--|
| (iii) Evidence | Know & understand:<br>the principles of evidence based medicine<br>the types of clinical trial<br>the types of evidence | Able to critically appraise evidence.<br>Ability to be competent in the use of databases, libraries and the internet.<br>Able to discuss the relevance of evidence with individual patients | Display a keenness to use evidence in the support of patient care and own decisions therein.                   |
| (iv) Audit     | Know & understand:<br>the audit cycle<br>data sources<br>data confidentiality   | Involvement in on-going audit.<br>Undertake at least one audit project  | Consider the relevance of audit to:<br>benefit patient care<br>clinical governance                             |
| (v) Guidelines | Know the advantages and disadvantages of guidelines<br>Methods of determining best practice                             | Ability to utilise guidelines<br>Be involved in guideline generation, evaluation, review and updating.  | Show regard for individual patient needs when using guidelines<br>Willingness to use guidelines as appropriate |

## 10. STRUCTURE OF THE NHS AND THE PRINCIPLES OF MANAGEMENT

Objective: To display a knowledge of the structure and organisation of the NHS Nationally and locally.

| <b>Subject</b>  | <b>Knowledge</b>  | <b>Skills</b>  | <b>Attitudes</b>  |
|---|---|--|---|
| Structure of the NHS and the principles of management | Know:<br>The structure of the NHS, primary care groups, Trusts and Hospital Trusts.<br>The local Trusts structure including Chief Executives, | Develop skills in managing change and managing people.<br>Develop interviewing techniques and those required for performance reviews.<br>Be able to build a business plan. | Show an awareness of equity in health care access and delivery.<br>Demonstrate an understanding of the importance of a health service for the population.<br>Show respect for others, ensuring equal opportunities. |

|  |  |  |  |
|--|--|--|--|
|  | <p>Medical Directors,<br/>Clinical Directors and<br/>others.<br/>The role of post-<br/>graduate deaneries,<br/>specialist societies, the<br/>royal colleges and the<br/>General Medical<br/>Council.<br/>Finance issues in<br/>general in the Health<br/>Service, especially<br/>budgetary manage-<br/>ment..<br/>The appointments<br/>procedures and the<br/>importance of equal<br/>opportunities.<br/>Of Central Govern-<br/>ment health<br/>regulatory agencies<br/>(eg NICE, CHI,<br/>NCAA)</p> |  |  |
|--|--|--|--|

11. INFORMATION USE AND MANAGEMENT

Objective: Demonstrate competence in the use and management of health information

| Subject   | Knowledge   | Skills  | Attitudes   |
|---|---|---|---|
| <p>To demonstrate good use of information technology for patient care and for own personal development.</p> | <p>Define:<br/>           How to retrieve and utilize data recorded in clinical systems.<br/>           Main local and national projects and initiatives in information technology and its applications.<br/>           The stages of evaluation that new technology needs to go through.<br/>           The main features, responsibilities and liabilities in the UK and Europe pertaining to confidentiality<br/>           Demonstrate an understanding of the range of possible uses for clinical data and information and appreciate the dangers and benefits of aggregating clinical data.</p> | <p>Demonstrate competent use of database, word processing and statistics programmes.<br/>           Define how to undertake searches and access web sites and health related databases.<br/>           To critically appraise available software<br/>           To apply the principles of confidentiality and their implementation in terms of clinical practice in the context of information technology.</p> | <p>Demonstrate the acquisition of new attitudes in patient consultations in order to make maximum use of information technology.<br/>           Demonstrate appropriate techniques to be able to share information on computer with the patient in a constructive manner<br/>           Adopt proactive and enquiring attitude to new technology.</p> |

## 12. CROSS-SPECIALTY TOPICS

### A) ADMISSIONS AND DISCHARGES

Management of the 'take'

Objective: To provide the trainee with the knowledge and skills to be able to safely manage the general medical 'take'.

| <b>Subject</b>        | <b>Knowledge</b>   | <b>Skills</b>   | <b>Attitudes</b>   |
|-----------------------|--|---|--|
| (i) 'Take' management | Medical indications for urgent investigation and therapy<br>Skills and capabilities of members of the 'on-take' team<br>When to seek help or refer to other specialties<br>Knowledge of support available in the community | Ability to prioritise<br>Interact effectively with other health care professionals<br>Keep patients and relatives informed<br>Receive referrals appropriately<br>Cope with stress<br>Delegate effectively and safely<br>Keep an accurate patient list<br>Handover safely with appropriate documentation | Sympathetic handling of acutely ill patients.<br>Aware of the pressures on other members of staff. |

*B. DISCHARGE PLANNING*

Objective: To provide the trainee with the knowledge and skills to be able to plan difficult discharges for patients, particularly the elderly.

| <b>Subject</b>     | <b>Knowledge</b>  | <b>Skills</b>   | <b>Attitudes</b>   |
|--------------------|---|---|--|
| Discharge planning | Impact of physical problems on activities of daily living.<br>Roles and skills of members of the multidisciplinary team including nurses, OTs, Physio's, speech therapists and psychologists<br>discharge co-ordinators and social workers.<br>Impact of unnecessary hospitalisation<br>Available support in primary care . | Recognise when in-patient care is not required<br>Effective contribution to discharge planning meetings.<br>Liaison and communication with patient, family and primary care.<br>Write reports for appropriate bodies. | Display empathy.<br>Show an awareness of family dynamics and socio-economic factors influencing success of discharge |

### C. RESUSCITATION

Objective: To provide the trainee with the knowledge and skills to be able to recognise critically ill patients, take part in advanced life support, feel confident to lead a resuscitation team under supervision and use the local protocol for deciding when not to resuscitate patients.

| <b>Subject</b>                                  | <b>Knowledge</b>  | <b>Skills</b>   | <b>Attitudes</b>   |
|---|---|---|--|
| (i) Recognise when a patient is critically ill. | Know how life threatening emergencies present and how to treat them.  | Perform initial assessment<br><br>Manage life threatening emergencies<br><br>Recognise when to call for help from seniors or other specialties e.g. ITU | Keep calm<br>Recognise priorities.<br>Recognise the dignity of patients.<br>Keep relatives informed.   |
| (ii) Advanced life support                      | Advanced life support algorithms.<br>Role and side effects of commonly used anti-arrhythmics and cardiac support drugs. | Recognise cardiac arrhythmias.<br>Perform emergency defibrillation.<br>Perform emergency endo-tracheal intubation.                                      | Display a calm and confident demeanour   |
| (iii) Lead a cardiac arrest team                | Role and responsibilities of the team leader.   | Safe and effective communication and delegation   | Be calm and realistic  |
| (iv) Do not resuscitate orders (DNR)            | Know local and national protocols for DNR orders.<br>Know legal and ethical considerations.                             | Support patients and families.  | Ability to empathise with relatives and to explain the consequences of DNR orders with compassion and without giving undue hope<br>Act with empathy and sensitivity.<br>Respect living wills and advance directives. |

#### D. NUTRITION

Objective: To provide the trainee with the knowledge and skills in the nutritional issues listed below.

| <b>Subject</b>         | <b>Knowledge</b>   | <b>Skills</b>                                    | <b>Attitudes</b>   |
|------------------------|--|--|--|
| (i) Nutritional status | Impact of:<br>disease on nutritional<br>status<br>malnutrition on<br>clinical outcomes   | Assessment of nutritional status                 | Recognise cultural and religious issues  |
| (ii) Nutrition support | Principles and routes<br>of nutrition support<br>Role of nutrition<br>support team (NST)<br>Indications and<br>arrangement of PEG<br>tubes | Naso-gastric intubation<br>Central venous access | Identify those needing nutrition support or<br>advice and the significance of the doctor in<br>providing such advice.<br>Recognise:<br>the skills of others e.g. specialist nurses,<br>pharmacist, dieticians<br>when to consult NST |

#### *Professional Development Specific to Rehabilitation Medicine*

The training programme will build on a *knowledge* base so that *skills* are developed as *experience* is gained. Positive and empathic *attitudes* to disabled people are less easy to specify but must be developed throughout the course of training. The assessments by supervisors at the end of attachments, and by the committee conducting annual reviews, will pay particular attention to the acquisition of skills and, particularly, attitudes in dealing with disabled people, relatives and members of the therapeutic team.

## **OUTLINE OF THE CURRICULUM IN REHABILITATION MEDICINE**

The four year training consists of obligatory and optional clinical attachments. Other aspects of training can be acquired by short attachments or attendance at relevant courses and meetings. The trainee should keep a log book of all such courses and meetings and of the knowledge and skills derived therefrom.

### **Obligatory Training**

A CCST will only be granted if the training has included experience of and acquisition of demonstrable knowledge and skills in the following subjects. These subjects are compulsory for all trainees regardless of special interest or whether the trainee is on a dual training programme with another speciality.

The following five areas constitute a core of generic training which will be developed throughout the training programme. Attendance at specific courses, meetings and appropriate short attachments is also encouraged.

*The rehabilitation process* including all aspects of specialised clinical assessment, multidisciplinary working and negotiation and monitoring of structured goals.

*Social and community aspects of rehabilitation* including the assessment and management of complex disability in community settings.

*Psychological aspects of disability, handicap and rehabilitation* including experience of the psychological aspects of disability and psychological assessment which should include work with a clinical psychologist. Counselling skills should be learnt together with the influence of personal family and social circumstances on the experience of disability.

*Organisation and management in rehabilitation.* Experience of multidisciplinary teamwork is essential. Training in team dynamics, leadership, goal setting, resource and financial management is also required – often by attendance at appropriate management courses. Knowledge of information technology is also important as well as demonstration of presentational and teaching skills.

*Research in rehabilitation* including principles of statistics, trial design and data analysis and a knowledge of both quantitative and qualitative research. Critical appraisal skills are needed and the design, completion and presentation of a research project is required. Some trainees may wish to undertake a higher degree or at least pursue a specific longer term research project. Details of the training possibilities are outlined in the Special Interest section.

The following clinical subjects are compulsory for the minimum period indicated. These subjects will require a specific clinical attachment to an appropriate unit.

*Neurological rehabilitation* including the management of brain injury and stroke as well as the management of those people with progressive disorders such as multiple sclerosis.

Minimum period 12 months (for those wishing to pursue a special interest in spinal cord injury or neurological rehabilitation - see later Special Interest section).

*Spinal cord injury* including the management of all aspects of spinal cord injury from the acute event to rehabilitation and long term support. This attachment should be undertaken in an established spinal cord injury centre. Minimum period three months (see later Special Interest section for those wishing to pursue a particular interest in this subject).

*Rheumatological and musculo-skeletal rehabilitation* including the management of orthopaedic and non-inflammatory and inflammatory joint disorders, back pain and other pain management. Minimum period six months (see later section for Special Interest requirements in this field).

*Rehabilitation of people with amputation and limb deficiencies, wheelchair provision and orthotics.* Includes all aspects of the assessment and management of people in need of prostheses or orthoses as well as knowledge, skills and experience in all aspects of wheelchair provision. Minimum period three months – preferably on a full-time attachment but if this is not possible then a minimum of half-time attachment (ie spread over six months) is required. (See later Special Interests section)

*Environmental control systems and assistive technology.* Experience of all aspects of assistive technology should be gained throughout the programme. Attendance at five environmental control assessments is an obligatory part of the training.

## **Optional Modules**

The above compulsory clinical elements occupy a total of two years. This leaves a further two years in the four year training programme. A number of optional modules should be available in the local programme to allow the trainee to develop broad based experience. The SAC does not wish to be prescriptive about the range or number of modules taken. Some trainees may wish to pursue a special interest and may need further experience in some of the compulsory elements (see Special Interest section). However, the SAC will need to be convinced of a broad based training and some experience of some of the following modules (even if only on a brief attachment or attendance at courses and meetings) will be required. In general clinical attachments should last about three months. However, training in these areas can be spread over time if appropriate to local circumstances. The following list is not definitive and some trainees may wish to pursue other optional attachments relevant to their own special interests. Prospective approval by the SAC and Programme Director will be needed. Open discussion with the SAC is encouraged at all times.

Acute stroke  
Cardiac rehabilitation  
Continence services/urodynamics  
Disabled school leavers and young adults  
Driving for disabled people  
Learning disability services

Palliative medicine  
Rehabilitation of sensory deficits  
Residential units for disabled people  
Respiratory rehabilitation  
Sexual aspects of disability  
Sports medicine

Orthopaedic rehabilitation  
Paediatric rehabilitation  
Pain management

Vocational rehabilitation  
Other specialty attachments

### **Special Interests**

Many trainees will eventually wish to specialise in a particular field of rehabilitation. Whilst all trainees must complete the compulsory elements there is considerable flexibility in the remainder of the programme. This section outlines the requirements for the development of special interests. The completion of these training courses will not result in a different CCST as all trainees will receive a CCST in Rehabilitation Medicine. However, completion of these programmes will obviously be viewed favourably by appointment committees when a job is advertised with a particular emphasis. This is particularly the case for those wishing to work in spinal cord injuries when it is most unlikely that an appointment will be made without completion of the specifically tailored training programme.

### **Spinal Cord Injury**

Individuals wishing to specialise in spinal cord injury will be expected to spend three years training in all aspects of this field. The compulsory 12 month training period in neurological rehabilitation may be completed in this three year attachment to a spinal cord injury unit provided that the unit also admits people with more general neurological disabilities including brain injury, stroke and potentially deteriorating conditions such as multiple sclerosis. If this is not the case then at least three months, of the 36 month attachment, must be spent in a unit which does manage such individuals. An award of a CCST will only be made if evidence of broad based neurological rehabilitation training can be produced. Most of the remaining time will be needed to cover the other compulsory elements (rheumatological and musculo-skeletal rehabilitation and amputee/wheelchair rehabilitation – total nine months). This leaves only three months for optional modules so the trainee will be expected to demonstrate an appropriate variety of short attachments, courses, meetings etc to satisfy the SAC of a sufficiently broad based training.

### **Neurological Rehabilitation**

Trainees wishing to specialise in this field may wish to consider dual training with Neurology (see dual training section). However, in any case a minimum of two years (ie 12 months compulsory plus 12 months optional) will be needed to take a special interest in this field. This will still leave 12 months for optional modules.

### **Rheumatological and Musculo-skeletal Rehabilitation**

Trainees wishing to specialise in this field may wish to consider dual training with Rheumatology (see dual training section). However, in any case a minimum of 18 months (ie six months compulsory and 12 months optional) will be needed to take a special interest in this field. This will leave 12 months for optional modules.

Rehabilitation of People with Amputation and Limb Deficiencies: Wheelchair Provision

Trainees wishing to specialise in this field will need an extra 12 months in the area. This equates to a total of 15 months full-time training (three months compulsory plus 12 months optional). This will leave 12 months for optional modules.

### **Academic/Research Career**

Some trainees will eventually seek an academic appointment or wish to take a particular interest in rehabilitation research. It is recommended that such individuals spend 12 months full-time (of the available 24 month optional period) pursuing a specific research project, probably attached to an academic unit and probably leading to a higher degree. Elements of the research may extend part-time over the rest of the training programme as long as sufficient time is spent on the clinical training requirements. The research will need to be relevant to rehabilitation practice but may have a clinical or non-clinical bias. If further time is needed on the research then the trainee would need to take time out-of-programme – a maximum of one year full-time commitment is allowable within the training programme.

### **Other Specialty Attachments**

Attachment to another relevant speciality is allowable as part of the rehabilitation medicine training programme to a maximum of one year. Neurology, rheumatology, geriatric medicine and paediatrics are clearly relevant specialities but other specialities may be approved in certain circumstances. These, for example, may include orthopaedic surgery, plastic surgery or psychiatry (particularly neuro-psychiatry). It is likely that only short attachments in these specialities will be approvable. Prospective discussion with, and approval by, the Programme Director and the SAC will be necessary.

Obviously the trainee need not obtain a formal SpR place in the speciality (unless a dual CCST is sought) but the training, usually supernumerary, should take place on a recognised and approved training programme in that speciality.

### **International Experience**

Experience abroad is encouraged in the training programme. It is not possible, nor desirable, to be prescriptive about training abroad as the circumstances and opportunities vary widely. Attachment to centres in developing countries may be just as valuable as an attachment to an internationally recognised centre of excellence in the developed world.

Prospective approval will be necessary by the Programme Director and by the SAC. Full details of the proposed attachment will need to be submitted. A maximum of one years training abroad may be approvable. However, all compulsory elements of the training programme in rehabilitation medicine must be completed in the UK.

### **Dual Training**

The SAC wishes to actively encourage dual training in associated specialities, particularly neurology and rheumatology but also other specialities such as geriatric medicine and paediatrics. However, we realise that the present system provides a major disincentive to

such training given the long combined training programmes. Thus, the SAC will be as flexible as possible in helping a trainee design a suitable dual programme that combines as short a period of training as possible which is nevertheless compatible with a high quality, broad based training in rehabilitation medicine. The trainee will need to work with both the relevant Programme Directors and both SACs in order to design a suitable programme which will need prospective approval.

The SAC will not compromise on the compulsory training requirements outlined in this document. However, flexibility in the optional period is possible provided the trainee can still demonstrate a broad based training. A one year attachment to the other speciality is already possible (see page 54) within the training period. A one year research period, provided the research is relevant to both specialities may also be “double” counted. However, it is unlikely that the trainee would be allowed to pursue both such possibilities as this would leave no time for other optional modules. Other flexible possibilities may exist. For example, if a mainly acute neurology or rheumatology unit is able to demonstrate that the clinical practice in the unit includes some genuine rehabilitation experience then that element may count, pro rata, towards the compulsory neurological or rheumatological training elements of the rehabilitation curriculum. Discussion and negotiation with both SACs will be required, both informally before appointment and more formally after appointment to an SpR post. Triple training will likewise require active discussion with all SACs involved.

### **Examples of Dual Training**

#### **Neurology**

It is possible, for example, that dual training with neurology could be undertaken as follows:

3.5 years compulsory neurological training (see Neurology curriculum)

2 years compulsory rehabilitation medicine training

1 year rehabilitation medicine optional modules – which should not include acute neurology but may include up to six months further experience in neurological rehabilitation.

Total duration for combined neurology/rehabilitation medicine training is 6.5 years.

#### **Rheumatology**

It is possible, for example, that dual training with rheumatology could be undertaken as follows:

3 years rheumatology training (which may include the six month compulsory rheumatological rehabilitation training from the rehabilitation medicine curriculum)

1.5 years compulsory rehabilitation medicine training (excluding six months rheumatological rehabilitation)

1 year rehabilitation medicine optional modules – but excluding any further training in acute rheumatology.

Total duration for combined rheumatology/rehabilitation medicine is 5.5 years.

These specific suggestions are currently under discussion at the JCHMT and STA but provide examples of the dual training possibilities and the likely duration of training. Trainees wishing to pursue such options should contact the JCHMT office in the first

instance and will then be put in touch with the relevant SACs to discuss a personal training programme in more detail.

### **DETAILED CURRICULUM**

The curriculum has been devised in order to define the knowledge which all Specialist Registrars should acquire during their training, but experience in some of the fields may be obtained only in certain parts of the country. Attendance at courses at these centres of excellence is therefore recommended. Some clinical problems appear under a number of headings, reflecting variability around the country in the service that has primary responsibility for the management of particular disabilities. The detailed curriculum which follows therefore, should be used as a guideline, rather than a rigid prescription.

## **THE REHABILITATION PROCESS**

Status – Obligatory

### ***Objective***

To demonstrate that the trainee has the knowledge skills and experience to manage the rehabilitation process as a member of a multidisciplinary rehabilitation team.

### ***CONTENT***

#### ***Knowledge***

Concepts of impairment, disability and handicap including those of the 1980 and recently revised WHO classification as well as those advocated by the disability movement.

Background legislation, especially the Chronically Sick and Disabled Persons Act 1970, the Disabled Persons (Services, Consultant & Representation) Act 1986, Children Act 1989 and National Health Service & Community Care Act 1990, Disability Discrimination Act 1995, Mental Health Acts 1983,1988 and other relevant legislation.

Epidemiology of disability.

Knowledge of disability found in, and rehabilitation requirements of, people with physical disabilities at different ages.

Knowledge of the roles and expertise of members of the multidisciplinary team.

Knowledge of the preventive management of medical complications of musculo-skeletal and neurological impairments, including falls, skin sores, contractures, nutritional complications etc.

Knowledge of the medical, surgical, nursing and therapeutic management of the above complications.

Nutritional and energy needs of severely disabled people, including nutritional supplementation.

Knowledge of techniques for modulation of muscle tone and posture.

Knowledge of basic exercise physiology.

Methods of monitoring progress in people with progressive disability using appropriate instruments to measure health gain or deterioration.

#### ***Skills***

The medical assessment of disabled people referred for rehabilitation.

Collaboration with a multidisciplinary team in selecting the appropriate form of ongoing management according to the capabilities and needs of the disabled person.

Rapid screening assessment (eg in an outpatient clinic) of the impact of disease and disability on everyday life.

Detailed clinical assessments relevant to the comprehensive evaluation of disabled people in an inpatient setting.

Health promotion needs and medical management of people with chronic and progressive disability (particularly promotion of tissue viability, nutrition and feeding, continence, physical function, tone and posture, management of pain, mood, behaviour).

Assessing and meeting the needs of people in the terminal phase of chronic disabling conditions.  
Identification of carers' needs, including respite arrangements.  
Effective working within multi-professional teams in different roles, including that of team leader.  
Organisation and chairing of multidisciplinary case conferences or other meetings involving the disabled person and their family.  
Advocacy role on behalf of disabled people, particularly to break down administrative barriers between different service providers.  
Contribution to the appropriate negotiating of goals, application of resources and review of achievements in different settings (inpatient and community).  
Effective communication with relatives.

### **Teaching and Learning Methods**

The detailed experience around the rehabilitation process is described in the relevant sections of this handbook. Teaching and learning methods include:

Personal study and directed reading (all sections)  
Attendance of appropriate postgraduate courses (all sections)  
Observation of and discussion with therapy and nursing colleagues .  
Clinical attachment to a multidisciplinary rehabilitation unit  
Clinical attachment to a specialist clinic for relevant condition  
Attachment to a geriatric rehabilitation unit (eg stroke unit)  
Attachment to a hospice  
Personal discussion with an appropriate range of carers  
Chairing, with supervision as necessary, of case conferences and other meetings

### **Assessment**

Assessment of basic principles will be by discussion with supervising consultant and programme director  
Observation of the trainee in the clinical setting by the supervising consultant.  
Discussion between supervising consultant and/or programme director and the relevant key therapy and nursing colleagues on the rehabilitation units, on the knowledge, skills and attitude of the trainee

Evidence of Competence for Inclusion in Record

*Training Record to detail clinical attachments and postgraduate courses*

### **Recommended Reading**

In keeping with the broad nature of rehabilitation medicine, the trainee will wish to consult texts and original articles from a wide variety of sources. The following list is a guide to general reading. Use of the internet is also recommended for keeping up to date.

## Journals

*Archives of Physical Medicine and Rehabilitation*  
*Clinical Rehabilitation*  
*Disability and Rehabilitation*  
*International Journal of Rehabilitation Research*  
*Journal of Neurorehabilitation and Neural Repair*  
*Prosthetics and Orthotics International*  
*Scandinavian Journal of Rehabilitation Medicine*  
*Journal of Head Trauma Rehabilitation*  
*Brain Injury*  
*Topics in Stroke Rehabilitation*  
*Topics in Spinal Cord Injury*  
*Spinal Cord*  
*Stroke*  
*BSRM Specialist Reports*

## Books

Barnes MP, Ward AB. Textbook of Rehabilitation Medicine. Oxford University Press, Oxford, 2000 – basic introductory text suitable for junior post-graduates or as introductory reading for specialist registrars

Goodwill CJ, Chamberlain MA. Rehabilitation of the Physically Disabled Adult. 2<sup>nd</sup> Edition. Stanley Thornes, Cheltenham, 1997

Greenwood R, Barnes MP, MacMillan TM, Ward CD (Eds). Neurological rehabilitation Churchill Livingstone, Edinburgh 1993 [also available in paperback by Erlbaum (UK) Taylor & Francis (2<sup>nd</sup> Ed due for publication in 2000)]

Kottke FJ, Lehmann JM. Krusen's Handbook of Physical Medicine and Rehabilitation - Fourth Edition. WB Saunders, Philadelphia, 1990

Wade DT (Ed). Measurement in neurological rehabilitation. Oxford University Press, Oxford 1992

## **SOCIAL AND COMMUNITY ASPECTS OF REHABILITATION**

Status – Obligatory

### ***Objectives***

To demonstrate that the trainee has the knowledge, skills and attitudes necessary for:  
the inclusion of social and cultural factors in the assessment of a person's rehabilitation needs  
effective communication with patients, professionals and agencies in planning packages of community-based care and rehabilitation  
effective contribution to the planning of community services for specific groups of disabled people

## CONTENT

### **Knowledge**

Causes and effects of societal attitudes to disability and methods of assessing negative attitudes to disability.

Influence of culture and ethnicity on the impact of disability.

Impact of disability on social function, including housing, employment, financial, leisure, transport and inter-personal relationships.

Services provided by statutory bodies, voluntary agencies and charities and the regulations and legislation under which they operate.

Community care plans, the planning of services in line with these and the process of multi-agency assessments for disabled people.

The process of assessing an individual's long term needs, including the co-ordination of multi-agency case conferences, identifying needs, establishing management plans and monitoring progress.

The interface between specialist community services and hospital based rehabilitation services and incorporation of shared care guidelines.

The interface of specialist community rehabilitation services with primary care and generic community rehabilitation services (community physiotherapy, occupational therapy, nursing, etc).

Issues relating to transition of care between children and adult services. (See also section on Disabled School Leavers and Young Adults)

Knowledge regarding specialised services for disabled children. (See also section on Disabled School Leavers and Young Adults)

Available services for short-term, intermittent and longer-term rehabilitation and services for people in institutional care, as well as respite care services.

The work of voluntary and self-help groups and their inclusion in the planning and rehabilitation of disabled people and their carers.

Physical, psychological and social impact on living in residential care and of shared care arrangements. (See section on Residential Units).

Vocational rehabilitation (either as a specialist activity or in a generic context. (See section on Vocational Rehabilitation).

Community mobility and driving. (See section on Driving for Disabled People).

Factors relevant to planning hospital discharge...

### **Skills**

Home visiting: assessment of the impact of disease and disability in a home setting.

Other aspects of assessment of disabled people living in the community through liaison with those involved in rehabilitation and care.

Identification of carers' needs, including respite arrangements.

Appreciation of factors in the community setting which are relevant to pre-discharge planning and effective evaluation of long-term outcomes of hospital admission.

### **Experience**

attachment to a community based rehabilitation team in which there is close involvement with social services and the opportunity to carry out home based assessments – and/or through inpatient rehabilitation settings which give opportunity for home assessment and for close working with social services.

**Teaching/Learning methods:**

Directed reading, national/international resources

Directed reading, local resources such as Community Care Plan, HIMP, local policies, voluntary sector information

Clinical practice including home visits, visits to non-NHS residential units, and multi-agency case conferences) with critical review by an observer (formative aspect of assessment - see below) or by feedback to a non-observing supervisor

**Assessment**

One 1500-word critical case study reflecting the views of a disabled person

Clinical practice observed by an approved trainer (either a consultant or a senior nurse, therapist or social worker) ; to include at least four supervised home visits, and four observed multi-agency case conferences, with at least one chaired by the trainee)

Portfolio of case records from clinical practice

Verbal commentary to educational supervisor

One 2000 word critical case study of the responses of individuals, families, society, statutory services and the voluntary sector to a specific disabling disease (K1-16)

*Evidence of competence for inclusion in record*

Written work

Report from Approved Observer

Report from Trainer

**PSYCHOLOGICAL ASPECTS OF DISABILITY, HANDICAP, AND REHABILITATION**  
Status - Obligatory

***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:-

Performing and interpreting the relevant assessments for psychiatric illness and cognitive and behavioural effects of brain damage and recognition of psychological mechanisms which cause or exacerbate disability.

Contributing effectively to the multidisciplinary management of psychiatric, behavioural and cognitive complications.

Referring appropriately to psychologists, psychiatrists and other mental health specialists.

*CONTENT*

***Knowledge***

Personality characteristics, and how they may be caused or affected by illness, disease, pain and disability.

Moods, and how they may be influenced by external and internal factors.

Somatic presentation of emotional distress.

Presentation, consequences and assessment of psychiatric and organic brain syndromes in the context of physical disability.

### ***Skills***

Recognition of the presence of psychological influences in the presentation and rehabilitation management of a person with physical problems.

Interviewing techniques with people with complex disabilities.

Counseling, including an appreciation of its benefits and limitations.

Interpretation of the results of psychological, psychometric, social and vocational assessments.

Recognition of the specific indications for psychological support provided by psychotherapists, clinical psychologists, counselors or other professionals such as social workers.

Management of psychologically induced disability.

### **Experience**

Training in the above areas will be obtained throughout the programme and should involve a period of working in close proximity to a clinical psychologist. Experience should be gained in:

Behavioural assessment and rehabilitation of people with brain damage.

Assessment and rehabilitation of people with chronic pain.

Rehabilitation of other people in which there is a discrepancy between subjective and objective assessment of disability, particularly those with premorbid personality problems or higher cortical deficit.

### **Teaching/learning methods**

Directed reading

Assessment of people with psychological impairments, subsequently discussed with a clinical psychologist

Assessment of people with communication impairment, supervised by a clinical psychologist or speech and language therapist

Participation in the multidisciplinary rehabilitation of people with disorders of mood, behaviour and cognition

Counseling sessions with patients discussed with a qualified counselor, using audiotape, video recording or direct observation

Supervised administration of cognitive screening tools

### **Assessment**

Clinical practice observed by approved trainers (as detailed above)  
Review of a portfolio of case records from clinical practice  
Detailed case report (1500 words) on psychological issues relating to a patient with brain injury

*Evidence of competence for inclusion in record*

Report on clinical work from trainer.  
Assessment of written work by trainer.

**ORGANISATION AND MANAGEMENT IN REHABILITATION MEDICINE**

Status - Obligatory

***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary to implement good organisational practice within a rehabilitation service including management, financial, personnel and clinical governance aspects.

*CONTENT*

***Knowledge***

General principles of operational and strategic planning, leadership techniques, team dynamics, management of change, decision making, conflict resolution, personal development, delegation and time management.

Legislation concerning the provision of services through the NHS, Local Authority, Departments of Social Security, (including knowledge of social security benefits), Transport and other Government departments relevant to the lives of disabled people.

Principles underlying the planning of services within and between agencies, and how the process may be influenced by the submission of objective data, lobbying by pressure groups, political decisions and other means.

Knowledge of all aspects of clinical governance as relevant to rehabilitation medicine.

The role of generic and specific rehabilitation services, such as spinal injuries unit, disabled living centre, disablement services centre, geriatric orthopaedic rehabilitation units, community disability teams, young disabled unit, head injury unit etc, in the overall design of a comprehensive rehabilitation service.

Budgetary management, including elementary principles of accounting, delegation of financial responsibility, accountability and planning, and health economics applied to rehabilitation medicine.

Knowledge of the commissioning process between purchasers and providers of rehabilitation services.

Staff development, including personal career plans, appraisal and in-service education opportunities.

Legal aspects of disability, including employment, driving, testamentary capacity, Court of Protection, living wills, persistent vegetative state and medico-legal reports. An awareness of the different legal frameworks operating in the various countries of the UK.

Ethical aspects of Rehabilitation Medicine, including resource allocation, selection for treatment, and withdrawal or termination of treatment in progressive disability and persistent vegetative state

Organisation within the medical profession, including the General Medical Council, Royal Colleges, Joint Committee on Higher Medical Training and Specialist Advisory Committee system, British Medical Association, Specialist Societies such as the Society for Research in Rehabilitation and British Society of Rehabilitation Medicine, Professions Supplementary to Medicine, and those allied to medicine such as psychology, nursing and rehabilitation engineering.

Knowledge of the appropriate application of information technology.

Knowledge of the process necessary to appoint staff.

### ***Skills***

Application of management principles within a multi-professional team, including ability to deal with issues such as motivation, reconciliation of conflict and promotion of team identity.

Undertaking organisational duties delegated by consultant or clinical director, e.g. rotas, teaching, minute taking etc.

The development of effective communication skills - verbal, written and presentational.

The development of an empathic awareness of the professional and personal values of members of staff, and an understanding of how these may be affected by the decisions of others.

Counseling skills in relation not only to disabled people but also members of staff, particularly when they feel angry, powerless or devalued.

Awareness of how locally desired goals must be integrated with wider agendas such as those dictated by local or national policies.

Skills in the use of information technology, including computerised literature searching and the use of the internet as well as more basic requirements such as word processing, use of a spreadsheet and database.

Co-operation with colleagues in producing and implementing a personal development plan.

Skills required to interview job applicants.

### **Teaching and Learning Methods**

Personal study and background reading

Discussion sessions with senior medical personnel on designated topics.

Formal discussion with senior consultant familiar with legal aspects of disability and/or medico-legal reporting or alternatively formalised meeting with relevant local solicitor.

Attachment to an appropriate multidisciplinary rehabilitation team and supervised undertaking of necessary duties delegated by consultant.

Formal discussion with senior consultant responsible for personal development plans.

Attendance at relevant local and national courses in management principles and counseling skills.

Observing and undertaking a secretarial role in meetings concerned with planning, policy and practice in rehabilitation.

Training in writing medico-legal reports.

## **Assessment**

*Formal observation of the trainee in appropriate settings.*

*Evidence of Competence for Inclusion in Record*

Trainer reports and written work.

## **RESEARCH IN REHABILITATION**

Status - Obligatory

### ***Objectives***

The trainee to be able to:

Complete a research or clinical audit study from the planning to final report stage.

Present research/audit study results orally and in written form.

Critically appraise scientific, clinical and sociological research literature.

### ***CONTENT***

#### ***Knowledge***

Knowledge of qualitative as well as quantitative research and the different types of research design.

Principles of statistics, trial design, randomisation and techniques of data analysis.

Methods used to assess impairments, disabilities, and aspects of handicap.

Laboratory techniques relevant to the specialist trainee's special interest.

Epidemiology of disabling conditions.

#### ***Skills***

To be able to read scientific, clinical, sociological and other relevant papers and reports critically.

To be able to evaluate the evidence presented in papers, literature reviews and meta-analyses.

To report research findings in written papers and at meetings.

To incorporate research findings into clinical practice.

#### **Teaching/Learning Method**

Directed reading, national/international resources

Regular active participation in journal club/research meetings

Take a lead role, directed by an approved trainer, in designing, conducting data analysis and report preparation of a research or clinical audit study.

Report research findings at a recognised meeting and/or publish them in a peer review journal.

#### **Assessment**

Preparation of a written protocol describing a research/audit study.  
Oral presentation of research/audit study results at a recognised meeting, demonstrating adequate presentational skills. (peer review).  
Written report, preferably but not compulsorily published in a peer review journal, of research/audit study results.  
Demonstrate critical appraisal skills during participation in journal club and scientific meetings.

*Evidence of competence for inclusion in record*

Oral presentation and written report of research/audit study approved by trainer.  
Correctly maintained logbook detailing attendance at scientific meetings and journal clubs.

## **NEUROLOGICAL REHABILITATION**

Status – Obligatory

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:-

Specialist assessment and treatment of individuals with a wide range of neurological and neuromuscular impairments and disabilities in the acute setting or as an outpatient or in the community

The development of multidisciplinary goal centred rehabilitation programmes with the regular use of reliable objective measures.

Effective communication and liaison with the individual, his family or carers and professionals from health and social services backgrounds involved in provision of treatment, care and equipment.

### ***CONTENT***

#### ***Knowledge***

Epidemiology of disabling neurological disorders.

Mechanisms of recovery, neural plasticity, learning and skill acquisition.

Pathogenesis and treatment of various specific impairments including spasticity, ataxia, and flaccid paralysis; sensory impairment due to blindness and deafness; neuropsychological dysfunction; incontinence; dysphagia; disorders of speech and language, perception and memory, and other cognitive functions including attention, sequencing and planning.

Organisation of services including linkage with paediatric and geriatric services.

Practice across the interface between rehabilitation medicine, learning disabilities, psychiatry and neuropsychiatry and neuropsychology.

Burden and impact of neurological disease on families.

Measurement in neurological rehabilitation.

## ***Skills***

Assessment of the neurologically disabled person by means of the history and neurological examination.

INTERPRETATION, PREFERABLY LEARNED THROUGH EXPERIENCE, OF COMMON NEUROLOGICAL AND NEURO-RADIOLOGICAL INVESTIGATIONS AND NEURO-PSYCHOLOGICAL TESTS.

Use of some measures of disability and handicap in common neurological disorders such as stroke and multiple sclerosis and traumatic brain injury.

Methods of managing neurological impairment e.g. spasticity, feeding difficulties, incontinence, neurogenically impaired respiratory function etc.

Management of behaviourally disturbed people with neurological impairments.

## **Experience**

Experience in the management of common causes of disability, particularly stroke, head injury and multiple sclerosis and rarer problems such as:

Congenital including cerebral palsy, spina-bifida and hydrocephalus; hereditary ataxias; muscular dystrophies and atrophies.

Acquired non-progressive including brain injury due to trauma or to vascular events such as stroke and subarachnoid haemorrhage; hypoxia-ischaemia; metabolic brain damage; infection including encephalitis; non-malignant brain tumours; non-traumatic and incomplete myelopathies; brachial plexus injuries; Guillain-Barre syndrome.

Acquired progressive including multiple sclerosis; motor neurone disease; neuro-degenerative conditions; post polio syndromes; muscle diseases; Parkinson's disease; malignant brain tumours and AIDS.

Other syndromes and problem areas including the interaction between multiple impairments resulting in complex disability; epilepsy; chronic pain; sexual dysfunction; aspects of rheumatological, prosthetic, orthotic and vocational rehabilitation as they impact upon people with neurological disease.

## **Teaching/Learning Methods**

Tutored clinical experience

Observation of senior multidisciplinary staff and task specific training

Personal study and directed reading

Appropriate postgraduate education courses

Observation, visits to and liaison work with related specialties and services

Giving lectures on core topics to health personnel

## **Assessment**

Observation by trainer

Inspection of hand written medical notes, OP letters, summaries or treatment plans by trainer

Observe competence and test knowledge of indications, methods and hazards ( e.g. spasticity management)  
Self Assessment Questionnaire.

*Evidence of Competence for Inclusion in Record*

Log Book or diary maintained and up to date  
Trainer's report  
Educational supervisor's report  
Score on computer based assessment

**SPINAL CORD INJURY**

Status – obligatory

***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:-  
Managing all aspects of spinal cord injury and disease taking account of the influence of psychological, social and economic factors  
Prevention of further cord injury in a recently injured person  
Provision of an appropriate prognosis at all stages following spinal cord injury  
Making an effective contribution to the resettlement of spinal cord injured patients  
Application of the principles of rehabilitation (as detailed in other obligatory modules) in the specific context of spinal cord injury

*CONTENT*

***Knowledge***

The pathomechanisms of injury to the spine.  
The pathophysiology of spinal cord injury.  
The knowledge base described under “The rehabilitation process” and under “Neurological rehabilitation” with particular reference to spinal cord injury.  
Presentation of illness and treatment of complications in spinal cord injury.

***Skills***

The assessment of the acute spinal injured person and associated injuries.  
Assessment for operative treatment.  
The total early management following injury.  
Management of the seriously ill, including people with cardiac dysfunction or respiratory failure requiring assisted ventilation.  
Bladder management and care of the acutely paralysed bladder and long term care of the urinary tract.  
Management of high level lesions and people with long term ventilation needs.

Management of the following aspects of general rehabilitation and neurological rehabilitation with particular reference to spinal injury:

Pressure management and tissue viability assessment

Pain management techniques

Wheelchair assessment, specialised seating and orthotics prescription

The technique and application of psychometric testing

### **Experience**

Wide experience of the management of all levels of spinal injury.

The management of associated multiple injuries.

The care of the critically ill and use of mechanical ventilation.

Three months attachment to an Intensive Care Unit (or a High Dependency Unit if mechanical ventilation is undertaken on such a unit) is considered mandatory (if not already covered by prior experience).

Co-ordination of management across inter-specialty boundaries.

Urological assessment including urodynamics & uroradiology - the place of urological surgery.

Neuroscience - experience of neuroradiology, neurophysiology and other neuro-diagnostic techniques gained through a three month attachment to a relevant department (if not already covered by prior experience).

The relevant applications of orthopaedic, plastic and reconstructive surgery as experienced in the Spinal Unit or through an appropriate attachment.

The management of paralysed children through close liaison with paediatric colleagues and, preferably, some experience in a paediatric department.

Non-traumatic spinal cord injury.

The applications of clinical psychology following major injury and attempted suicide.

Sexual counselling and fertility disorders.

High technology bioengineering such as robotics and functional electrical stimulation.

### **Teaching/Learning Methods**

Direct reading, national / international resources

Direct reading, local resources from guidelines and protocols of management.

Clinical practice including ward rounds, multidisciplinary team meetings, progress meetings.

Responsibility and accountability for a small number of patients.

### **Assessment**

Observed clinical practice on an ongoing basis.

Demonstration of ability to acquire relevant medical and non medical information.

Demonstration of ability to assess and process this information.

Demonstration of ability to formulate a plan of management relevant to the patient's medical and non medical circumstances

Demonstration of ability to co-ordinate a multi disciplinary/inter disciplinary team meeting

Portfolio of case records from clinical practice

Two critical case studies of the effects, management and outcome of a cervical cord and a thoraco lumbar cord injury

*Evidence of Competence for inclusion in record*

Continuous assessment  
Report from approved observer  
Quality of written portfolio and of case studies

**RHEUMATOLOGICAL AND MUSCULOSKELETAL REHABILITATION**

Status – Obligatory

***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:  
The assessment, diagnosis and management of bone, joint and soft tissue disorders of the musculoskeletal system.  
To acquire the skills necessary for the assessment and treatment of chronic pain syndromes and their interactions with other disabling conditions.  
To be able to organise multidisciplinary rehabilitation programme for the patients with rheumatological disorders.

***CONTENT***

***Knowledge***

Epidemiology of diseases of bones, joints and other connective tissues.  
Anatomy and physiology of joints and the spine.  
Differential diagnosis of diseases of inflammatory joint disease and connective tissue disorders including rheumatoid arthritis and the spondyloarthritides.  
Non inflammatory joint disorders, including osteoarthritis, soft tissue rheumatism, spinal disorders and conditions presenting as pain and disability in the musculoskeletal system due to alterations in complaint threshold for psychosocial reasons.  
Diseases of the muscle (congenital and acquired) and bone, particularly osteoporosis  
The biology of pain and the assessment and management of acute and chronic pain.  
Specific interventions designed to minimise the effects of immobility eg physical and occupational therapy environmental adaptations, orthotics and surgery.  
The musculoskeletal effects of posture and repetitive movements in the workplace and in leisure activities.

***Skills***

How to examine the musculoskeletal system, particularly painful joints and the painful spine (neck, dorsal and lumbar).  
How to assess disability presenting with musculoskeletal symptomatology and pathology, including the separation of physical, psychological and social elements.

Injection techniques used in the management of musculoskeletal pain (including knees and shoulder).

How to use, appropriately, pharmacological and non-pharmacological means of reducing pain and inflammation.

Interpretation of results of clinical, laboratory, radiological and other diagnostic techniques for the assessment of impairments of the musculoskeletal system.

Assessment of handicap associated with diseases of bones and joints.

### **Teaching and Learning Methods**

Instruction in examination and assessment of joints and their disorders by Consultant or SpR in rheumatology either individually or in groups

Clinical practice in rheumatology outpatients and on wards under supervision of approved trainer

Observe and perform injection techniques under supervision

Attendance at specialist clinics, eg pain, surgical and orthotic clinics and at therapy sessions eg physiotherapy and occupational therapy

Reading of approved texts

### **Assessment**

Observation of randomly selected case notes (clinical supervisor to comment).

Presentation of a minimum of 3 cases at departmental meetings. This should include cases of inflammatory joint disease, pain management and soft tissue rheumatism and include plans for rehabilitation.

Observation of injection techniques and record of procedures performed records.

Record of specialist clinics attended.

Evidence of Competence for inclusion in record

Record of a case history, presented at meeting

Educational supervisors assessment.

Record of numbers of joints and soft tissue injections performed to satisfactory standard.

## **REHABILITATION OF PEOPLE WITH AMPUTATIONS AND LIMB DEFICIENCIES; WHEELCHAIR PROVISION AND ORTHOTICS**

Status – Obligatory

### ***Objectives***

To demonstrate that the Trainee has the knowledge and skills necessary for:-

The comprehensive rehabilitative management of individuals with congenital or acquired loss of limb.

The use of prostheses and orthoses with an understanding of their applications and limitations.

Assessing mobility support requirements including the specification of appropriate wheelchair and special seating solutions.

### ***CONTENT***

#### ***Knowledge***

##### **1. Prosthetics**

The aetiology and epidemiology of upper and lower limb amputation congenital and acquired.

The epidemiology, aetiology and clinical significance of peripheral vascular disease and available methods of investigation and management.

Principles of amputation surgery, and post-operative management.

Biomechanical principles of artificial limbs, their components and methods of fabrication.

Knowledge of gait analysis.

Indications and contraindications for prosthetic and non prosthetic management of amputation

Rehabilitation of the amputee with co-existing medical conditions, particularly diabetes.

Psychosocial aspects of amputee care.

##### **2. Orthotics**

Biomechanical principles of orthotic management.

Appreciate the diversity of medical conditions for which orthotic management is required.

Understand the aims of orthotic treatment.

Understand the place of orthotic treatment in relation to alternative (e.g. surgical) modes of treatment.

Appreciate the skills involved in the design, casting, manufacture and fitting of orthoses.

Understand the limitations of the application of orthoses.

### 3. Wheelchairs

Understand the mechanics of wheelchair propulsion by occupants and attendants.  
Know the range of wheelchairs available - self propelled, attendant propelled and electric (indoor and indoor/outdoor) and to know the criteria for appropriate provision.  
The types of people referred for the provision of a wheelchair (a) as the sole or principal means of mobility and (b) as an aid to social mobility.  
The environmental factors which limit the usefulness of wheelchairs.  
Risk and safety analysis in wheelchair provision.  
Understand the workings of district wheelchair services.

### 4. Special Seating

The need for different types of special seating - supportive, contoured, anti-pressure, static, built into wheelchair etc.  
The benefits and shortcomings of the different types of equipment available.  
Techniques of assessment, fabrication, fitting etc.  
Knowledge of the costs of special seating.

### ***Skills***

To prescribe prostheses, orthoses, wheelchairs and other assistive devices.  
To work in conjunction with engineering and technical staff and other members of the multi-professional team involved in assessing equipment for disabled people.

### **Teaching/Learning Method**

Directed reading, national/international resources  
Supervised practical experience :-

The clinical management of people with a wide variety of disorders for whom the provision of aids and equipment is required.

*Working with different agencies, suppliers and professionals involved in the provision and maintenance of equipment.*

Working in various clinical settings e.g. hospital clinic, disabled living centre, domiciliary assessment etc.

Inpatient as well as outpatient comprehensive management of amputees.

### **Assessment**

Clinical practice observed by relevant trainer(s).

Portfolio of personally managed cases reflecting the range of commonly occurring situations.

One 2000 word critical case study aimed at demonstrating an understanding of the complex interaction between amputation and other synchronous disabilities.

Case presentations in formal (tutorial) and informal settings.

*Evidence of Competence for inclusion in Record*

Reports from trainers and approved observers.  
Written work

## **ENVIRONMENTAL CONTROL SYSTEMS AND ASSISTIVE TECHNOLOGY**

Status - Obligatory (five EC assessments)

- Optional (further experience)

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:-

The assessment for and specification of assistive devices in collaboration with non-medical specialists.

Accessing the relevant agencies to ensure timely supply of equipment.

Periodic monitoring to ensure continuing suitability of equipment.

### ***CONTENT***

#### ***Knowledge***

Environmental Control Equipment.

The range of equipment available through the NHS and other suppliers.

The administrative system of environmental control provision.

Integration of environmental control equipment with other equipment (eg electric wheelchairs or communication aids).

Residual functional capabilities of severely disabled people, and the impact of this on the selection of interfaces with environmental control equipment.

Assistive Technology.

Have a working knowledge of the range of equipment used to assist mobility and activities of daily living e.g. walking, bathing, feeding, lifting aids etc.

The principles, functioning and range of electronic aids (eg environmental control systems, communication aids, computers etc).

The function of manipulation devices (e.g. page turners, feeders).

Devices to assist sight and hearing.

Understand supply arrangements, including procedures for assessment, supply, funding and maintenance.

#### ***Skills***

Assessment of severely disabled people for environmental control equipment and assistive technology.

Co-ordination of this service provision with the other rehabilitation needs of the person

To work in conjunction with engineering and technical staff as well as other members of the multi-professional team involved in assessing people for equipment.

#### ***Teaching/Learning Methods***

Involvement in a minimum of five Environmental Control assessments.

Directed reading, attendance at specialised courses

Attachment to departments supplying assistive technology e.g medical physics, speech and language.

**Assessment**

Clinical practice observed by trainer  
Portfolio of records from environmental control assessments

*Evidence of competence for inclusion in record*

Report from trainer  
Written work

**OPTIONAL MODULES**

## **ACUTE STROKE**

Status – Optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for  
Specialist assessment, investigation and treatment for people with acute stroke  
Multidisciplinary intervention to promote recovery and reduce complications due to stroke  
Developing specialist primary and secondary prevention protocols.

### ***CONTENT***

#### ***Knowledge***

Anatomy and pathophysiology of various types of stroke  
Classification schemes for acute stroke (eg TOAST, Oxford)  
Scales for describing severity of acute stroke (eg NIHSS, ESS, SSS)  
The range of investigations appropriate for acute stroke (eg CT, MRI, Doppler ultrasound, echocardiography)  
The principles of acute assessment, including swallowing assessment  
The differential diagnosis of acute stroke, and initial management of conditions that mimic stroke  
The place of acute intervention, including thrombolysis  
Complications of acute stroke and their management  
Concomitant conditions and their influence on management  
Appropriate secondary prevention  
Current research into acute stroke management

#### ***Skills***

Clinical assessment of stroke type and severity in the acute situation  
The investigation of acute stroke with appropriate use of specialist colleagues' expertise and of radiological resources  
Interpretation of early CT and MRI brain scans to distinguish infarction from haemorrhage, to localise stroke and to detect early signs of infarction  
Provide general medical care to acutely ill patients with widespread vascular disease and/or with respiratory or other complications of stroke  
Manage people with acute dysphagia  
Develop management plans for secondary prevention  
Provide triage for rehabilitation services/terminal care and maintain efficient turnover

#### ***Experience***

Work within a specialist acute stroke unit, including experience of on-call for acute admission of suspected people with stroke  
Participate in a cerebrovascular clinic for assessment of TIA and minor stroke

Experience of longer term outcome of the full range of people admitted to an acute stroke unit (including those that are not referred for rehabilitation)

Assessment of people with stroke for acute treatment, particularly thrombolysis, and for secondary prevention, especially anticoagulation

Exposure to acute stroke research is desirable

Attachments to coronary care, acute general medicine, intensive care, neurology and neuroradiology would have direct relevance

### **Teaching/Learning Method**

Tutored clinical experience

Observation of senior multidisciplinary staff and task specific training

Personal study and directed learning

Observation visits to other stroke units and diagnostic services e.g. carotid screening

### **Assessment**

Observation of clinical skills by trainer

Inspection of trainee's clinical documentation by trainer

Self assessment questionnaire

### *Evidence of competence for inclusion in record*

Log book or diary maintained and up to date

Trainer's report

Educational supervisor's report

Satisfactory score on self assessment questionnaire

## **CARDIAC REHABILITATION**

*Status – Optional*

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

The assessment for rehabilitation of a patient with cardiac disease.

The planning and implementation of a rehabilitation programme of a patient with cardiac disease taking into account the psychological as well as physical difficulties faced by a patient with cardiovascular disease.

### ***CONTENT***

#### ***Knowledge***

Epidemiology, aetiology and pathology of the various types of heart disease.

Management of acute cardiac events as well as ongoing medical management.

Exercise physiology and changes in cardiovascular disease.

Psychosocial aspects of cardiac disease.

The assessment and rehabilitation of people with heart disease, including people who have had cardiac surgery.

Vocational aspects of cardiac rehabilitation.

#### ***Skills***

Assessing the severity of symptomatology in the light of investigations of cardiac, psychological and social status.

Application of medical, surgical, behavioural, dietary and family therapy in the management of a person with heart disease.

Recognition of non-organic symptomatology and behaviour in people who have cardiac disease or present with cardiac symptomatology.

Secondary prevention of heart disease.

#### **Teaching and Learning Methods**

Assessing people for rehabilitation programmes in an out patient setting or on the cardiac ward.

Participating in the running of hospital based and community orientated cardiac rehabilitation programmes.

Participating in the exercise testing of patients post myocardial infarction and be familiar with the Bruce protocol supervised by exercise physiologist.

Following at least one patient from coronary care unit to completion of cardiac rehabilitation programme.

#### **Assessment**

Observation by trainer

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Evidence of Competence

Case history in portfolio approved by clinical supervisor.  
Certificate of attendance at a coronary care programme.

## **CONTINENCE SERVICES/URODYNAMICS**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

Effective counseling to disabled persons and their families on aspects of incontinence.  
Participating with the multi disciplinary team in the management/containment of incontinence.

Referring for urological assessment in appropriate cases.

### ***CONTENT***

#### ***Knowledge***

Anatomy of the upper and lower urinary tract.

Innervation of the lower urinary tract.

Central control of micturition.

Physiology of micturition.

Causes of urinary incontinence.

Effects of malfunction of the lower urinary tract.

Effects of urinary incontinence.

Investigation of urinary incontinence in general.

General principles of management of neurogenic urinary incontinence.

Effects of different lesions of the central nervous system on the functioning of the lower urinary tract.

Understanding the role of urodynamic studies in the investigations of the lower urinary tract.

The influence of physical disability in the management of incontinence.

Potential complications affecting the neurogenic bladder.

General effects of complications in the neurogenic bladder.

Benefits and costs of various methods of drainage of the neurogenic bladder.

Surgical and non-surgical methods of containment of urinary incontinence.

Effects of pharmaceutical agent on the neurogenic bladder.

#### ***Skills***

History taking and examination of the urinary system.

Correlation between neurological and urological dysfunction.

Clean intermittent catheterisation.

Insertion of supra pubic catheter.

Replacement of suprapubic and indwelling catheters..

Participating during urodynamic studies.

Communication with the community incontinence services.

#### **Teaching And Learning Method**

Attachment to a Spinal Injuries Centre or a Urological service.

Direct reading of national and international resources.  
Supervised clinical practice.

### **Assessment**

Ongoing assessment of clinical practice.

Case presentation.

A critical case study of the management of incontinence in two patients with different neurological lesions.

### *Evidence of Competence for Inclusion in Record*

Report from trainer.

Written work.

## **DISABLED SCHOOL LEAVERS & YOUNG ADULTS**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the necessary knowledge and skills for:

Recognition of the difficulties experienced by disabled young people and their families during the transition between childhood and adulthood.

Recognition of the potential gaps in service provision as young people leave school.

Dealing with the requirement for educational needs as people move into adult life and take on adult roles.

Recognition of vocational needs of disabled people.

Effective communication between the participating agencies in developing action plans for disabled people living in the community.

Advising local communities and authorities of their responsibilities with respect to the needs of disabled school leavers and young people.

### ***CONTENT***

#### ***Knowledge***

Health and personal development needs (including psychosexual and genetic counseling) of disabled adolescents.

Special services provided for this group through education, training and day units.

The social needs of this group, particularly for information, education, training, employment, transport, mobility, leisure and recreation.

#### ***Skills***

Assessment, multi-disciplinary and multi-agency management of this group of service users. Identification of future needs of this group of people in order to help them mature and fulfil their potential.

### **Teaching and Learning Methods**

Part-time attachment over a three month period (e.g.1 session per week) to a Young Adult Team, in which there is close multi-professional working, identification of tasks to be undertaken on behalf of the client and inter-agency working/cooperation.

Visits to special schools and colleges for physically disabled students.

Working in joint clinics with paediatricians and orthopaedic surgeons.

Concurrent attachment to a community rehabilitation team or to a paediatric unit.

Reading Material – national resource.

Local community documentation, community care assessments, transitional plan arrangements, YAT information data.

Attendance at one specific teaching event (workshop/seminar/conference) on client group.

Participation in three client assessments by YAT

**Assessment**

Performance review by Team Leader.

*Evidence of Competence for inclusion in record*

Team leader's report

Written work: case study and literature review.

## **DRIVING FOR DISABLED PEOPLE**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:  
Giving effective advice on the influence of impairments and disabilities on the ability to drive participating effectively in the multidisciplinary process of assessing all aspects of car mobility for disabled people

### ***CONTENT***

#### ***Knowledge***

Legal framework of drivers and vehicle licensing.  
The factors involved in controlling a vehicle, and the wider skills of driving safely.  
Engineering and safety aspects of transport in a vehicle as a driver, passenger in a fixed seat and in a wheelchair.  
Range of equipment available to compensate for impairments which affect ability to drive.  
Financial, technical and other assistance available to help disabled people achieve social mobility.

#### ***Skills***

Assessment of medical, visual, physical and higher cognitive factors relevant to driving a car.  
Assessing practical problems of access to a vehicle and vehicle adaptation to suit the needs of disabled people.  
Co-ordinating assessment with other training aspects e.g. driver education, financial help with vehicle adaptation.

#### **Teaching/Learning method**

Directed reading, national/international resources  
Supervised Practical experience:

Assessment and advice to people with impairments and disabilities which might impair their ability to drive a car safely.  
Assessment of people for other forms of powered mobility.  
Assessment of disabled passengers.  
Observing training and progress of people who have previously been assessed as potentially fit to drive a suitably adapted car.

#### **Assessment**

Clinical practice observed by an approved trainer.  
Portfolio of case records from clinical practice.  
One written report on all aspects of car mobility for a specific condition or disability

*Evidence of competence for inclusion in record*

Report from Approved Observer  
Written work

## **LEARNING DISABILITIES SERVICES**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the skills necessary for medical involvement in the multi disciplinary assessment and management of people with mild to profound learning disabilities.

### ***CONTENT***

#### ***Knowledge***

To be able to explain and discuss the issues in the medical and social care of people with mild to profound learning disabilities, including health screening, sexual counselling, advocacy, autonomy and family involvement in care.

To be able to explain the principles of assessment and management of epilepsy and disturbed behaviour in this group of patients.

To be able to explain and discuss the principles of:

postural support and positioning

management of swallowing difficulties

oesophageal reflux

bowel and bladder management

To have the knowledge to be able to explain and discuss the nature of the health and social organisations, which support people with learning disabilities in the community.

#### ***Skills***

To be able to carry out a simple clinical assessment of hearing and vision in a person with moderate to profound learning disabilities.

To be able (and to be able to demonstrate ability) to take relevant, appropriate and active role in a multi disciplinary team discussion or case conference.

To be able (and to be able to demonstrate ability) to communicate appropriately with people of different levels of learning disability and also with their families.

#### **Teaching and Learning Method**

To work with people with learning disabilities in the community as part of a team.

To experience the assessment and management of people with combined physical/learning disabilities and psychiatric/learning disabilities.

To attend special seating assessments for people with severe learning and physical disabilities.

#### **Assessment**

To produce one 1500 word case study in which the overall medical and social care is discussed with particular reference to and discussion of the principles of advocacy, counselling, ethical and behavioural management needs.

Clinical practice observed by trainer.  
Topic Specific structured discussion with educational supervisor.

Evidence of competence for inclusion in training record

Report from an approved observer.  
Report from educational supervisor.  
Written work.

## **ORTHOPAEDIC REHABILITATION**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the necessary knowledge and skills, for:

Assessment and management of patients after severe musculo-skeletal trauma and/or orthopaedic intervention.

Management of patients following brachial plexus and peripheral nerve injury.

Management of chronic pain in the context of musculoskeletal disease (in conjunction with an attachment to a pain management attachment)

### ***CONTENT***

#### ***Knowledge***

Epidemiology, aetiology and pathology of diseases of bones and joints including trauma. Orthopaedic management of people who have sustained fractures, including those with multiple trauma and non-orthopaedic injuries.

The role of orthopaedic surgery in children and adults in the areas of scoliosis and cerebral palsy management.

The principles of the surgical management of degenerative joint disease with particular reference to arthroplasty.

Musculoskeletal pain associated with changes in bones, joints, ligamentous and other soft tissues.

Brachial plexus and peripheral nerve injury.

Disability arising as a result of other pathology of the connective tissues, including deformities and contractures.

Diagnosis and management of post-traumatic stress.

Indications for medical, surgical, orthotic, paramedical, behavioural and other forms of therapy for this group of people.

Paediatric orthopaedic and particularly scoliosis and cerebral palsy management

Orthogeriatric rehabilitation

Appropriate use of paramedical, orthotic and other therapies in this group of conditions.

Appropriate pain management techniques complementary to those learnt in a pain management attachment and relevant to orthopaedic practice.

#### ***Skills***

Assessment and management of disability resulting from trauma and musculoskeletal disease, congenital and acquired.

Assessment and appropriate management of people with brachial plexus and peripheral nerve lesions.

Recognition of non-organic presentations of musculoskeletal disorders.

*Diagnosis and Management of musculoskeletal diseases, including back and neck pain, soft tissue rheumatism and multiple trauma.*

Diagnosis and management of brachial plexus injury and peripheral nerve injury

**Teaching and Learning Method**

*Working in orthopaedic clinics and wards and observing operating theatre sessions.*  
Attending paediatric orthopaedic clinics in special schools, where available.

**Assessment**

Objective assessment of trainee performance by supervisor in patient assessment, formulation of treatment/management strategy and application of surgical principles. (Viva voce testing)

Performance review in setting up two discharge plans for elderly people following orthopaedic trauma.

Writing up the full case management of a patient with a musculoskeletal condition.

*Evidence of competence*

Trainer' report  
Written work

## **PAEDIATRIC REHABILITATION**

### **Status – Optional**

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

Treatment and management of clinical aspects of disability in childhood  
Liaising with statutory services (Health, education and social services)  
Supporting both the child and family  
Securing smooth transfer of care at 16 to 19 years to adult services

#### ***CONTENT***

#### ***Knowledge***

Normal and abnormal child development, including growth, puberty, vision, hearing, gross and fine motor skills, language and communication skills, social behaviour and emotional development and response to pain, illness and disability.

Epidemiology, natural history and various methods of management for disabling conditions of childhood, including cerebral palsy, neural tube defects, neuromuscular and musculoskeletal disorders, severe learning difficulties, juvenile rheumatoid arthritis and head injury.

Plasticity of the child's brain at various ages and the degree of neurological recovery that can be anticipated in comparison with the adult brain.

Orthopaedic complications of neurodisability and their management, particularly scoliosis, hip dislocation and joint contractures.

Vision and hearing impairment and their management.

Communication, speech and language disorders and their management.

General and specific learning difficulties.

Physical illness, including epilepsy.

Psychological aspects of childhood and adolescence, including problems relating to sexual development, non-compliance with treatment and medication, bereavement.

The legal and practical framework of education, including special provisions for children with disabilities.

Relationships between children, their families and their social, cultural and educational environments.

#### ***Skills***

Neurological and basic orthopaedic examination of children of all ages.

Effective communication skills with parents and children of all ages.

Indications for use of orthoses and other assistive devices for mobility and communication in children and their relation to growth and development.

Prescribing and use of medication in children.

Basic assessment of developmental abilities and functional skills.

## **Teaching and Learning Method**

Directed reading, national and international resources

Supervised practical experience

Attachment to a child development service for experience in multi-disciplinary team work, clinical assessment, the functional effects and medical complications of disability, relevance of specialist clinics (neurology, genetics, orthopaedics, audiology, ophthalmology, psychiatry)

Health reports to education services for children with special educational needs

Care across both acute and community settings

Liaison with social services and other family support networks

Visits to units specialising in paediatric rehabilitation

## **Assessment**

Clinical practice observed by an approved trainer

Portfolio of case records from clinical practice including clinic letters and health reports to education and social services

Two 300-word case reports summarising clinical management of children with motor, sensory, learning and/or complex neurodisability

## ***Evidence of competence for inclusion in record***

Report from trainer.

Written work

## **PAIN MANAGEMENT**

Status – optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills to:

Assess the contributing factors and their relative importance in the development of chronic pain disability.

Assess the relative merits of interventions for the management of chronic pain, recognise their limitations and relate accordingly with patients, family and colleagues.

Manage the individual with chronic pain so as to minimise associated distress and maintain activities and social participation

### ***CONTENT***

#### ***Knowledge***

Anatomy and physiology of pain

Distinction between acute and chronic pain

Clinical pain patterns and their diagnostic associations including neurogenic, mechanical, inflammatory as well as common pain syndromes

Psychosocial and cultural influences on the pain experience

Relationship between chronic pain, impairment and disability

Techniques for measuring pain and its impact on the lives of people with manifest disability

The assessment of the relative importance of organic and non-organic factors in the expression of pain

The social consequences of chronic pain for the individual and his/her family and carers, including the impact on employment and education, social security benefits, finance and demands on health and social services

Psychological consequences of pain and trauma (eg depression, phobias and post traumatic stress disorder)

#### ***Skills***

The appropriate investigation of people with chronic pain utilising clinical, radiological, psychological and questionnaire techniques

Appreciate the range of psychological reactions to chronic pain, including the way in which secondary gain may be influenced by personal, family and societal factors eg the perverse incentives built into the legal and social security systems

Identifying the presence of illness behaviour and other maladaptive phenomena within the constellation of symptoms associated with chronic pain

Identifying modifiable cognitive and behavioural factors influencing disability eg misconceptions about the cause and meaning of pain, fear-avoidance patterns and the rest / overactivity cycle

Communicating with individuals in pain and their families in ways which enable them to adjust to and minimise disability eg avoiding jargon which provokes fear and motivational interviewing techniques

The use of drugs, physiotherapy, occupational therapy, counselling, cognitive-behavioural, educational, and other professional skills within a multidisciplinary team concerned with the management of chronic pain

The use of interventional techniques where appropriate such as nerve blocks, soft tissue injections and acupuncture

The preparation of reports which reflect as accurately as possible the relative contributions of the factors and influences associated with chronic pain, including letters to other doctors, medico-legal reports and reports for the Department of Social Security or employers

### **Teaching / Learning Method**

Directed reading

Attachment to a pain assessment and management service using:  
medical/ physical interventions

Cognitive-behavioural interventions or

Integrated pain service

### **Assessment**

Clinical practice observed by an approved trainer / supervisor

Clinical practice observed and reviewed by trainer.

One 1500 word critical case study describing the experience and views of individuals with either i) severe neurological disability and chronic neurogenic pain or ii) chronic pain with no identifiable medical cause and unresponsive to medical treatment

One 2000 word critical case study outlining the responses of individuals, families, employers and work colleagues, health professionals, government agencies and society to chronic mechanical pain with activity restriction

Portfolio of case records from clinical practice

*Evidence of competence for inclusion in record*

Written work

Report from approved observer

## **PALLIATIVE MEDICINE**

### **Status - Optional**

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:-

Specialist assessment of dying people and related symptoms

Use of rehabilitation measures appropriate in the palliative care setting

Use of the wide range of therapies available for palliation of symptoms and appropriate referral for their use.

Effective communication with the dying person relatives and staff based on an understanding of the personal, ethical and legal issues surrounding dying.

#### ***CONTENT***

#### ***Knowledge***

The wide spectrum of diseases, particularly malignancy, progressive neurological disorders and other conditions where people require control of a range of symptoms, particularly pain, in order to make their death more comfortable.

The range of therapies (medical, paramedical and complementary) which may be applied in this situation.

Understand the pharmacology of drugs used to control pain and other common symptoms.

Understand the effects of disease and disability on body image among dying people, and the psychological and social problems faced by them and their families.

Understand the roles of formal and informal carers, statutory and voluntary services, in improving the quality of life of people with terminal disease.

#### ***Skills***

Clinical assessment of dying people (often on a daily basis) in order to manage their pain or other symptoms effectively.

Use of a wide range of therapies, including radiotherapy, chemotherapy and surgery where appropriate, and understanding how these procedures contribute to the overall rehabilitation of the dying person.

Develop good communication with the dying person, relatives and care staff.

Acknowledge the ethical and legal problems which can be faced by professionals and relatives at the time of bereavement.

#### ***Experience***

Working with a multi-professional team involved in the terminal care of people with a wide variety of diseases in a hospice, hospital unit and community.

Experience in bereavement counselling and the prevention, or minimisation of abnormal grief reactions.

**Teaching/Learning method**

Tutored clinical experience  
Observation of senior multidisciplinary staff and task specific training  
Personal study and directed learning  
One detailed case study

**Assessment**

Observation of clinical competence by trainer  
Inspection of clinical documentation by trainer  
Self assessment questionnaire OR a 1500 word case study to illustrate the interplay between rehabilitation and palliation.

***Evidence of competence for inclusion in record***

Log book or diary  
Educational supervisor's report

## **SENSORY DEFICITS REHABILITATION**

Status - Optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

Recognition of the needs arising from sensory deficits.

Communicating and collaborating effectively with specialist multiprofessional teams providing services to people with sensory deficits.

### ***CONTENT***

#### **A: Deafness/Hearing Impairment**

##### ***Knowledge***

Prevalence, aetiology and natural history of hearing impairments in children with congenital and acquired disorders.

Aetiology, pathology and natural history of hearing loss in adults, especially due to sensori-neural loss.

Effects of ageing on hearing.

Prevalence and natural history of tinnitus in adults.

Hearing aids - the range of aids and equipment available, both on the NHS and commercially, including accessory aids e.g. alerting and amplification devices for telephone, television etc.

The types of cochlear implants available.

Speech reading (lip reading), sign language and other forms of alternative communication for deaf people.

Social services support for deaf people.

##### ***Skills***

Recognition of the behavioural, language, speech and cognitive consequences of prolonged hearing impairment in children.

Methods of fitting and assessing the benefits of hearing aids.

#### **B: Blindness/Visual Impairment**

##### ***Knowledge***

Aetiology and pathology of causes of visual impairment.

Methods of compensation for (a) impaired vision and (b) blindness (including mobility issues).

Psychosocial consequences of visual impairment at different ages.

Services for blind people, including education, training and eligibility for benefits.

Role of opticians and orthoptists and the identification and management of visual problems.

Legal consequences of impaired vision, e.g. for driving or operating machinery.

Difference in presentation and consequences of central and peripheral visual loss.

### ***Skills***

Tests and techniques for assessing visual impairment.  
Accessing services for blind people.

### **Teaching and Learning Method**

Directed reading, national/international resources .  
Attachment to a clinical service involved in assessing A: hearing impairment, including assessment and fitting of hearing aids or B: visual impairment Experience of activities of professional and voluntary support services addressing methods of compensation for sensory deficits (e.g. lip-reading for the deaf; guide dogs for blind).

### **Assessment:**

One 1500-word critical case study describing the experience and views of a person with a sensory deficit.  
Clinical practice observed by trainer.  
Portfolio of case records from clinical practice.

### ***Evidence of competence***

Trainer's Report  
Written work

## **RESIDENTIAL UNITS FOR DISABLED PEOPLE**

Status - optional

### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

Appraising the options for care placement.

Ensuring adequate liaison with authorities both inside and outside the hospital, and, where relevant, voluntary groups, to allow residents the greatest possible variety of activities and experience.

Managing a unit where many of the patients will stay for almost all of their remaining lives, and balancing the resources required for that with those required for respite care and slow-stream rehabilitation.

### ***CONTENT***

#### ***Knowledge***

Physical, psychological and social impact of living in residential care, and of shared care arrangements.

Statutory and local frameworks regarding the relative responsibilities of the NHS and social sectors.

Intrinsic and extrinsic factors influencing success or failure of community care.

#### ***Skills***

Liaison with statutory and voluntary agencies in admission and discharge planning.

Ways of improving social stimulation of people in institutions.

#### ***Experience***

Management of the residential unit, including understanding the competing demands for residential care, respite care, intermittent admissions (shared care) and longer term "slow stream" rehabilitation.

Experience may be gained by attachment to a unit that has residential care for disabled people within the Health Service environment. This should be complemented where possible with visits to residential units run by Social Services and voluntary sector organisations, and at nursing homes.

#### ***Teaching/Learning method***

Participating in the assessment of patients for consideration of a residential unit.

Routine clinical work in such a unit.

Attendance at planning meetings to organise a balance of care between Health Service and Social Sector provisions.

Participation in review case conferences.

Written information on local policy on provision and direction of future care.

Directed reading of reports and studies of the needs of people requiring residential support

## **Assessment**

Observed clinical practise by an approved trainer (normally a consultant) in day-to-day management of patients with long-term disability, and recognition of their changing needs. Reports on visits to facilities that provide a similar, but non-Health Service package, particularly to identify the differences between facilities and why individual patients might enter the Health Service or a non-Health Service facility.

A written exercise in how the balance of care for this group might be addressed in a standard sized district without existing facility.

### ***Evidence of competence for inclusion in record***

Report from trainer

Evidence of the above written work.

## **RESPIRATORY REHABILITATION**

### **Status - Optional**

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for running an efficient respiratory rehabilitation programme.

#### ***CONTENT***

##### ***Knowledge***

The epidemiology and pathophysiology of the most common lung diseases in particular chronic obstructive pulmonary disease and asthma.

The use of lung function tests and basic exercise physiology.

The epidemiology of cigarette smoking and the role of smoking cessation therapy.

The actions of drugs used in COPD and asthma.

The principles of assessment and rehabilitative management of people with disabling lung disease.

Rational use of oxygen and methods of administration (cylinders, concentrators, liquid oxygen)

The natural history of severe smoking related lung disease, and the role of palliative treatment.

##### ***Skills***

Clinical recognition of severe pulmonary disease and any reversible features.

Chest X-Ray examination as an integral part of patient assessment.

Pulmonary function tests – ability to recognise classical chronic obstructive pulmonary disease or other severe impairments.

Objective and subjective grading of impairment i.e. dyspnoea scoring scales, shuttled walking tests etc.

Sensitive handling of smoking cessation issues.

##### **Teaching and Learning Method**

Clinical practice. Work with physician with an interest in pulmonary rehabilitation in a formal rehabilitation programme. Sessions in the pulmonary function laboratory, if available. Work with physiotherapists and nurses in pulmonary rehabilitation and smoking cessation classes.

Reading. Understanding pathophysiology, lung function, exercise physiology and smoking cessation from standard texts.

##### **Assessment**

Clinical practice observed by trainer.

##### ***Evidence of competence for inclusion in record***

Report from trainer

## **SEXUAL ASPECTS OF DISABILITY**

### **Status - Optional**

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary to assess the sexual aspects of disability in relevant individuals and to be able to discuss all aspects of sex and sexuality both with the disabled person and the relevant family members.

#### ***CONTENT***

##### ***Knowledge***

Understand the biological and social factors relating to normal emotional and sexual development.

Awareness of the range of problems of human sexuality, among able bodied as well as disabled people.

Understand the physiology of sexual arousal and performance, and how this may be affected by disease processes.

Understand the principles of assessment and rehabilitative management of sexual disorders. The range of psychological, physiological, drug, appliance and other therapeutic options. Awareness of the contraceptive needs of disabled people.

##### ***Skills***

Being confident in discussing issues of sexuality, sexual techniques and counseling with disabled people and their partners.

The assessment of the factors which may contribute to a disabled person presenting with sexual problems.

Managing the impact which a person's disability may have on their sexual performance.

##### ***Experience***

Working with trained professionals involved in the assessment and management of sexual problems of disabled people.

Management of specific areas of potential sexual difficulty eg spinal cord injured, diabetes, severe neurological and musculoskeletal conditions.

##### ***Teaching and Learning Methods***

Personal study and background reading (all sections as relevant)

Attachment to sexuality clinic or other appropriate clinical setting (relevant to all sections)

Attendance at specialist courses (relevant to all sections)

##### ***Assessment***

Formal assessment by trainer

Observed clinical practice  
Reports from other team members

***Evidence of Competence for Inclusion in Record***

Reports from trainers.

## **SPORTS MEDICINE**

### **Status – Optional**

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills necessary for:

The assessment of acute and chronic bone, joint and soft tissue injuries related to sport.

The application of fitness testing and its their implications for exercise prescription

The multidisciplinary team approach to the treatment of sports injury including the coach, psychologist, therapist and nutritionist.

To advise patients with disabilities or medical problems in relation to sporting activities including appropriate advice on medication.

#### ***CONTENT***

##### ***Knowledge***

The biomechanics of sporting injuries.

The physical and psychological attributes of sportsmen / women.

The mechanisms of injuries in different sports, and their relevance to prevention.

Clinical presentation, assessment and management of acute sporting injuries.

Exercise physiology, the positive and negative effects of exercise, and the importance of retraining in the management of people who have sustained sporting injuries.

The employment, domestic and the social consequences of sports injuries for the athlete and society.

The problems of children and adolescents involved in sport, particularly those subject to over-training, fatigue and other negative influences.

Drugs and sport.

Sports and sporting activity among disabled people, including any special equipment that they may require.

The extent of National Health Service provision of sports medicine services and the role of the private health sector.

Benefits of exercise in the non sportsman / woman and its value in rehabilitation programmes.

##### ***Skills***

Assessment and rehabilitation of people injured while undertaking sporting activities.

Measurement of physical fitness.

Assessing the physical and psychological consequences of failure of the acute injury to resolve to the satisfaction of the athlete.

Understanding the motivation of athletes and how this can help, or occasionally hinder, rehabilitation after injury.

Dealing with disabled people who have been injured while undertaking a sporting activity.

#### **Teaching and Learning Methods**

Working at a sports injury clinic with an experienced multidisciplinary team, including the acute management of injured athletes.  
Liaison with orthopaedic and other surgical colleagues in promoting the active rehabilitation of sportsmen/women with serious physical injuries.  
Experience an exercise physiology laboratory, understand how to perform and interpret measurements of fitness, eg VO2 Max, lactate threshold and isokinetics.  
Field experience with team doctor, psychologist, nutritionist advisable.  
Reading recommended texts.  
Experience at a disabled sporting injuries and / or a disabled sporting event.

### **Assessment**

Demonstrate ability to diagnose and manage common sporting injuries to supervisor in clinic.  
Demonstrate ability to perform measurements of fitness and interpret results in context of a fitness programme to supervisor.  
Case history presentations.

### **Evidence of Competence**

Satisfactory record of attendance at sports injury clinic and physiological laboratory by clinic supervisor.  
Case history presentation recorded in portfolio to demonstrate ability to manage sporting injuries and to provide an exercise prescription on the basis of physiological testing.

## **VOCATIONAL REHABILITATION**

### ***Status – optional***

#### ***Objectives***

To demonstrate that the trainee has the knowledge and skills, necessary for:-

The assessment of a disabled patients fitness to work.

The initiation of work rehabilitation and communication with the appropriate personnel to maximise a patients potential for return to work.

#### ***CONTENT***

##### ***Knowledge***

Social policy framework of vocational rehabilitation, including the education and Disabled Persons (Employment) Act 1944, the quota system, current Department of Education and Employment services and social security regulation relevant to this field, such as Industrial Injury Benefit, Disability Working Allowance, Incapacity Benefit, Disability Discrimination Act, etc. Awareness of the different legal frameworks operating in the various countries of the United Kingdom.

The obligations of employers which influence decisions, including Health and Safety at Work, superannuation and redundancy, rights of employees, and arrangements for retirement on medical grounds.

Ways in which jobs may be modified eg, by the provision of technical aids or other services to facilitate employment or return of work of a disabled person.

Vocational assessment and training schemes run by local enterprise companies and Training and Employment Councils, retraining through further educational colleges, and sheltered placement / supported employment schemes.

Psychological reactions to injury or impairment, including learned helplessness, secondary gain, post traumatic stress and depression.

##### ***Skills***

Assessment of a disabled person's fitness to work, bearing in mind relevant medical factors in each case and also the wider social context.

Recognition of the importance of physical, psychological and social factors in each case.

Writing reports for Department of Education and Employment, Department of Social Security, employers, trade unions, pension funds and lawyers.

#### **Teaching and learning methods**

Experience may be gained by:

Consideration of vocational needs when dealing with people disabled as a result of different conditions eg low back pain, traumatic brain injury, stroke, spinal cord injury, orthopaedic injury or cardiac disease.

Liaison with occupational health staff, Department of Educational and Employment and other providers of specialist assessment facilities and services.

Assessment fitness for work in outpatients and on discharge from ward

Writing of reports concerning fitness for work for appropriate bodies checked by educational supervisor  
Attachment to occupational Health Physician or other specialist facility.  
Appropriate reading.

### **Assessment**

One case study approved to appropriate standard by educational supervisor.  
Satisfactory report from Occupational Health Physician or deputy of satisfactory attendance and understanding of employment rehabilitation.  
Record of reports written and for which authority.

### **Evidence of Competence**

Case study held in portfolio  
Reports from occupational health  
Educational supervisors report.