



ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN REHABILITATION MEDICINE



This curriculum of training in Rehabilitation Medicine was developed in 2010 and undergoes an annual review by Dr Jacinta McElligott, National Specialty Director, Dr. Ann O'Shaughnessy, Head of Education and Professional Development and by the Rehabilitation Medicine Specialty Training Committee. The curriculum was approved by ICHMT.

Version	Date published	Last edited by	Version comments
Agreed numbering convention	Date approved by EPD for circulation	Name of administrator to make changes	Brief overview of changes made e.g. section edited, content added/edited/deleted
<i>1.0</i>			

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Introduction

A trainee in Rehabilitation Medicine must have expertise in 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 (RM) is practised full time though it will continue to be practised in conjunction with other specialities in some posts. These specialties include Rheumatology, Neurology, Geriatric medicine and Spinal injury.

Aims

Upon satisfactory completion of specialist training Rehabilitation Medicine, the doctor will be **competent** to undertake comprehensive medical practice in that specialty in a **professional** manner, unsupervised and independently and/or within a team, in keeping with the needs of the healthcare system.

Competencies, at a level consistent with practice in the specialty of Rehabilitation Medicine, will include the following:

- Patient care that is appropriate, effective and compassionate dealing with health problems and health promotion.
- Medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient care.
- Interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professionals, the scientific community and the public.
- Understand the roles of the allied health professionals who form part of the team and when to refer appropriately.
- Appraisal and utilisation of new scientific knowledge to update and continuously improve clinical practice.
- The ability to function as a supervisor, trainer and teacher in relation to colleagues, medical students and other health professionals.
- Capability to be a scholar, contributing to development and research in the field of Rehabilitation Medicine
- Professionalism
- Knowledge of public health and health policy issues: awareness and responsiveness in the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, the practice of cost-effective health care, health economics and resource allocations.
- Ability to understand health care and identify and carry out system-based improvement of care.

Professionalism describes the knowledge, skills, attitudes and behaviours expected by patients and society from individuals during the practice of their profession (*as a doctor*). It includes such concepts as:

- The skills of lifelong learning and the maintenance of competence
- Information literacy
- Ethical behaviour
- Integrity, honesty

- Altruism
- Service to, justice and respect for others
- Adherence to professional codes

Entry Requirements

Applicants for Higher Specialist Training (HST) in Rehabilitation Medicine must have completed a **minimum** of two years Basic Specialist Training (BST) in approved posts and obtained the MRCPI or (UK).

BST* should consist of a minimum of 24 months involved with direct patient care.

BST in General Internal Medicine (GIM) is defined as follows:

- A minimum of 24 months in approved posts, with direct involvement in patient care and offering a wide range of experience in a variety of specialties.
- At least 12 of these 24 months must be spent on a service or services in which the admissions are acute and unselected.
- For further information please review the BST curriculum

A period of experience in Neurology, Rheumatology, Geriatric Medicine or Spinal Injury before entry to HST is considered desirable although not essential.

Rehabilitation Medicine however, does require a broad range of clinical skills and thus a background in other specialties can provide an acceptable entry qualification into the specialty. The FRCS, AFRCS, MRCS, MRCPsych, MRCGP or another relevant and equivalent clinically based Irish/UK qualification may be acceptable for entry into the specialty. Candidates possessing any such qualification will be required to have completed prior Basic Specialist 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 ICHMT Office directly.

If the candidate has a non-general internal medical background or has been in a non-general internal medical specialty for some time, further experience in general internal medical may be required prior to entry into Higher Specialist Training.

Duration & Organisation of Training

The duration of HST in Rehabilitation Medicine is 4 years, one year of which **may** be gained from a period of full-time research.

Training rotations may be in Rehabilitation alone or may include up to 1 year in approved posts in specialties such as Neurology, Rheumatology, Geriatric Medicine or Spinal Paralysis. Specialist training ideally should not seek to duplicate experience gained previously during BST. Some flexibility in training requirements with regard to those with experience of other disciplines (such as cardio-respiratory medicine, general (internal) medicine, palliative care, psychiatry or relevant surgical disciplines such as neurosurgery) may be shown, particularly where there is evidence of transferable skills (such as interdisciplinary teamwork and work with disabled people, carers, social services, and voluntary organisations.)

Higher Specialist Training in Rehabilitation will provide experience in both university teaching hospitals, and other major rehabilitation centres with academic activity, and in Regional General Hospitals. The programme to which the trainee is appointed will have named consultant trainers. In addition, the programme will be overseen by a Programme Director who will co-ordinate the training and report to the National Specialty Director appointed by the ICHMT.

Dual Training

Those seeking to practise Rehabilitation with another speciality should seek the advice of the Dean of Higher Specialist Training and the National Specialty Directors concerned, as enrolment in both specialities will be required.

The four-year Higher Specialist Training in Rehabilitation Medicine consists of **Obligatory Experience** and **Optional Experience**, each of which will be assessed formally, together with other aspects of training which can be acquired by short attachments or attendance at relevant courses or meetings.

(Approval of a training programme will only be granted if it includes experience in all of the following. 1-6 below)

1. Neurological Rehabilitation including spinal injury

Including the management of head injury, stroke, spinal injury and incontinence of neurological origin – minimum period of 12 months. If the spinal paralysis is not specifically included, a 3 months attachment to a spinal unit is recommended. For those who will take responsibilities for such services a period of one year is recommended.

2. Rheumatological/Locomotor Rehabilitation

Including the management of orthopaedic and non inflammatory joint disorders, back pain, pain management, learnt at specialised clinics, inflammatory joint disorders and metabolic bone disease - minimum period of 6 months.

3. Amputee Care, Wheelchairs and Assistive Technology

A minimum period of 3 months is required. For those who will take responsibility for such services, one year of training is recommended. During this period all levels of amputation should be seen and experience gained at more than one centre. Experience of assistive technology in all its forms should be gained by each trainee throughout the training programme. Attendance at 5 environmental control assessments is required.

Training in the following areas (4, 5 and 6 below) will normally take place throughout the programme rather than for specified periods but details of the training received and completed satisfactorily, countersign where appropriate, will be required for certification.

4. Psychosocial Aspects of Rehabilitation, Disability and Handicap

Experience of the psychological aspects of activity limitation and participation restriction and psychological assessment should be gained including work with a clinical psychologist on the rehabilitation team. Counselling skills should be learnt together with the influence of personal family and social circumstances on the experience of disability. The role of statutory bodies, social agencies and voluntary organisations should be learned.

5. Organisational and Management Aspects of Rehabilitation

Experience of multidisciplinary teamwork is essential. Training in team leadership and dynamics, goal setting, resource management and conflict resolution through attendance on appropriate management courses will be required. Knowledge of information technology should be developed.

6. Research

Throughout the period of training in Rehabilitation Medicine research into any aspect of rehabilitation, should be carried out. This can be broadly interpreted to include audit development and interdisciplinary research in these as well as other relevant clinical studies.

Optional Training Experience

A wide variety of experiences in approved posts can count towards certification in Rehabilitation. No specialist trainee will acquire comprehensive experience of all these options in the course of a four-year training programme. Therefore the curriculum sets out to define the knowledge in these areas which could be acquired during the four years of HST. Attendance at appropriate courses and attachments for short periods to centres of excellence, in aspects of Rehabilitation not available locally to the trainee is recommended.

As noted previously, one year's training in approved posts in Rheumatology, Neurology, Geriatric Medicine, or Spinal Paralysis may be included. Training in the following areas may be obtained; these will mainly consist of short attachments (up to three months) but none should exceed one year:

- Cardiac rehabilitation
- Community based rehabilitation
- Continence services / Urodynamics
- Disabled school leavers and young adults
- Driving for disabled people
- Environmental control systems
- Learning disability services
- Orthopaedic rehabilitation
- Paediatric rehabilitation
- Pain management
- Palliative medicine
- Rehabilitation of sensory deficits
- Respiratory rehabilitation
- Sexual aspects of disability
- Sports medicine
- Vocational rehabilitation
- Young disabled unit

Specialist trainees who wish to obtain training in other areas, for example rehabilitation engineering, computer technology for disabled living, rehabilitation in developing countries, epidemiology and public health medicine etc. should negotiate these attachments with the National Specialty Director who, in conjunction with the trainee, will consult the Dean of HST if necessary, in order to obtain approval for a training programme not specified

Spinal Paralysis

In Ireland, as in many countries, Spinal Paralysis is an inclusive part of Rehabilitation Medicine and does not exist as a separate speciality

However, in addition to the specific medical and surgical knowledge required the consultant in a Spinal Paralysis Unit requires the skills to co-ordinate a whole range of medical and paramedical expertise, social agencies and personal support services. There is therefore a need for additional training for specialists prepared to commit themselves principally to the management of Spinal Injuries.

In Ireland and in the UK Spinal Paralysis is not included in the specialities listed in Schedule 2. Certificates of satisfactory completion of specialist training cannot therefore be awarded in this speciality. However, arrangements can be made for those undertaking higher specialist training in Rehabilitation Medicine to have their programmes adapted to provide specialist training in Spinal Paralysis. The precise content of a programme will depend on the experience gained in BST (or in basic surgical training for those entering with surgical qualifications) and on the options selected in the Rehabilitation Medicine programme. It will

therefore be tailored to the needs of the individual trainee. It will usually be accomplished in five years but may have to extend to six.

The following elements of training are considered essential for those specialising principally in Spinal Paralysis:

- **Acute Spinal Injuries**

Wide experience of the management of acute spinal injuries at all levels of the spine. This includes the management of associated multiple injuries. Experience should be gained in the assessment of patients for operative treatment and in the co-ordination of management when several specialities are involved.

- **Bladder Management**

Direct involvement and training in the care of the paralysed bladder through adequate urological services including urological surgery, urodynamic measurement and uro-radiology. Detailed knowledge of long term care of the bladder and urinary tract is essential.

- **Bowel Management**

Direct involvement and training in the care of the Neuropathic bowel. Detailed knowledge of long term care of the bowel is essential.

- **Neuroscience**

Six months attachment to a department of neurology or neurosurgery with evidence of regular experience of neuro-radiology, neuro-physiology and other neuro-diagnostic techniques.

- **Orthopaedic, plastic and reconstructive surgery**

Relevant experience in orthopaedic surgery and plastic surgery should be gained in the spinal unit or through sessional attachments to appropriate units.

- **Psychosocial aspects of rehabilitation, disability and handicap**

Experience in the value of clinical psychology in the care of patients following major injury and attempted suicide should be gained. Knowledge of psychometric assessment is recommended together with experience of the influence of personal family and social circumstances in the experience of disability. The role of statutory bodies, social agencies and voluntary organisations should be learned.

- **Organisational and Management aspects of Spinal Paralysis Rehabilitation**

Experience of multidisciplinary teamwork is essential. Training in team leadership and dynamics, goal setting, resource management and conflict resolution through attendance on appropriate management courses will be required. Knowledge of information technology and medical audit are standard requirements of medical training. Direct experience of both hospital and unit management, planning and policies is important.

- **Intensive care experience**

Secondment for two months to an intensive care unit should be considered to gain experience of specialised equipment and ventilator dependent patients if this has not been covered in Basis Specialist Training.

- **Paediatric Experience**

Close liaison with paediatric colleagues will be maintained for the management of paralysed children but some experience in a paediatric department should be obtained, unless covered by Basis Specialist Training.

- **Other areas of recommended experience**

Although listed under one heading, the following areas of experience are considered important though the experience placed upon them may vary in different centres.

- **Sound knowledge and experience should be gained in:**

Sexual counselling and fertility disorders.

High-level lesions and long-term ventilator dependent patients.

Pain management techniques.

Wheelchair provision, orthotics, specialised seating, pressure management and tissue viability.

Non-traumatic spinal injury.

High technology bio-engineering such as robotics, environmental control systems and Functional Electrical Stimulation.

Tendon transfer and upper limb programmes

Sacral root stimulators

Obligatory experience:

Neurological Rehabilitation
Acquired brain injury Rehabilitation
Spinal Cord Injury Rehabilitation
Rheumatological / Musculoskeletal/Locomotor Rehabilitation
Amputee care, Wheelchairs and Assistive Technology
Psychosocial aspects of Rehabilitation, Disability and Handicap
Organisational, Management and Audit aspects of Rehabilitation

Further Training Options:

Cardiac rehabilitation	• Paediatric rehabilitation
Community based rehabilitation	• Pain management
Continence services / Urodynamics	• Palliative medicine
Disabled school leavers & young adults	• Rehabilitation of sensory deficits
Driving for disabled people	• Respiratory rehabilitation
Environmental control systems	• Sexual aspects of disability
Learning disability services	• Sports medicine
Orthopaedic rehabilitation	• Vocational rehabilitation

No particular order or sequence of training will be imposed and programmes offered should be flexible i.e. capable of being adjusted to meet trainees' needs. The earlier years will usually be directed towards acquiring a broad general experience of Rehabilitation Medicine under appropriate supervision. An increase in the content of hands-on experience follows naturally, and, as confidence is gained and abilities are acquired, the trainee will be encouraged to assume a greater degree of responsibility and independence.

If an intended career path would require a trainee to develop further an interest in a sub-specialty within Rehabilitation Medicine (e.g. Cardiac Rehabilitation etc.), this should be accommodated as far as possible within the training period, re-adjusting timetables and postings accordingly.

"Generic" knowledge, skills and attitudes support competencies which are common to good medical practice in all the Medical and related specialties. It is intended that all Specialist Registrars should re-affirm those competencies during Higher Specialist Training. No time-scale of acquisition is offered, but failure to make progress towards meeting these important objectives **at an early stage** would cause concern about a SpR's suitability and ability to become independently capable as a specialist.

Flexible Training

Trainees who are unable to work full-time are entitled to opt for flexible training programmes. EC Directive 93/16/EEC requires that:

Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limited participation in medical activities to a period of at least half of that provided for full-time trainees;

The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than that of full-time trainees.

The above provision must be adhered to. A flexible trainee should undertake a *pro rata* share of the out-of-hours duties (*including on-call and other out of hours commitments*) required of their full-time colleagues in the same programme and at an equivalent stage.

For details of appointment and funding arrangements for flexible trainees, please see the current issue of the HST training Handbook.

Training Programme

The training programme offered will provide opportunities to fulfil all the requirements of the curriculum of training for Rehabilitation Medicine. The programme will offer posts in both general hospitals and teaching hospitals. Each post within the programme will have a named trainer/educational supervisor and programmes will be under the direction of the National Specialty Director for Rehabilitation Medicine or, in the case of GIM, the Regional Specialty Advisor. Programmes will be as flexible as possible consistent with curricular requirements, for example to allow the trainee to develop a sub-specialty interest.

The experience gained through rotation around different departments is recognised as an essential part of HST. A Specialist Registrar may **not** remain in the same unit for longer than 2 years of clinical training; or with the same trainer for more than 1 year.

Where an essential element of the curriculum is missing from a programme, access to it should be arranged, by day release for example, or if necessary by secondment.

Teaching, Research & Audit

All trainees are required to participate in teaching. They should also receive basic training in research methods, including statistics, so as to be capable of critically evaluating published work.

Throughout the period of training in Rehabilitation Medicine research into any aspect of rehabilitation, should be carried out. This can be broadly interpreted to include audit development and interdisciplinary research in these as well as other relevant clinical studies.

A period of supervised research relevant to Rehabilitation Medicine is considered highly desirable and will contribute up to 12 months towards the completion of training. Some trainees may wish to spend two or three years in research leading to a MSc, MD, or PhD, by stepping aside from the programme for a time. Additional educational credit may be granted at the discretion of the NSD and STC for clinical work relevant to the curriculum undertaken during the second and subsequent years of this research, up to a maximum of six months credit. For those intending to pursue an academic path, an extended period of research may be necessary in order to explore a topic fully or to take up an opportunity of developing the basis of a future career. Such extended research may continue after the CSCST is gained. However, those who wish to engage in clinical medical practice must be aware of the need to maintain their clinical skills during any prolonged period concentrated on a research topic, if the need to re-skill is to be avoided.

Trainees are required to engage in audit during training and to provide evidence of having completed the process.

Logbook

Up-to-date training records and a portfolio of achievements will be maintained by the trainee throughout HST. The training records will be countersigned as appropriate by the trainers to confirm the satisfactory fulfilment of the required training experience and the acquisition of the competencies set out in the Rehabilitation Medicine Curriculum. They will remain the property of the trainee and must be produced at the annual assessment review.

Each trainee is responsible for maintaining an up-to-date record of progress through training and compiling a portfolio of achievements for presentation at annual assessment review. The trainee also has a duty to maximise opportunities to learn, supplementing the training offered with additional self-directed learning in order to fulfil all the educational goals of the curriculum. Trainees must co-operate with other stakeholders in the training process. It is in a SpR's own interest to maintain contact with the Medical Training Office and Dean of Higher Specialist Training, and to respond promptly to all correspondence relating to training. "Failure to co-operate" will be regarded as, in effect, withdrawal from the HST's supervision of training (*see the HST Training Handbook*).

At annual review, the Logbook will be examined. The results of any assessments and reports by educational supervisors, filed in the portfolio submitted, together with other material capable of confirming the trainee's achievements, will be reviewed.

Assessment Process

The methods used to assess progress through training must be valid and reliable. The Rehabilitation Medicine Curriculum has been re-written, describing the levels of competence which can be recognised. The assessment grade will be awarded on the basis of direct observation in the workplace by consultant supervisors. Time should be set aside for appraisal following the assessment e.g. of clinical presentations, case management, observation of procedures. As progress is being made, the lower levels of competence will be replaced progressively by those that are higher. Where the grade for an item is judged to be deficient for the stage of training, the assessment should be supported by a detailed note which can later be referred to at annual review. The assessment of training may utilise the Mini-CEx, DOPS, Case Based Discussions (*CBD*) methods adapted for the purpose. These methods of assessment have been made available by HST for use at the discretion of the NSD and nominated trainer. They are offered as a means of providing the trainee with attested evidence of achievement in certain areas of the Curriculum *e.g. competence in procedural skills, or in generic components*. Assessment will also be supported by the trainee's portfolio of achievements and performance at relevant meetings, presentations, audit, in tests of knowledge, attendance at courses and educational events.

Annual Review – The PeTRA Process

An annual review of progress through training will be undertaken on behalf of HST. The training record will be examined at the review. Assessments and reports by educational supervisors, confirmation of achievements and the contents of the portfolio will be reviewed. A decision is made regarding progress, as detailed in the Training Handbook. At some or all of these annual reviews a non-specialty assessor will be present capable of addressing core competencies. An external assessor will participate in the penultimate year review (PYA) which is held to a standard format usually 12-18 months before the planned end of training. The award of a CSCST will be determined by a satisfactory outcome after completion of the entire series of PeTRA assessments.

Each year trainees undergo a formal review by a panel including the Dean, the National Specialty Director, and whenever possible, a representative member from another specialty. The panel will review in detail the training record, will explore with the trainee the range of experience and depth of understanding which has been achieved and consider individual trainer's reports. Attendance by the trainer is highly desirable and essential for the first year and PYA assessments. An opportunity is also given to the trainee to comment on the training being provided; identifying in confidence any deficiencies in relation to a particular post.

A decision on progress through training is reached at each of these annual assessments. The determination and the evidence considered is entered on one of a set of standard PeTRA Forms as follows:

- successful completion of a year of training – **PeTRA Form C**
- completion but with a need for additional targeted training – **PeTRA Form C₁**
- repeat training year – **PeTRA Form C₂**

The penultimate year assessment (*the PYA*) reviews the evidence provided in the logbook on the results of the assessment methods employed (*see above*); the evidence provided will be further questioned during the assessment. At the PYA, the panel identifies the residual training outstanding, advising adjustments to the training schedule as necessary, and finally confirming the estimated date for completion (**PeTRA Form T and CSCST issuance**).

Facilities

A consultant trainer/educational supervisor has been identified for each approved post. He/she will be responsible for ensuring that the educational potential of the post is translated into effective training which is being fully utilized. The training objectives to be secured should be agreed between trainee and trainer at the commencement of each posting in the form of a written training plan. The trainer will be available throughout, as necessary, to supervise the training process.

All training locations approved for HST have been inspected by the medical training department. Each must provide an intellectual environment and a range of clinical and practical facilities sufficient to enable the knowledge, skills, clinical judgement and attitudes essential to the practice of Rehabilitation Medicine to be acquired.

Physical facilities include the provision of sufficient space and opportunities for practical and theoretical study; access to professional literature and information technologies so that self-learning is encouraged and data and current information can be obtained to improve patient management.

Trainees in Rehabilitation Medicine should have access to an educational programme of e.g. lectures, demonstrations, literature reviews, multidisciplinary case conferences, seminars, study days etc, capable of covering the theoretical and scientific background to the specialty.

Trainees should be notified in advance of dates so that they can arrange for their release. For each post, at inspection, the availability of an additional limited amount of study leave for any legitimate educational purpose has been confirmed. Applications, supported if necessary by a statement from the consultant trainer, will be processed by the relevant employer.

**Teaching, Learning & Assessment
Methods**

Teaching, Learning & Assessment Methods

This section relates to the clinical competencies that are required for your training. During your training you will be assessed by methods such as miniCEX, DOPS, Case Based Discussion. It is extremely important that you read this so that you are aware of the requirements of your training.

Record of Training

The evidence required to confirm progress through training includes:

- Details of the post(s) occupied, the training plan agreed with weekly timetables and duty rosters; case-mixes and volumes, numbers of practical procedures and outcomes.
- Confirmation of attendance at events in the educational programme, at departmental and inter-departmental meetings and other (optional) educational events.
- Confirmation (certificates) of attendance at subject-based/skills-training/instructional courses; (certificate or diploma from appropriate authority).
- Recorded attendance at conferences and meetings.
- A properly completed logbook with entries capable of testifying to the training objectives which have been attained and the standard of performance achieved.
- Evidence of regular contact with trainers, i.e. appraisals; confirmation of workplace/clinical encounters significant in relation to activities specified in the curriculum.
- Evidence of personal study, e.g. journals taken, membership of specialist society, web-based research, special interest developed.
- CPD/CME activity, returns, study leave records.
- Copies/examples of material prepared for presentation e.g. for audit, teaching, best-practice development, collection of cases, topic reviews, output from research.
- Educational supervisor's reports on **observed** performance (in the workplace): of duties, practical procedures, of presentations made and teaching activity: of advising and working with others, of standards of case notes, correspondence, communication with others e.g. at handover. Results of Mini-CEX, CBDs and DOPS encounters.
- Collective opinions, – as used to ascertain a range of generic skills e.g. professionalism, maintaining trust.
- Result (diploma, certificate from recognised body) of completed knowledge-based test and/or practical examination.

Assessment of Competencies

The competencies to be acquired during training are listed within the Generic and Specialty Sections of this Curriculum.

The competencies will be assessed on a regular basis during your training programme and must be documented in the Training Record (*Logbook*). Progress through training is confirmed by entries which must be authenticated/ countersigned by the educational supervisors.

Documents which provide evidence of satisfactory completion of other necessary components of the curriculum must be filed in the portfolio of achievements compiled by the trainee and reviewed annually.

A report from the educational supervisor will be included. This will be prepared following appraisal, based on his/her assessment of observed performances by the trainee of practical procedures and other duties. The standard of case notes, summaries, correspondence and

other material, of presentational ability can also be the subjects of such report, as could the trainee's enthusiasm, judgement, team working or professionalism.

The trainer's report will also be based on a structured pro-forma, as used in the short form of clinical evaluation exercise (*Mini-CEX*); following observation and appraisal of the performance of a procedure (*DOPS*); after discussion of the (*clinical*) reasoning involved in the management of a problem faced by a trainee (*Case-Based Discussion, CBD*).

The results of any summative tests of knowledge taken, e.g. *MCQs and problem-solving tests, including self-administered tests*, should be filed and retained. Confirmation of the acquisition at a particular stage of a specified professional examination may be required in order to make progress towards the completion of training.

Learning Methods

This section gives examples of the learning methods that can be used as guidance to acquire competencies as they appear in the curriculum.

Experiential:

- Working under supervision
- Documenting/reporting progress (*case notes*), preparing summaries (*discharge notes*) other professional correspondence; communicating information to patients/to other health professionals.
- Consults, referrals between departments, handover, providing cross-cover.
- (*In certain specialties*), procedure room and investigation/assessment sessions offer practical opportunities to learn and develop skills under supervision and to exercise judgement when to seek assistance.

Self-directed learning:

- Curriculum-based personal study *e.g. textbooks, journals, literature search, retrieval of web-based information.*
- Information gathering and evaluation
- Active participation in audit
- Tests of knowledge

Group learning:

- Workplace discussions
- Multidisciplinary meetings
- Programmed meetings within the workplace

Performance based:

- Observing, learning, assisting, performing, demonstrating a technique or practical procedure.
- Simulations, role-play

Learning through teaching and research:

- Teaching, giving tutorials, lecturing.
- Mentoring and supervising junior colleagues and other staff.
- Presenting at meetings - local and international.
- Research
- Publication

External Courses:

- Specialty study/training days
- Attending mandatory and non-mandatory courses
- Attendance at seminars, relevant conferences, regional, national and international meetings.

Reflection:

- In your logbook there is an area to record reflections on training, learning, clinical events and career discussions. In recent years the importance of reflecting as part of the learning process on what you are doing has been shown to improve professional practice. Reflection on what you know and don't know helps to understand that learning is individual and reflection of professional activities can be used to highlight your strengths, weaknesses and areas for development.

Assessment Methods

Mini-CEx

Definition: Mini-CEx is designed to provide feedback on skills essential to the provision of good clinical care by observing an actual clinical encounter.

Description: The mini-CEx is a "snapshot" of a doctor/patient interaction and is based on a 15 minute observation of a single interaction. It is designed to assess the clinical skills and behaviors of trainees assessing such skills as history taking, physical examination skills, clinical judgement, professionalism, organisation/efficiency and overall clinical care. Not all elements will be assessed on each occasion. Immediate feedback should be provided after each encounter by the observer assessing the trainee.

Frequency of assessment: At least two miniCEx assessments should take place in each year of training. Where appropriated, one should be based in an outpatient setting and one in an acute setting. The assessments include assessment of skills in history taking, physical examination, appropriate use of investigations, cost-effectiveness, interpretation of investigations, making medical notes, making a diagnosis, treatment and management of disease, appropriate referral to other specialities, standards of care.

Competencies assessed:

- Consideration/Professionalism:
- Recognises/accepts patient's rights (to consent, confidentiality, information). Establishes trust, shows professional approach.
- Communication:
 - Informs, explains, advises using appropriate language. Obtains consent, enlists patient's co-operation.
- Interviewing Skills:
 - Active" listening facilitating relevance; effectively using questions, responding to non-verbal clues.
- Examination Skills:
 - Prepares patient, minimises discomfort/unease. Proceeds logically, efficiently, thoroughly, completely.
- Judgement:
- Correctly identifies/lists problems, prioritises actions in realistic and timely schedule.

Opportunities for assessment: The assessment should take place in the usual place of work (*in-patient, clinic, office or department*) where the assessor must directly **observe** the trainee's performance.

DOPS

Definition: Directly Observed Procedural Skills (DOPS) is a method, similar to the mini-CEX that has been designed specifically for the assessment of practical skills. DOPS assess the capabilities of a trainee while they perform a procedure.

Description: The DOPS is a structured assessment of actual performance. Each DOPS should represent a different procedure. The trainee chooses the timing, procedure and observer.

Frequency of Assessments: The number and frequency of assessments of procedural skills will vary from specialty to specialty.

Competencies assessed:

- Understanding of Procedure:
 - Relevant anatomy; purpose, indications, contra-indications; outcomes, risks, complications; choice of methods available, technique of procedure.
- Consideration for the Patient:
 - Gives reassurance, minimises discomfort, explains procedure fully; confirms informed consent obtained.
- Preparation:
 - First re-checks all relevant details correct. Safety check; instrumentation, equipment (drugs); positioning; cleansing/aseptic technique; sedation, analgesia, anaesthesia confirmed.
- Professional/technical ability:
 - Dexterity, accuracy, efficiency; obtains, interprets diagnostic material/information; informs, directs staff courteously; recognises own limitations; seeks help where appropriate; manages risk.
- Post-Procedure:
 - Completes documentation; regulates recovery phase, observations; anticipates/deals with complications. Informs/counsels patient/relatives.
- Overall ability to perform Procedure:
 - Ability to complete/undertake procedure; technical abilities as demonstrated; appropriately confident, team/ leadership skills.

Opportunities for assessment: While supervising, assisting, observing actual performance in appropriate setting (office, theatre, day procedure, ICU etc.). The assessment should be made under appropriate conditions e.g. with all equipment and personnel necessary to support the procedure.

Case Based Discussion (CBD)

Definition: Case-based discussion (CBD) is used to enable the documenting of conversations about, and presentations of, cases by trainees. This activity happens throughout training, but is rarely conducted in a way that provides systematic assessment and structured feedback. CBD is used to evaluate core skills that can be demonstrated during an interactive discussion based on a single case in which the trainee has been actively involved.

Description: CBD is designed to assess clinical decision-making and the application or use of medical knowledge in relation to patient care for which the trainee has been directly responsible. It also enables the discussion of the ethical and legal framework of practice, and in all instances, it allows trainees to discuss why they acted as they did. Although the primary purpose is not to assess medical record keeping, as the actual record is the focus for the discussion, the assessor can also evaluate the record keeping in that instance. The case for discussion can either be selected by the trainee or chosen by the assessor. The assessment

will be based on oral discussion and written information available. It includes a bi-lateral (trainee's and trainer's) critical appraisal of the reasoning and judgements made, and of the management of the case. Whenever possible the assessment should include issues such as disease notification, health promotion and screening.

Frequency of Assessment: This method of assessment has not been validated as yet, however it is a very useful method and can be easily incorporated into journal clubs, post-graduate teaching sessions or on-line etc

Competencies assessed:

- **Problem Definition:**
 - All relevant facts established, from current/previous history, investigations, interventions; reports, correspondence reviewed.
- **Record Keeping:**
 - Legible, tidy, legally defensible records seen.
- **Reasoning:**
 - Appropriately selected, sequenced investigations/procedures planned. Evidence-based, logical judgements made; (differential) diagnosis established; action plan made with realistic goals.
- **Case Management:**
 - Effective, safe (responsible) prescribing; aware of protocols/guidelines, best practice; monitoring progress, handling complications/mistakes; timely, appropriate referrals, case closure.
- **Reflective Practice:**
 - Shows analytical, constructive approach to case, willingness to learn; acknowledges and prepared to consider other management options; aware of change, possible advances, when to seek help.

Opportunities for assessment: The presentation should take place in a suitable environment, with due consideration given to the patient's sensitivities, to confidentiality e.g. in any ward or clinical setting; an office, side- or seminar-room may be found convenient. Case presentations and discussions, e.g. at handover, ward-rounds (inter-) departmental meeting.

Mandatory Training Courses:

(Note: this list only included the generic mandatory courses)

Mandatory Communication course:

To be completed in Year 1. The course is a short 1 -2 hour course at the start or the end of specialty study days to reduce time spent away from the hospitals.

Communication skills will be assessed as part of the miniCEX assessments

Audit:

Mandatory 1/2 day on audit to be completed in Year 1.

Audit reports are submitted on a yearly basis

Ethics:

Four mandatory study days are to be completed during the training programme. Three study days are for all specialities - Ethics & Law, Ethics in Research and Professionalism. The fourth day 'End of life' is for all specialties except Public Health Medicine, Occupational Medicine and Histopathology who have a speciality specific ethics day.

Leadership Skills:

Mandatory 3 day course to be taken in year 3 - 5.

ACLS:

Compliant in appropriate specialties

Specialty Study Days:

The topics of specialty specific study days to be completed during training are listed in appendix 1.

Annual Assessments

Consultant feedback:

End of year assessment completed by the Trainers include assessment in areas such as: Team working skills, Leadership skills, Handling of complaints, conflict management

Questions such as the following are included in the assessment form:

- Have there been any complaints from nursing staff, AHP, patients regarding this trainee or their team?
- If so:
 - How did the trainee respond to a complaint about a member of his/her team?
 - How did the trainee respond to a complaint against him/her?.
- Have you any serious issue with your SpR?
- Where there any instances of serious conflict?
- Do you think he/she behaved appropriately?

Audit:

It is difficult to complete the audit cycle in a one year period. Each year the trainee should take part in an audit - either to develop and start an audit or to review and change practice as a result of an audit - the complete audit cycle should be understood. In hospitals that have audit systems set up, the trainee should complete a full audit.

Trainees will be required to submit a full audit report and will be encouraged to present audit results at local, national or international meetings.

Attendance at In- Hospital Speciality Radiology conferences**Time spent in Laboratory/Pathology or attendance at Laboratory/Pathology conferences** (Depending on specialty)**Committee membership :**

Many specialty curricula have identified participation in committees.

Teaching skills

Number of undergraduate and postgraduate tutorials, number of membership tutorials.

Presentations/Publications**On-Call take**

GENERIC COMPONENTS

Communication & Interpersonal Skills

Objective: To be able to communicate effectively and sensitively with patients, their relatives, carers and with professional colleagues in different situations.

Medical Council Domains of Good Professional Practice: No. 2: Relating to Patients; No 3. Communication and Interpersonal Skills.

KNOWLEDGE

Within a consultation

- How to structure an interview to obtain/convey information; how to identify concerns, expectations, priorities; how to promote understanding, reach conclusions; use/choose appropriate language. Knowledge of procedures/investigations available and alternative options; of strategies to promote compliance through understanding of objectives.
- Able to elicit facts, question using open, followed by closed questions; “active listening”. Gives information clearly, avoids jargon, confirms understanding, is able to encourage co-operation, compliance; obtain informed consent.
- Considerate, shows respect for other’s culture, opinions, patient’s right to be informed, make choices.

In difficult circumstances

- Understands potential areas for difficulty “awkward situations”, knows how and when to break bad news, how to circumvent cultural, language barriers, deal with sensory or mental impairments, how to deal with challenging or aggressive behaviour.
- Able to communicate essential information where difficulties exist, appropriately uses assistant, interpreter, chaperone, relatives. Able to deal with anger, frustration in self and others.
- Selects an appropriate environment; seeks assistance, makes and takes time. Avoids unrealistic optimism or pessimism.
- Respects another’s right to opinions and to accept or reject advice.

With professional colleagues and others

- How best and when to communicate with doctors and other members of the healthcare team; how to provide concise, problem-orientated statement of facts and opinions (*written, verbal or electronic*). Knows legal context status of records and reports, of data protection (*confidentiality*), Freedom of Information (FOI) issues.
- Understands relevance to continuity of care and the importance of legible, accessible, authenticated records. Knows when urgent contact becomes necessary and the appropriate place for verbal, telephone, electronic, written communication.
- Communicates effectively, promptly; recognises roles and skills of other health professionals.
- Able to judge own abilities/limitations and when to seek help or give assistance, advice to others; when to delegate responsibility, when to refer.
- Values perspectives of others contributing to management decisions.

In maintaining continuity of care

- Understands the relevance to outcome of continuity of care, within and between phases of healthcare management.
- The importance of completion of tasks and documentation *e.g. before handover (to another team, department, specialty)*, of identifying outstanding issues, uncertainties.
- Maintains (*legible*) records, is available, contactable, time-conscious, sets (*and attempts to reach*) realistic objectives, identifies/prioritises outstanding problems.
- Alert to avoid potential confusion or misunderstanding through communications failure.

Giving explanations

- The importance of possessing the full facts, and of recognising uncertainty and conflicting evidence on which decisions have to be based.
- How to secure, retain attention avoid distraction. Understand how adults receive information best, the relative value of the spoken, written, visual means of communication, use of reinforcement to assist retention. Risk of information overload.
- Need to interpret results, significance of findings, diagnosis, to explain objectives, limitations, risks of treatment, in terms and by means adjusted to recipients' ability to comprehend.
- Uses language, literature (*leaflets*) diagrams, educational aids and resources appropriately.
- Able to achieve level of understanding necessary to achieve co-operation (*compliance, informed choice, acceptance of opinion, advice, recommendation*).
- Prepared to discuss, repeat information, resolve uncertainty, confusion, respond to questioning, challenge.

Responding to complaints

- Value of hearing and dealing with complaints promptly; the appropriate level, the procedures (*departmental and institutional*); sources of advice, assistance available.
- The importance of obtaining and recording accurate and full information, seeking confirmation from multiple sources.
- Able to establish facts, identify issues and respond quickly and appropriately to a complaint received.
- Accepts responsibility, involves others, consults appropriately.
- Open, prepared to accept criticism, acknowledge shortcomings where they exist, offer an apology.

SKILLS

- Communication
- Conflict resolution
- Dealing with complaints
- Communicate decisions in a clear and thoughtful manner
- Presentation skills

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Consultant feedback at annual assessment
 - Workplace based assessment e.g Mini-CEx, DOPS, CBD
 - Educational supervisor's reports on observed performance (in the workplace): communication with others e.g. at handover. ward rounds, multidisciplinary team members
- Presentations

Professionalism & Autonomy

Objective: To have the knowledge, skills and attitudes to act in a professional manner at all times and in partnership with patients and colleagues. To develop the attributes of someone trusted to be able to manage complex human, legal and ethical problems.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No 2. Relating to Patients; No. 7 Professionalism

KNOWLEDGE

Patient Centred Care;

- The provision of Patient Centre Care should be at the core of the service a doctor provides
- To put the quality and safety of patient care as a prime objective

Behaviour in the workplace;

- **Relationships with patients**
 - Know patients' rights e.g. to be informed sufficiently to enable them to be involved in decisions about their treatment and care. Know boundaries limiting consultations including ethical, duty of care.
 - How to deal with inappropriate behaviour e.g. aggression, threats, violence, harassment, racism.
 - Potential obstacles e.g. cultural, educational, ethical – also preconceptions and prejudices.
 - Ensures confidentiality, respects privacy. Focuses investigation on patient's needs and expectations. Shows sensitivity, develops empathy but avoids personal involvement.
 - Non-judgemental in approaching patient's perceived problems. Prepared to accommodate idiosyncrasies, respecting patients as individuals. Altruistic.
- **Working with colleagues**
 - Know the potential roles and contributions of other specialists – medical, surgical, general practitioners and of other hospital or community-based agencies e.g. social services, also patient support groups and other providers of care.
 - How to arrange cover, safeguarding the handover process, know where responsibility begins and ends, when and where to seek advice.
 - Aware of the extent and limitations of own areas of practice/expertise; recognises and respects others' inputs, capabilities; is able to work co-operatively with other health professionals; refers, delegates appropriately.
 - Realistically schedules and completes tasks and provides full documentation for handover, referral; strives to maintain continuity and standard of care especially across shifts and when arranging rotas and covering absences.
 - Conscientious, reliable, responsible and professional at all times, considerate, shows respect for opinions of others, values good advice, accepts constructive criticism.

Creating an environment conducive to learning and improvement

- Endeavours to foster an environment conducive to learning
- Shares knowledge with trainees, students and other members of the multidisciplinary team
- Encourages and is open to reflective practice
- Seeks out role models and learns from the best practice behaviours of others.
- Participates in quality assurance and clinical improvement systems & training
- Uses evidence based practice in decision making
- Participates in journal clubs, case presentations, grand rounds

Time management & continuity of care

- Is punctual for duty, meetings, handovers and other duties
- Prioritises workload
- Delegates when appropriate to do so
- Knows when to call for help
- Ensures satisfactory handover to ensure continuity of care
- Ensures satisfactory transfer of patients to other medical teams or services when required
- Makes adequate arrangements to cover holidays, study and other leave

Honesty & Integrity

- Acts with honesty and integrity at all times in the delivery of patient care and in working with professional colleagues
- Acts fairly in all situations.

Moral Reasoning & Legal and ethical issues (see also Ethics section)

- Describes and demonstrates an understanding of the main principles of medical ethics including autonomy, justice and confidentiality
- Understands correct procedures for obtaining consent (for treatment, investigations, procedures, research project, post mortem). Legal responsibilities surrounding death/disease certification; regarding mental illness; referrals to coroner; also in criminal cases.
- Understands issues surrounding confidentiality, disclosure/release of information; discovery (FOI) of records. Legal and ethical issues in context of resuscitation, organ donation/transplantation.
- Able to complete certificates, documents, respects patient's wishes, rights, but accepts a doctor's (legal) obligations to society. Able to obtain/provide in full, information relevant to consent.
 - Alert to possible legal implications and ethical aspects of actions
 - Ensures privacy when discussing sensitive issues
 - Seeks timely advice where patient abuse is suspected

Team working and leadership

- How teams work, know how to assign individual and collective responsibilities which respect an individual's (*professional*) status within a team. How to set goals, initiate/co-ordinate action, audit performance, give feedback, e.g. developing guidelines, protocols.
- Positively contributes to planning, motivating, organising activity, employs negotiating, human relations, interpersonal skills appropriately.
- Able to set and apportion individual and team objectives, energise and fortify others to sustain efforts to achieve goals, appraise performance.
- Co-operates as team player; respects the contributions, expertise of others; tolerant but determined as team leader.
- Adopts a holistic approach to patient care
- Knowledge of principles of audit and self assessment

Health-Physical health and Handling Stress & Fatigue

- Know how stress can affect performance, how to reduce stress and develop coping mechanisms to deal with pressure. When to enlist support.
- Understand the relevance of personal health to performance at work: the risks of self-medication, potential for drug and alcohol abuse: know that support is available from Occupational Health Services.
- Able to recognise, cope with stress; asks for help when necessary, is aware of responsibility (*to others*) of having health problems dealt with. Willing to take time off; and, if necessary, re-train/redevelop skills.

Commitment to Continuous Improvement in Health care Systems

- Understands the principles of quality and safety improvement
- Participates in quality improvement activities, including standard setting, follows established practice guidelines, research and audit
- Undergoes training in this area where appropriate

SKILLS

- Professionalism
- Multidisciplinary team working
- Ethical issues
- Leadership
- Time management
- Stress management

ASSESSMENT & LEARNING METHODS

- RCPI Ethics programme: Ethics I, Ethics II, Ethics III and Ethics IV (mandatory)
- Consultant feedback at annual assessment
 - Workplace based assessment e.g. Mini-Cex, DOPS, CBD
 - Educational supervisor's reports on observed performance (in the workplace): communication with others e.g. at handover. ward rounds, multidisciplinary team members
- Leadership Programme (Year 3 – 5)

Maintaining Good Practice

Objective: To adopt the habits of lifelong learning, and to appreciate and implement the practices of clinical governance.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care, No. 6 Scholarship, No 7 Professionalism, No 8 Clinical Skills

KNOWLEDGE

Lifelong learning

- Aware of CME/CPD obligations, systems/process for competence assurance/revalidation. Understand the role of appraisal, assessment methods available their application.
 - Sources, resources, opportunities for self-directed and group learning including IT. Know how adults learn.
 - Recognises and makes effective use of learning opportunities, maximises the potential for personal study, plans personal development.
 - Self motivated, inquisitive, eager to learn.

Application of clinical governance

- Understand the principles of evidence-based practice, clinical audit and effectiveness, the development/application of best-practice protocols.
- Able to appraise and apply data from research, and to use audit to establish best practice and clinical effectiveness. Utilizes and practices evidence-based medicine.
- Accepts the need for reflective practice and to critically evaluate own work and make changes.

Risk management

- Systems, procedures for identifying (*clinical*) risk; correct procedures and action when things go wrong; how to handle complaints.
- Employs procedures and policy for accidents, injuries; for confirming skill and staffing levels, arranging cross-cover, on-call, for supervision.
- Potential complications or side effects of treatments, procedures and investigations; importance of accurate, recent information and available records. The assessment of risk, relative risk.
- Able to assess, anticipate, risks; recognise failure. Openly discuss bad outcomes, locate system weakness, analyse critical incidents.
- Able to discuss potential risks *e.g. with patients, to analyse and balance risk with benefit*. Able to learn from previous experience, from complaints received, errors.
- Is honest in recognising misjudgements.

Evidence, audit, guidelines

- Basis for developing evidence-based medicine, kinds of evidence, evaluation; methodologies of clinical trials.
- Sources from which useful data for audit can be obtained, the methods of collection, handling data, the audit cycle.
- Means of determining best practice, preparing protocols, guidelines, evaluating their performance.
- Capable of accessing relevant data (library, internet use). Able to appraise available evidence critically.
- Able to complete an audit cycle relevant to practice; to develop, evaluate, review and update a set of guidelines.
- Uses evidence / guidelines appropriately having due regard for the individual.

SKILLS

- Personal development planning
- Evidence -based practice
- Risk Management
- Audit
- Research

ASSESSMENT & LEARNING METHODS

- Record of attendance at journal clubs, medical grand rounds, SpR teaching sessions, local and national academic meetings
- Record of attendance at CME accredited international meetings
- Attendance at local radiology conferences
- Time spent in laboratory or attendance at laboratory conferences
- Audit Study Day (Year 1)
- Annual Audit
- Leadership Skills Course (Year 3- 5)
- Research Publications
- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD

Standards Of Care

Objective: To be able to assess patients' problems investigate and treat them appropriately, efficiently, and consistently over time.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 2 Relating to Patients; No. 3 Communication and Interpersonal Skills; No. 4 Collaboration and Teamwork; No. 5 Management (including Self Management; No. 8 Clinical Skills,

KNOWLEDGE

History taking and examination

- Diagnostic significance of patterns of symptoms, pathophysiology and physical signs.
- Able to take and analyse a clinical history and perform a reliable and appropriate examination, arrive at a differential diagnosis.
- Exhibit empathy and show consideration for all patients, their impairments and attitudes irrespective of cultural and other differences.

Investigation, indications, risks, cost-effectiveness

- Understand the pathophysiological basis of the investigation undertaken.
- Know and be able to explain the procedure for the commonly used investigations, preparations, effects or risks, the reason for the investigation, the information sought and its relevance to management.
- Sensitivity and specificity of results, possible interferences, artefacts.
- Able to understand significance, interpret and explain results of investigations.
- Shows logical approach in choosing, sequencing and prioritising investigations.
- Able to liaise, discuss, negotiate effectively with those undertaking the investigation.
- Careful to select investigations appropriately, considering (*patients'*) needs, risks, value.

Treatment and management of disease

- Understand the pharmacology, therapeutics of treatments prescribed, choice of routes of administration, dosing schedules, compliance strategies; the objectives, risks and complications of treatment cost-effectiveness. Natural history of diseases; quality of life concepts.
- Able to assess accurately patient's needs, to prescribe administer, deliver, arrange treatment; recognise and deal with reactions / side effects. Sets realistic therapeutic goals, utilizes rehabilitation services, palliative care appropriately.
- Able to discuss rationale, objectives, risks and alternative options openly, taking into account patients' / their relatives' attitudes, beliefs or other philosophical concepts.
- Recognises that the degrading effects of illness, especially incapacity which is chronic, impacts on relationships and family, having financial as well as social effects.
- Discusses, plans, delivers care appropriate to patient's needs and wishes.

Disease prevention and health education

- Disease notification; methods of collection and sources of data. Screening for disease, (*methods, advantages and limitations*). Health promotion and support agencies; means of providing and sources of information for patients.
- Risk factors, preventive measures, strategies applicable to smoking, alcohol, drug abuse, lifestyle changes.
- Able to advise on and promote lifestyle change, stopping smoking, control of alcohol intake. Able to assess and explain risk, encourage positive e.g. *immunisation* and negative preventive measures.

- Enlists / requires patients' involvement in solving their health problems, provides information, education. Avails of support provided by voluntary agencies and patient support groups, as well as expert services e.g. detoxification / psychiatric services.
- Non-judgemental approach to patient's problem: values contributions of health education and disease prevention to health in a community.

Notes, records, correspondence

- Understand the functions of medical records, their value as an accurate up-to-date commentary and source of data.
- Understand the need and place for problem-orientated discharge notes, letters, more detailed case reports, concise out-patient reports, focused reviews.
- Compiles adequate case notes, with results of examinations, investigations, procedures performed, sufficient to provide an accurate, detailed account of the diagnostic and management process and outcome. Provides concise, informative progress reports orally.
- Maintains legible, authenticated records, uses dictation, telephone, e-mail appropriately.
- Appreciates importance of up-to-date, accurate information, its availability, transfer and the need for communicating promptly *e.g. with primary care*.

Time management and decision taking

- How to prioritise demands, respond to patients' needs, sequence urgent tasks. Understand how to establish (*clinical*) priorities *e.g. for investigations, intervention; how to set realistic goals; understand the need to allocate sufficient time, know when to seek help*.
- Understands the need to complete tasks, reach a conclusion, make a decision, take action with allocated time.
- Able to recognise when falling behind and can adjust accordingly; able to cope with changing circumstances, variable demand, prepared to re-prioritise and ask for help.
- Able to collate evidence, summarise, recognise when objective has been gained
- Knows how and when to conclude, disengage.
- Has realistic expectations of own and of others' performance. Time-conscious, punctual.

Relevance of professional bodies

- Understand the relevance to practice of standards of care set down by recognised professional bodies – the Medical Council, Medical Colleges and their Faculties, and the additional support available from professional organisations *e.g. IMO, Medical Defence Organisations and from the various specialist and learned societies*.
- Actively engages with professional/representative/specialist bodies.
- Values the breadth and depth of experience that can be accessed by associating with professional colleagues.

SKILLS

- History taking and examination
- Appropriate use of investigations
- Treatment and management of disease
- Disease notification
- Health promotion
- Screening
- Study Day - Disease prevention & health education
- Personal and professional organisation and planning; goal setting, time management

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on **observed** performance (in the workplace)
- Study Days
- Annual Audit

Patient Safety

Objective: To ensure patient safety is at the core of the health service provided by designing safe systems and processes of care and understanding the role of healthcare systems and human factors in adverse events and errors.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care.

KNOWLEDGE

Safe Systems, Competency and Safe practice

- Understands multiple factors involved in failures;
- Safe Healthcare Systems-a Safe working environment
- The relationship between 'Human factors' and patient safety
 - Safe working practice. Role of procedures and protocols in optimal practice
- Patient safety relevance in health care and its role in minimizing the incidence and impact of adverse events and maximize recovery from them.
- Knowledge and understanding of the Swiss cheese model.
- Health care errors and system failures; human and economic costs; blame culture

Communication

- Disclosure – know the principles of open disclosure
- Knowledge and understanding of valid consent
- Teamwork
- Continuity of care

Near Misses and adverse events

- Knowledge of preventing and managing near misses and adverse events. Incident reporting; root cause analysis. Understanding and learning from errors
- Understands and manages clinical risk
- Manages complaints
- Knows when and how to report a near miss or adverse event

Quality improvement

- Standardises common processes and procedures – checklists, vigilance
- Evidence based care
- Infection control; healthcare associated infections
- Patient safety and invasive procedures.
- Improvement medication safety; safe prescribing; common medication errors
- Ethical behaviour

SKILLS

- Effective Communication with patients, families and colleagues
- Co-operation and collaboration with colleagues to achieve safe and effective quality patient care
- Being an effective team player
- Understand how and why systems break down and why errors are made
- Be able to learn from errors and near misses to prevent future errors
- Know how to use relevant information from complaints, incident reports, litigation and quality improvement reports to control risks
- Minimise infection through improved infection control practice
- Minimise errors during invasive procedures by developing and adhering to best-practice guidelines for safe surgery.
- Minimise medication errors by practicing safe prescribing principles

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): prioritization of patient safety in practice
- RCPI Patient safety on-line course (recommended)
- Completion of infection control induction in the workplace

Therapeutics and Safe Prescribing

Objective: To progressively develop your ability to prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice in specific specialities including non-pharmacological therapies and preventative care

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care.

KNOWLEDGE

- Indications, contraindications, side effects, drug interaction, dosage and route of administration of commonly used drugs
- Knowledge of prescribing for common medical conditions
- Knows range of adverse drug reactions to commonly used drugs, including complementary medicines
- Identifies common prescribing hazards
- Identifies high risk medications
- Knows drugs requiring therapeutic drug monitoring and interprets results
- Knows the effects of age, body size, organ dysfunction and concurrent illness or physiological state e.g. pregnancy on drug distribution and metabolism relevant to the trainees practice
- Recognise the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. IMB , and hospital formulary committees
- Knows procedure for monitoring, managing and reporting adverse drug reaction

SKILLS

- Knows how to write a prescription
- Prescribes appropriately in the elderly, childhood, pregnancy and breast feeding
- Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)
- Review the continuing need for long term medications relevant to the trainees clinical practice
- Anticipate and avoid defined drug interactions, including complementary medicines
- Advise patients (and carers) about important interactions and adverse drug effects
- Provide comprehensible explanations to the patient, and carers when relevant, for the use of medicines
- Open to advice and input from other health professionals on prescribing
- Participates in adverse drug event reporting

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on **observed** performance (in the workplace): prioritization of patient safety in prescribing practice

Infection Control

Objective: To be able to manage and control infection in patients, including controlling the risk of cross-infection, appropriately managing infection in individual patients, and within the wider community to manage the risk posed by communicable diseases.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 5 Management (including Self Management).

KNOWLEDGE

Within a consultation

- Understand the principles of infection control as defined by the HIQA
- How to minimize the risk of cross-infection during a patient encounter by adhering to best practice guidelines available
- Treat and manage infection in the individual patient
- Understand the principles of preventing infection in high risk groups e.g managing antibiotic use to prevent Clostridium difficile) Knowledge and understanding the local antibiotic prescribing policy
- Aware of infections of concern, eg MRSA, C Difficile,
- Understands best practice in isolation precautions
- Knows when and how to notify relevant authorities in the case of infectious disease requiring disclosure

In surgery or during an invasive procedure

- Understands the increased risk of infection in these patients and adheres to guidelines for minimizing infection in such cases
- Knows the guidelines for needle stick injury prevention and management

During an outbreak

- Adheres to guidelines for minimizing infection in the wider community in cases of communicable diseases and seeks expert opinion or guidance from infection control specialists where necessary

SKILLS

- Practices aseptic techniques, hand hygiene
- Follows guidelines for infection control and management
- Prescribes antibiotics according to antibiotic guidelines Encourages all staff, patients and relatives to observe infection control principles
- Communicates effectively with patients regarding treatment and measures recommended to prevent re-infection or spread
- Collaborates with infection control colleagues to manage more complex or uncommon types of infection including those requiring isolation eg transplant cases, immunocompromised host
- In the case of infectious diseases requiring disclosure:
 - Has knowledge of the diseases requiring disclosure and undertakes notification promptly
 - Collaborates with external agencies regarding reporting, investigating and management of notifiable diseases .
 - Able to advise patients on lifestyle change to minimize the risk of re-infection or spread of infection,
 - Enlists / requires patients' involvement in solving their health problems, provides information, education.

- Avails of support provided by voluntary agencies and patient support groups, as well as expert services where appropriate
- Non-judgemental approach to patient's problem:
- Utilises and values contributions of health education and disease prevention and infection control to health in a community.

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on **observed** performance (in the workplace): practicing aseptic techniques as appropriate to the case and setting, investigating and managing infection , prescribing antibiotics according to guidelines
- Completion of infection control induction in the workplace

Leadership

Objective: To have the knowledge, skills and attitudes to act in a leadership role and work with colleagues to plan, deliver and develop services for improved patient care and service delivery

Medical Council Domains of Good Professional Practice: No.1 Patient Safety and Quality of Patient Care; No. 3 Communication and Interpersonal Skill; No. 4 Collaboration and Teamwork; No. 5 Management (including Self Management); No 6 Scholarship.

KNOWLEDGE

Demonstrating Personal Qualities

- Develops self-awareness and understanding of personal style and its impact on others
- Efficiently and effectively manages one- self and one's time especially when faced with challenging situations
- Continues personal and professional development through scholarship and further training and education where appropriate
- Acts with integrity and honesty with all people at all times

Working with others

- Develops networks to expand knowledge and sphere of influence
- Builds and maintains key relationships. Adapts style to work with different people and different situations
- Encourages contributions from others including patients, carers, members of the multidisciplinary team and the wider community
- Aware of own personal style and other styles and their impact on team performance. Understands the importance of good communication in teams and the role of human factors on effectiveness and patient safety

Managing Services

- Knows and understands the structure and function of Irish Health Care System
- Aware of the challenges of managing in healthcare
 - Role of Governance
 - Clinical Directors
- Can contribute to the planning and design of services
- Knows and understands the financing of the health service
 - Preparing a budget
 - Defining value
 - Managing resources
- Knows and Understands the importance of human factors in service delivery.
 - Manages staff training, development and education
- Managing performance
 - Performs staff appraisal and deals effectively with poor staff performance
 - Rewards and incentivises staff for quality and efficiency

Improving Services

- Ensures patient safety by adopting and incorporating a patient safety culture
- Critically evaluates where services can be improved by measuring performance, and acting to raise standards where possible Encourages a culture of improvement and innovation
- Facilitating transformation by creating and living a vision

Setting Direction

- Identifies the external and internal drivers setting the context for change
- Applies knowledge and evidence of systems and resource management to guide service development
- Makes decisions using evidence based medicine and performance measures
- Evaluates the impact of change on health outcomes through ongoing service evaluation

SKILLS

- Effective Communication with patients, families and colleagues
- Co-operation and collaboration with others; patients, service users, carers colleagues within and across systems
- Being an effective team player Being able to managing resources and people
- Managing performance, performance indicators
- How to write and develop a service plan
- How to prepare and manage a budget

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Leadership course (Year 3 – 5)
- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): on management and leadership skills
- Involvement in hospital committees where possible e.g. division of Medicine, Drugs and Therapeutics, Infection Control etc.

Management Information Systems & Management Skills

Objective: To understand the organisation, regulation and structures of the health services, nationally and locally, and to be competent in the use and management of information on health and health services. To develop personal effectiveness and the skills applicable to the management of staff and activities within a healthcare team.

Medical Council Domains of Good Professional Practice: No. 5 Management.

KNOWLEDGE

Health service structure, management and organisation

- The administrative structure of the Health Service, services provided in Ireland and their funding. Department of Health, HSE and Hospital Management structures and systems. The National Regulatory Bodies, health agencies and patient representative groups.
- Can explore, direct, pursue a project, negotiating through the relevant department at an appropriate level. Able to “*operate the system*”. Understand the need for business plans, annual hospital budgets, the relationship between the hospital and PCCC.
- Recognises the advantage of understanding the administrative machinery of the Health Services.

The provision and use of information in order to regulate and improve service provision

- Methods of collecting, analysing and presenting information relevant to the health of a population and the apportionment of healthcare resources. The common ways in which data is presented. Know of the sources which can provide information relevant to national or to local services, publications available.
- Able to seek / locate information in order to define an issue needing attention e.g. to provide data relevant to a proposal for change, establishing a priority, obtaining resources.

Obtaining information of value in maintaining medical knowledge with a view to delivering effective clinical care

- Understands the contribution that current, accurate knowledge can make to establishing clinical effectiveness, best practice, treatment protocols. Know sources providing updates, literature reviews and digests.
- Able to make use of information, use IT, undertake searches and obtain aggregated data, to critically evaluate proposals for change *e.g. innovative treatments, new technologies*.
- Embraces principles of clinical governance.

Delegation skills, empowerment and conflict management

- How to assess, develop personal effectiveness, improve negotiating, influencing and leadership skills. How to manage time more efficiently, deal with pressure and stress. How to motivate and operate within a multidisciplinary team.
- Able to adjust to change, apply management/leadership, negotiating skills to manage change. Self-awareness, able to recognise strengths and weaknesses.
- Appropriately values and uses management techniques and seeks to improve these skills and personal effectiveness.

Leadership

- How to maintain, improve working relationships within a team; appropriately recognise roles, skills, status. Know when and what to delegate, provide support, appraise.
- Motivates and empowers others, knows when help is needed. Able to foresee, forestall, manage conflict.
- Sensitive to and aware of the needs of others.

SKILLS

- Risk Management
- Leadership skills
- Time management
- Delegation skills
- Conflict management
- Clinical governance
- Audit

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Audit course (Year 1)
- Leadership course (Year 3 – 5)
- Annual audit
- Consultant feedback at annual assessment on management and leadership skills
- Involvement in hospital committees

Teaching & Research

Objective: To recognise the opportunities for personal/professional development that exist for medical teachers, educational supervisors and from involvement with research.

Medical Council Domains of Good Professional Practice: No. 6 Scholarship.

KNOWLEDGE

Teaching, educational supervision and assessment

- Know principles of adult learning, teaching and learning methods available and strategies; educational principles directing assessment, methods, formative vs. summative. Value of regular appraisal / assessment in informing training process.
- Able to identify educational objective. Able to design and deliver an effective teaching event, both small and large group. Uses technology / materials effectively. Adequate preparation, timekeeping.
- Appreciates benefit to learner is key objective of teaching sessions, key resource is adequate knowledge of subject.

Research, methodology and critical evaluation

- How to design and resource a research project, how to obtain ethical approval. Research methodology, valid statistical analysis, writing and publishing papers. Ethical considerations, declaring an interest.
- Reviewing the literature, framing the question, designing a project capable of providing an answer. Able to derive results and conclusions, able to write or present a paper.
- Intellectually honest.
- Present data in a clear, honest and critical fashion.

SKILLS

- Bed-side undergraduate and post graduate teaching
- Lectures
- Ethics of research
- Presentation and writing skills

Ethics

Objectives: *Medicine is predominantly concerned with the diagnosis and treatment of illness. Besides the pathological processes involved and the physical impact of each condition, the requirements for practising medicine in a fair, competent and ethical manner must be understood before a doctor is ready for independent practice.*

*Upon satisfactory completion of specialist training, the doctor will be **competent** to undertake comprehensive medical practice in that specialty in a **professional** manner, unsupervised and independently and/or within a team, in keeping with the needs of the Irish healthcare system.*

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 3 Communication and Interpersonal Skill; No. 6 Scholarship; No. 7 Professionalism.

KNOWLEDGE

- Knowledge of basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient care.
- Interpersonal and communication skills that ensure effective informational exchange with individual patients and their families and teamwork with other health professionals, the scientific community and the public.
- Professionalism.

Ethics I: Professionalism

Objectives: *To explore the relationship between ethics of healthcare delivery and professionalism including the challenges and the impact of current developments*

KNOWLEDGE

- Knowledge, skills, attitudes and behaviours expected by patients and society from individuals during the practice of their profession (as a doctor).
 - The skills of lifelong learning and the maintenance of competence
 - Information literacy
 - Ethical behaviour
 - Integrity, honesty
 - Altruism
 - Service to, justice and respect for others
 - Adherence to professional code
- Leadership and Accountability
- Role of the Clinical Director
- Dignity & Respect
- Conflicts of interest
- Personal scope of practice & boundaries
- Adverse Events- open communication when adverse events occur
- Discussing errors

Ethics II: Ethics & Law

Objectives: *To explore the relationship between ethics of healthcare and law including the challenges and the impact of current developments*

KNOWLEDGE

- Ethical patient care and Irish Law including:
- Informed consent
- Consent and capacity
- Disclosure
- Medical Practitioner's Act
- Malpractice
- Misconduct
- Confidentiality
- Data protection
- Coroner's System
- Medical Council Ethical Guide

Ethics III: Research

Objectives: *To explore the ethics of healthcare research including the challenges and the impact of current developments*

KNOWLEDGE

- Principles of research
- Un-ethical conduct
- Genetics
- The Importance of Research in Health Care
- Dept of Health and Children Research Action Plan-implications for researchers
- Reasons for Research being Ethically Regulated
- Genetics
- Researching vulnerable groups
- Data Research/Protection and confidentiality
- Patient information bill
- Human Tissue Act
- Role of Research Ethics Committee
- Conflict of interest

Ethics IV: Public Health and Occupational Medicine

***Objectives:** To explore the ethics of public health and occupational medicine including the challenges and the impact of current developments*

KNOWLEDGE

- Screening
- Confidentiality
- Immunisation
- Infectious disease

SKILLS

- To incorporate the above ethical concepts in everyday practice

ASSESSMENT & LEARNING METHODS

- RCPI Ethics programme: Ethics I, Ethics II, Ethics III and Ethics IV (Mandatory)
- Note of examples of ethical dilemmas encountered in training
- Consultant feedback at annual assessment
- Workplace based assessment e.g CBD
- Educational supervisor's reports on observed performance (in the workplace)

Dealing with and Management of Acutely ill Patients in Appropriate Specialties

Objective: To have the knowledge and skills to be able to assess and initiate management of patients presenting as emergencies with the problems outlined below. For each scenario, trainees should in particular gain knowledge and skills to recognise the critically ill and:

Immediately assess and resuscitate if necessary.

Formulate a differential diagnosis, treat and/or refer as appropriate.

Select relevant investigations and accurately interpret reports.

Communicate the diagnosis and prognosis – see Generic Skills.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care, No. 8 Clinical Skills

KNOWLEDGE

Management of acutely ill patients with medical problems

- Know how potentially life-threatening problems present; know the indications for urgent intervention, additional information necessary to support action (*e.g. results of investigations*) and treatment protocols (*see Addendum*).
- Know when to seek help, refer/transfer to another specialty. Know ACLS protocols. Know the ethical and legal principles relevant to resuscitation and DNR orders.
- Able to manage acute medical intake, to receive and refer patients appropriately, to interact efficiently and effectively with other members of the medical team, accept/undertake responsibility appropriately.
- Able to anticipate / recognise, assess and manage life-threatening emergencies, recognise significantly abnormal physiology *e.g. dysrhythmia* and provide the means to correct *e.g. defibrillation*.
- Able to convey essential information quickly to relevant personnel: maintains legible up-to-date records documenting results of investigations. Lists of problems dealt with or remaining, identifies areas of uncertainty; ensures safe handover.
- Remains calm, delegates appropriately, ensures good communication. Tries to meet patient's/ relatives' needs and concerns, respecting their views and right to be informed.

Discharge planning

- Distinguish between illness and disease, disability and dependency. Understand the potential impact of illness and impairment on activities of daily living, family relationships, status, independence. Be aware of quality of life issues.
- Know role and skills of other members of the healthcare team, how to devise and deliver a care package. Know the support available from other agencies *e.g. specialist nurses, social workers, community care*. Understand the principles of shared care with the general practitioner service.
- Show awareness of the pressures/dynamics within a family, the economic factors delaying discharge but recognise the limit to benefit derived from in-patient care. Establish liaison with family and community care, primary care, communicate / report to agencies involved.
- Demonstrates can awareness of the wide ranging effects of illness and the need to bridge the gap between hospital and home.

SKILLS

- ACLS
- Deal with common medical emergencies
- Interpretation of blood results, ECG/Rhythm strips, Chest X-Ray, CT Brain
- Give clear instructions to both medical and hospital staff
- Order relevant follow up investigations
- Discharge planning
- Knowledge of patient pathways
- Knowledge of HIPE
- Multidisciplinary team working
- Communication
- Early regular and on-going consultation with family members and primary care physicians

ASSESSMENT & LEARNING METHODS

- Certified ACLS
- Record of on call
- miniCEX (acute setting) - each year
- Case based discussions
- Consultant feedback at annual assessment

**Specialty Section for Rehabilitation
Medicine**

Essential Training

Objective: To develop the knowledge and skills 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. Also to acquire the skills to be an excellent clinician, manager and to promote research and education in Rehabilitation Medicine.

The Rehabilitation Process

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.

KNOWLEDGE

- Knowledge of the WHO ICF Classification as well as concepts advocated by the disability movement
- Background legislation: Disability Act 2005, Building Regulations 2000, National Disability Authority Act 1999, Equal Status Acts and Employment Equality Acts and the Law Reform Commission consultation document on vulnerable adults and capacity, The Mental Health Act 2001 and the Children' Act 2001.
- Epidemiology of disability.
- Knowledge of the underlying aetiology, pathophysiology, management procedures and prognosis relating to the conditions for which patients are referred for rehabilitation.
- Knowledge of the roles and expertise of members of the multidisciplinary team.
- Knowledge of the preventive management of medical complications of musculoskeletal and neurological impairments, including falls, skin sores, contractures, nutritional complications etc.
- Knowledge of 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.
- 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 (*e.g. 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 applications of resources and review of achievements in different settings (inpatient and community).
- Effective communication and relatives.
- Works as part of a multi-professional team.
- Liaises closely with other clinical teams.
- Communicates clearly with colleagues.
- Understands the impact of the condition on the patient and their family.
- Recognises the importance of good communication.
- Understands the ethical issues involved in rehabilitation.
- Emphasise the importance of a healthy lifestyle.
- Develop and sustain supportive relationships with patients with chronic disabling conditions.
- Be able to support relatives.
- Be able to break bad news in a sympathetic manner.
- Appropriate self-confidence and recognition of limitations.

SKILLS

- Generic Skills
 - Multidisciplinary Team working
 - Leadership
 - Communication

ASSESSMENT & LEARNING METHODS

- Case based discussion
- In house teaching - WHO Classification, Legislation

Assessment at SpR Year 1 - 2

Social and Community Aspects of Rehabilitation Medicine

Objective: 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 disabled people

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 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 disable 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 vocational rehabilitation*).
- Community mobility and driving (*See section on driving for disabled people*).
- Factors relevant to planning hospital discharge.
- Home visiting: To be able to make an 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.
- Understands the impact of the condition on the patient and their family.
- Appreciation of the necessity for effective contribution to the planning of community services for specific disabled people.
- An understanding of Vocational Rehabilitation

SKILLS

- Assessing an individual's long term needs, including the co-ordination of multi-agency case conferences, identifying needs, establishing management plans and monitoring progress.
- Transition of care
- Driving assessment
- Discharge planning
- Interface with community services

ASSESSMENT & LEARNING METHODS

- Case based discussion
- Study Day - Transition
- Minimum of 5 home visits
- Minimum of 5 driving assessments

Assessment at SpR Year 1 - 4

Psychological Aspects of Disability and Rehabilitation

Objective: 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.*

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.
- Interpretation of the results of psychological, psychometric, social and vocational assessments.
- Recognition of the specific indications for psychological support provided by psychotherapists, clinical psychologists, counsellors or other professionals such as social workers.
- Management of psychologically induced disability.
- Demonstration of communication skills.
- Empathic manner.

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.
- Counselling, including an appreciation of its benefits and limitations.

ASSESSMENT & LEARNING METHODS

- miniCEX

Assessment at SpR Year 1 – 4

Organisation and Management in Rehabilitation Medicine

Objective: 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.

KNOWLEDGE

- Legislation concerning the provision of services through the HSE, Local Disability Authority, Department of Social Community and Family Affairs, (*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 the National Rehabilitation Hospital and other Rehabilitation Institutions such as The Royal Hospital Donnybrook, Peamount Hospital, and other Community Hospital, 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 service provision between HSE and PCCC
- Staff development, including personal career plans, appraisal and in-service education opportunities.
- Legal aspects of disability, including employment, driving, testamentary capacity, Power of Attorney, Ward of Court of Protection, living wills, persistent vegetative state and medico-legal reports. (An awareness of the different legal frameworks operating in the various countries in the UK)
- Ethical aspects of Rehabilitation Medicine, including resources allocation, selection for treatment, and withdrawal or termination of treatment in progressive disability and persistent vegetative state.
- Organisation within the medical profession, including the Medical Council, Royal Colleges, Irish Committee on Higher Medical Training and Specialist Training Committee system, IMO, IHCA, Specialist Societies such as the Society for Research in 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.
- 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.
- Counselling 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 indicated by local or national policies.

SKILLS

- Interview Skills
- Management skill

ASSESSMENT & LEARNING METHODS

- In house training: Time spent with Social Worker:
 - Legislation
 - Counselling skills
- Study Day: Medical Legal aspects
- Management/ Membership of a committee
- Ethics
- Medical Legal report writing course
- Leadership course

Research in Rehabilitation

Objective: *The trainee should be able to:*

- *Complete a research or clinical audit study from the planning to the final report stage.*
- *Present research/audit study results orally and in written form.*
- *Critically appraise scientific, clinical and sociological research literature*

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.
- 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.
- Understand the ethical issues involved in research.
- Appreciate the importance of research in influencing best practice.

SKILLS

- Presentations
- Publications
- Audit
- Research skills

ASSESSMENT & LEARNING METHODS

- Ethics
- Research Skills (non mandatory)
- Present at local, national and international meetings.
- Audit Study day
- Present audit at peer review meeting

Assessment at SpR Year 1

Neurological Rehabilitation

- **Objective:** *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.*

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.
- Knowledge of sexual health
- 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.
- Assessment of the neurologically disabled person by means of the history and neurological examination.
- Interpretation preferably learned through experience, of common neurological and neuroradiological investigations and neuropsychological 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.
- Driving for disabled people

SKILLS

- Management and treatment of specific impairments
- Spasticity management:
 - Assessment
 - Focal and systemic therapeutic treatment options
 - Blind, EMG and ultrasound guided injection of Botulinum Toxin
 - Head and Neck; Upper limb; Lower limb
 - Baclofen pump refills
 - Assessment of spasticity outcomes
- Measurement in neurological rehabilitation
- Ultrasound guided injection of salivary glands

ASSESSMENT & LEARNING METHODS

- Lead Goal setting conference
- DOPS - refilling a Baclofen pump
- DOPS Phenol injections
- DOPS - Spasticity:
- No of Cases of EMG and Ultrasound guided
 - Head and neck
 - Upper limb
 - Lower limb
- DOPS: Injection of salivary glands
 - Blind injection
 - Ultrasound guided
- miniCEX - Assessment of spasticity
- miniCEX Assessment of patient with complex disabilities
- Study Days: Spasticity (With neurologists & geriatrics)

Assessment at SpR Year 1 - 4

Acquired Brain Injury Rehabilitation Including Stroke

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

- Managing all aspects of acquired brain injury and disease taking account of the influence of psychological, social and economic factors.
- Prevention of further brain injury in a recently injured person
- Provision of an appropriate prognosis at all stages following acquired brain injury
- Making an effective contribution to the resettlement of acquired brain injury patients.
- application of the principles of rehabilitation (as detailed in other obligatory modules) in the specific context of acquired brain injury.

KNOWLEDGE

- The pathomechanisms of injury to the brain.
- The pathophysiology of acquired brain injury.
- The knowledge base described under “The rehabilitation process” and under “Neurological rehabilitation” with particular reference to acquired brain injury.
- Presentation of illness and treatment of complications in acquired brain injury.
- The total early management following acquired brain injury.
- Medical complications of acquired brain injury
- Knowledge of importance of bladder and bowel management
- Management of the following aspects of general rehabilitation and neurological rehabilitation with particular reference to acquired brain injury:
 - Aetiology of Stroke and acquired brain injury
 - Investigation and management of Stroke and acquired brain injury
 - Primary and Secondary prevention of Stroke
 - Post traumatic/stroke epilepsy
 - Behavioural management
 - Spasticity management
 - Pressure management and tissue viability assessment;
 - Pain management techniques
 - Wheelchair assessment, specialised seating and orthotics prescription
 - The technique and application of psychometric testing.

SKILLS

- To be able to perform a comprehensive Neurological Rehabilitation Exam
- To be understand differential diagnosis and describe the pathophysiology of Neurological and related disorders in a organized format
- To be able to do workup and treat the disorders listed above
- To be able to determine the prognosis of Neurological disorders
- To be able to develop and recommend rehabilitation programs for patients with Neurological and related disorders
- To be able to relate structural with functional in the management of the listed disorders
- To be able to utilize various Neuropharmacologic agents in the management of Neurological disorders and related complications
- To access safety and risk factors in the Neurological Rehabilitation patients
- To understand the medical legal aspects of the disabled patient.
- Management of Spasticity disorders with rehabilitation intervention, oral agents, Botulinum toxin and Baclofen Pumps
- Conducting team conferences
- Conducting family conferences
- Communicating with therapies, consulting physicians, insurance companies, case managers and discharge planners and families
- Management of patients in the out-patient setting

- Offering consultative services on patients in the acute care services when transfer is contemplated to rehab or who are involved in discharge planning
- Write up of consults, admission notes and orders
- Attend sessions involving medical-legal testimony.

ASSESSMENT & LEARNING METHODS

- Lead Goal setting conference
- DOPS - refilling a Baclofen pump
- DOPS Phenol injections
- DOPS - Spasticity:
- No of Cases of EMG and Ultrasound guided
 - Head and neck
 - Upper limb
 - Lower limb
- DOPS: Injection of salivary glands
 - Blind injection
 - Ultrasound guided
- miniCEX - Assessment of spasticity
- miniCEX Assessment of patient with complex disabilities
- Study Days: Spasticity (With neurologists & geriatrics)

Assessment at SpR Year 1 - 4

Rheumatological And Musculoskeletal Rehabilitation

Objective: 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

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.
- Pathway of management of acute and chronic pain
- Specific interventions designed to minimise the effects of immobility e.g. physical and occupational therapy environmental adaptations, orthotics and surgery. The musculoskeletal effects of posture and repetitive movements in the workplace and in leisure activities.
- Pain self management & Chronic back pain programmes: patient assessment & selection, goal planning, outcome measures.
- How to examine the musculoskeletal system, particularly painful joints and the painful spine.
- 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 participation restriction associated with disease of bones and joints.
- Understanding of the roles of other health care professionals in the management of musculoskeletal disorders, particularly physiotherapists, rheumatologists and orthopaedic surgeons.

SKILLS

- Assessment and management of acute and chronic pain
- Large joint injections

ASSESSMENT & LEARNING METHODS

- DOPS: Large joint injections
- Case based discussion - pain management
- Case based discussion - Osteoporosis / Reading a DEXA scan

Rehabilitation Of People with Amputations And Limb Deficiencies: Wheelchair Provision And Orthotics

Objective: 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.

KNOWLEDGE

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 on prosthetic management of amputation.
- Psychosocial aspects of amputee care.
- To be able to assess and prescribe appropriate prostheses.
- To work in conjunction with engineering and technical staff and other members of the multi-professional team involved in assessing equipment for disabled people.
- Appreciates the patient's right to dignity and privacy.
- Adopt a sympathetic and empathetic attitude towards parents with a child with limb deficiencies.
- 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.
- Driving for disabled people see page 74

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

Wheelchairs and special seating

- 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:
 - *As the sole or principle means of mobility and*
 - *As an aid to social mobility.*
- The environmental factors which limit the usefulness of wheelchairs.
- Understand the workings of district wheelchair services.
- 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.
- To prescribe appropriate special seating systems.
- Ability to understand the impact of poor seating on an individual with poor seating.
- Understanding of the importance of therapeutic handling.

SKILLS

- To work in conjunction with engineering and technical staff and other members of the multi-professional team involved in assessing equipment for disabled people.
- Rehabilitation of the amputee with co-existing medical conditions, particularly diabetes.
- Gait analysis
- To be able to assess and prescribe orthosis.
- Risk and safety analysis in wheelchair provision.
- To prescribe appropriate wheelchairs

ASSESSMENT & LEARNING METHODS

- Courses on amputation rehabilitation - upper and lower limb
- 5 day course in Advanced Rehabilitation medicine in Nottingham
- Minimum of 5 clinics in wheelchair and special seating
- Case based discussion
- miniCEX - assess and prescribe appropriate prostheses

Assessment at SpR Year 1 - 4

Driving For Disabled People

Objective: *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.*

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.

ASSESSMENT & LEARNING METHODS

- Attend 5 driving assessments
- Case based discussion

Environmental Control Systems And Assistive Technology

Objective: 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.

KNOWLEDGE

- Environmental control equipment:
 - The range of equipment available through the HSE and other suppliers.
 - The administrative system of environmental control provision.
 - Integration of environmental control equipment with other equipment (e.g. 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 (e.g. 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.
- Co-ordination of this service provision with the other rehabilitation needs of the person.
- Appreciate the ethical issues involved in providing EAT to individuals with complex disabilities

SKILLS

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

ASSESSMENT & LEARNING METHODS

- 5 Environmental control assessments during training

Spinal Cord Injury

Objective: 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.*

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
- The total early management following injury (including an understanding of physiotherapeutic modalities in respiratory care)
- 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.
- Medical complications of spinal cord injury
- Knowledge of importance of bladder and bowel management
- Management of the following aspects of general rehabilitation and neurological rehabilitation with particular reference to spinal injury:
 - Pressure management and tissue viability assessment;
 - Sexual function and male fertility
 - Pain management techniques
 - Wheelchair assessment, specialised seating and orthotics prescription
 - The technique and application of psychometric testing.
 - Upper limb preservation and tendon transfer
 - Functional electrical stimulation
 - Be familiar with use of appropriate outcome measures
 - Awareness of the physical and psychological benefits of sport, and its role in community re-integration
- Works as part of a multi-disciplinary team.
- Have realistic expectations of tasks to be completed by self and others.
- Be flexible and willing to change in the light of changing conditions.
- Be willing to ask for help.
- Act with empathy, honesty and sensitivity.
- Adopt a non-discriminatory attitude to all patients and recognise their needs as individuals.
- Seek to identify the health care belief of the patient.
- Acknowledge patient rights to accept or reject advice.
- Secure equity of access to health care resources for minority groups.

SKILLS

- The assessment of acute spinal injured person and associated injuries.
- Assessment for operative treatment in collaboration with Spinal Surgeons
- ASIA System of assessment and the determination of prognosis based on this.
- Management of the seriously ill, including people with cardiac dysfunction or respiratory failure requiring assisted ventilation.
- Bladder and bowel management
- Pain management
- Management of autonomic dysreflexia and orthostatic hypertension

ASSESSMENT & LEARNING METHODS

- Tracheostomy management 1/2 day course in house
- Time spent with tissue viability nurses and time with plastic surgeon.
- In house training - pain management techniques
- Attend clinics in wheelchair assessments
- 1 day per week in acute spinal injuries unit
- Assessment of new admissions in Mater hospital orthopedic surgical take
- Observe spinal surgeries
- Study Day - Management of spinal cord injury
- Case based discussion
- Ethics

Optional Training Experience

Objective: To allow trainees the opportunity to pursue a special interest and also to promote a broad base of experience.

Acute Stroke

- Objective:** 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.

KNOWLEDGE

- Anatomy and pathophysiology of various types of stroke.
- Classification schemes for acute stroke (e.g. TOAST, Oxford).
- Scales for describing severity of acute stroke (e.g. NIHSS, ESS, SSS).
- The range of investigations appropriate for acute stroke (e.g. 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.
- 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.
- Encourage patients to access further information and patient support groups.

SKILLS

- Management of acute stroke

ASSESSMENT & LEARNING METHODS

- Time spent in Acute stroke unit
- Multidisciplinary stroke team meetings
- Study day on Stroke (Geriatrics /neurology)
- To understand the medical legal aspects of the disabled patient.

Spinal Cord Injury

*Additional time may be spent in this area if the trainee is planning to have subspecialty interest in this area as **page 9 and 10***

Cardiac Rehabilitation

Objective: *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.*

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
- Vocational aspects of cardiac rehabilitation.
- 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.

SKILLS

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

ASSESSMENT & LEARNING METHODS

- Time spent with Nurse Specialist and Neurologist at the NRH
- Case based discussion
- Interpretation of Urodynamics

Continence Services/Urodynamics

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

- *Effective counselling to disabled persons and their families on aspects of incontinence.*
- *Participating with the multidisciplinary team in the management/containment of incontinence.*
- *Referring for urological assessment in appropriate cases.*

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.
- 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.
- Correlation between neurological and urological dysfunction.
- Clean intermittent catheterisation.
- Participating during urodynamic studies.
- Communication and the community incontinence services.
- Appreciate the need for a chaperone.
- Acknowledge cultural issues.

SKILLS

- History taking and examination of the urinary system.
- Insertion of supra pubic catheter.
- Replacement of suprapubic and indwelling catheters.

ASSESSMENT & LEARNING METHODS

- Time spent with nurse specialist urologist and NRH
- Case based discussion (Interpretation of urodynamics)

Disabled School Leavers And Young Adults

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

- *Recognition of the difficulties experienced by disabled young people 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.*

KNOWLEDGE

- Health and personal development needs (*including psychosexual and genetic counselling*) 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 the group of people in order to help them mature and fulfil their potential.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Learning Disability Services

Objective: *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*

KNOWLEDGE

- Knowledge of and ability 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 health and social organisations, which support people with learning disabilities in the community.*

SKILLS

- Assessment and management of people with mild to profound learning disabilities
- Carry out a simple clinical assessment of hearing and vision in a person with moderate to profound learning disabilities.
- Ability to take relevant, appropriate and active role in a multi disciplinary team discussion or case conference.
- Ability to communicate appropriately with people of different levels of learning disability and also with their families.
- Act with empathy in discussion diagnosis and treatment with patient and family.
- Recognise the importance of good communications.
- Understand the ethical issues involved in dealing with patients with learning difficulties.

ASSESSMENT & LEARNING METHODS

- Ethics
- Case based discussion

Orthopaedic Rehabilitation

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

- Assessment and management of patients after severe musculoskeletal 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 pain management attachment).

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 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.
-

SKILLS

- 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.
- 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 disease, including back and neck pain, soft tissue rheumatism and multiple trauma.
- Appreciation of patients discomfort during examination and ability to take remedial action.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Paediatric Rehabilitation

Objective: *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.*

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 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.
- Empathic and sympathetic attitude to children and their families/carers.
- Ability to work well within paediatric team.

ASSESSMENT & LEARNING METHODS

- miniCEX
- Case Based Discussion

Pain Management

Objective: 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.

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 service.
- Psychological consequences of pain and trauma (*e.g. depression, phobias and post traumatic stress disorders*).
- The appropriate investigation of people with chronic pain utilising clinical, radiological psychological, and questionnaire techniques.
- Pain self management & Chronic back pain programmes: patient assessments & selection, goal planning, outcome measures.

SKILLS

- 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 *e.g. 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 *e.g. misconceptions about the cause and meaning of pain, fear-avoidance patterns and the rest/over activity cycle*.
- Ability to treat pathological and non-pathological pain the same.
- Non-judgemental when dealing with functional disorders.
- Appreciation of the biopsychosocial impact of pain.

ASSESSMENT & LEARNING METHODS

-
- Case Based Discussion

Palliative Medicine

Objective: 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.

KNOWLEDGE

- The wide spectrum of diseases, particularly malignancy, progressive neurological disorders with 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 (*medial, 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 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 professional and relatives at the time of bereavement.
- Sympathetic and empathic attitude.
- Open-minded attitude towards end of life ethical issues.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Sensory Deficits Rehabilitation

Objective: 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.

KNOWLEDGE

Auditory Impairment

- 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 sensorineural loss.
- Effects of ageing and 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.

Visual impairment

- Aetiology and pathology of causes of visual impairment.
- Methods of compensation for: impaired vision and; 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 if impaired vision *e.g. for driving or operating machinery*.
- Difference in presentation and consequences of central and peripheral visual loss.

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.
- Appreciation of the impact of hearing impairment.
- Tests and techniques for assessing visual impairment.
- Accessing services for blind people.
- Appreciation of the impact of visual impairment.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Residential Units for Disabled People

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

- *Appraising the options of 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 patient 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.*

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 health and social service 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.
- Demonstrates an ability to liaise with voluntary and social services agencies to provide a seamless service.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Respiratory Rehabilitation Medicine

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

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.
- Rational use of oxygen and methods of administration (*cylinders, concentrators, liquid oxygen*).
- The natural history of severe smoking related lung diseases, 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 impairments i.e. dyspnoea scoring scales, shuttle walking tests etc.
- Sensitive handling of smoking cessation issues.
- Appreciation of the right of the patient to disregard advice given.
- Non-judgemental attitude.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Sexual Aspects of Disability

Objective: *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.*

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 counselling 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.
- Confident attitude when discussing issues of a sexual nature.

ASSESSMENT & LEARNING METHODS

- Attendance at a minimum of 5 sessions with sexual health nurse
- Case Based Discussion

Sports Medicine

Objective: 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 implications for exercise prescription. A multidisciplinary team approach to treatment of sports injury including the coach, psychologist, therapist and nutritionist.
- Advising patients with disabilities or medical problems in relation to sporting activities including appropriate advice on medication.

KNOWLEDGE

- The biomechanics of sporting medicine.
- 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 sports.
- Sports and sporting activity among disabled people, including any special equipment that they may require.
- The extent of the 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.
- Positive mental attitude.

ASSESSMENT & LEARNING METHODS

- Case Based Discussion

Vocational Rehabilitation

Objective: 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.

KNOWLEDGE

- Social policy framework of vocational rehabilitation, including the Disability Act 2005, Employment Equality Act, 1998, Equal Status Act, 2000, Training and Employment Authority (FAS), and benefits available to the disabled population, including: Disability Allowance (DA) and Blind Pension schemes, Back to Work Allowance scheme, Back to Education Allowance.
- 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 e.g., 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, retaining through further educational colleges, and sheltered placement/support 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 wider social context.
- Recognition of the importance of physical, psychological and social factors in each case.
- Writing reports for Department of Social, Community and Family Affairs. employers, trade unions, pension funds and lawyers.
- Socially inclusive attitude.

ASSESSMENT & LEARNING METHODS

- Case based discussion

Minimum Requirements for Training

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Section 1 - Training Plan				
Personal Goals Plan (Copy of agreed Training Plan for your current training year signed by both Trainee & Trainer)	Required	1	Training Post	Form 052
Weekly Timetable (Sample Weekly Timetable for Post/Clinical Attachment)	Required	1	Training Post	Form 045
On Call Rota	Required	1	Training Post	Form 064
Section 2 - Training Activities				
Outpatient Clinics (Minimum of 1 outpatient clinic per week)				
(Outpatients where spinal injury is not specifically available a minimum of 3 months attachment to a spinal unit is recommended.)				
General	Required	40	Training Programme	Form 001
Spinal Cord Injury	Required	1	Training Programme	Form 001
Spinal Cord Injury MD	Required	1	Training Programme	Form 001
Spasticity	Required	1	Training Programme	Form 001
Brain Injury	Required	1	Training Programme	Form 001
Paediatric	Required	1	Training Programme	Form 001
Amputee	Required	1	Training Programme	Form 001
Neurological Behaviour	Required	1	Training Programme	Form 001
Ward Rounds/Consultations				
Consultant led (minimum 1 per week)	Required	40	Year of Training	Form 002
SpR led (1 per week)	Required	40	Year of Training	Form 002
Consultations	Required	1	Year of Training	Form 002
Rehabilitation Obligatory Experience				
Neurological Training (minimum period of 12 months)	Required	1	Training Programme	Form 078
Rheumatological /Locomotor Rehabilitation (6 months)	Required	1	Training Programme	Form 078
Amputee Care, wheelchairs and assistive technology (3 months minimum)	Required	1	Training Programme	Form 078
Psychosocial aspects (no minimum specified but complete during HST)	Required	1	Training Programme	Form 078
Procedures/Practical Skills/Surgical Skills				
Refilling a Baclofen pump (Minimum 6 during training)	Required	6	Training Programme	Form 004
Botox (10 upper limb; 10 lower limb during training)	Required	20	Training Programme	Form 004
Injection of Salivary glands (4 over training)	Required	4	Training Programme	Form 004

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Large joint injections (5 per joint over training)	Required	5	Training Programme	Form 004
Additional/Special Experience Gained	Desirable	1	Training Programme	Form 005
Relatively Unusual Cases	Desirable	1	Training Programme	Form 019
Chronic Cases/Long term care (Minimum of 30 cases over training)	Required	30	Training Programme	Form 066
Management Experience	Desirable	1	Training Programme	Form 110
Section 3 - Educational Activities				
Mandatory Courses				
Mastering Communications (Year 1)	Required	1	Training Programme	Form 006
Audit	Required	1	Training Programme	Form 006
Leadership Skills (Year 3+)	Required	1	Training Programme	Form 006
Ethics I: Professionalism	Required	1	Training Programme	Form 006
Ethics II: Ethics & Law	Required	1	Training Programme	Form 006
Ethics III: Research	Required	1	Training Programme	Form 006
Ethics IV: End of Life	Required	1	Training Programme	Form 006
ACLS	Required	1	Training Programme	Form 006
Advanced Skills Course	Required	1	Training Programme	Form 006
Course in Advanced Rehabilitation	Required	1	Training Programme	Form 006
Course on Amputation Rehabilitation	Required	1	Training Programme	Form 006
Non – Mandatory Courses	Desirable	1	Training Programme	Form 007
Study days (Minimum of 4 per year) See the following examples: Transition; Medical Legal Aspects; Medical Legal report writing course; Spasticity; Management of spinal cords injury; Study day in stroke	Required	4	Year of Training	Form 008
In-house activities				
Grand Rounds (Minimum of 1 per month) (Minimum of 1 other in house activity per month)	Required	10	Year of Training	Form 011
Journal Clubs	Required	10	Year of Training	Form 011
Radiology conference	Required	1	Year of Training	Form 011
Pathology conference	Required	1	Year of Training	Form 011
MDT	Required	10	Year of Training	Form 011
Seminar	Required	1	Year of Training	Form 011
Lecture	Required	1	Year of Training	Form 011
Examinations	Desirable	1	Training Programme	Form 012
Formal Teaching Activity (1 formal teaching session per month)				
Lecture	Required	4	Year of Training	Form 013

Curriculum Requirement	Required/Desirable	Minimum Requirement	Reporting Period	Form Name
Tutorial	Required	4	Year of Training	Form 013
Bedside Teaching	Required	4	Year of Training	Form 013
Research	Required	1	Training Programme	Form 014
Audit activities (1 audit, either to start new audit or complete an existing audit per year)	Required	1	Year of Training	Form 015
Publications	Desirable	1	Year of Training	Form 016
Presentations (1 National and 1 local per year)	Required	2	Year of Training	Form 017
National/International meetings (Attend minimum 1 per year)	Required	1	Year of Training	Form 010
Additional Qualifications	Desirable	1	Training Programme	Form 065
Committee Attendance	Desirable	1	Training Programme	Form 063
Section 4 - Assessments				
DOPS				
Refilling a Baclofen pump	Required	1	Training Programme	Form 021
Botox	Required	1	Training Programme	Form 021
Injection of Salivary glands	Required	1	Training Programme	Form 021
Large joint injections	Required	1	Training Programme	Form 021
CBD See the following examples: Pain management – at least 2 for spinal cord, brain injury, amputee, paediatric, low back pain and chronic pain; Osteoporosis/reading a DEXA scan – 4 during training; Rehabilitation of people with amputations and limb deficiencies – 6 during training; Driving for disabled people	Required	1	Year of Training	Form 020
Mini-CEX (At least two Mini-CEX assessments)	Required	2	Year of Training	Form 023