

HIGHER MEDICAL TRAINING

CURRICULUM

FOR

RHEUMATOLOGY

OCTOBER 2004
(PREVIOUS VERSION DATED JANUARY 2003)

Joint Committee on Higher Medical Training
5 St Andrews Place
Regent's Park
London NW1 4LB

Tel: 020 7935 1174
Fax: 020 7486 4160

Email: HMT@rcplondon.ac.uk

This curriculum is available on the JCHMT website:
<http://www.jchmt.org.uk>

TABLE OF CONTENTS

DOCUMENT REVISION CONTROL	3
INTRODUCTION	1
Entry Requirements.....	1
Duration and Organisation of Training	1
HMT Programme and Location.....	2
Research	2
Approval of Training Programmes.....	2
Training Record.....	2
Flexible training	2
Assessment.....	3
Higher Medical Training - General Description	3
1.1 DESCRIPTION OF THE DISCIPLINE	4
1.2 AIMS OF THE POST-GRADUATE TRAINING.	4
1.3 TEACHING & LEARNING METHODS	4
2. SYLLABUS.....	5
2.1 KNOWLEDGE.....	5
2.2 CLINICAL SKILLS & ATTITUDES.....	6
2.3 CLINICAL AUDIT AND ASSESSING OUTCOMES -.....	9
3. OPTIONAL MODULES	10
3.1 GENERAL DESCRIPTION -	10
3.2 EXAMPLES OF OPTIONAL PROGRAMME TOPICS	10
3.3 SPECIFIC OBJECTIVES -.....	10
APPENDIX A RHEUMATIC DISORDERS.....	11
APPENDIX B UNDERTAKING A CLINICAL EXAMINATION	12
APPENDIX C ASSESSMENT & COMPETENCE.....	14

DOCUMENT REVISION CONTROL

Version Ref:	Date:	Notes/Proposal/Decision
Jan 2003	Oct 2004	2.2 Clinical Skills: the following text was added "The trainee should have experience of managing patients in Day Care Units"

INTRODUCTION

Entry Requirements

Applicants for Higher Medical Training (HMT) should have completed a **minimum** of two years General Professional Training (GPT) in approved posts and obtained the MRCP (UK) or (I). A period of experience in Rheumatology at SHO grade is considered desirable, although not essential, before entry to HMT.

GPT is defined as follows:

- a minimum of 2 years in approved posts with direct involvement in patient care and offering a wide range of experience in a variety of specialties
- 18 months of the 2 years must be spent in posts providing experience in the admission and early follow-up of acute emergencies
- at least 6 of these 18 months must be spent on a service or services on which the emergency take is 'unselected'
- 'unselected take' is defined as acute medical intake encompassing the broad generality of medicine ie not restricted to any single or small group of specialties. If any major component of acute medicine (eg cerebrovascular accidents, myocardial infarctions) is excluded from the take, this experience must be obtained in other posts. During the period on 'unselected take' trainees should have an on-call commitment which averages no less than 4 takes per month

Non-UK graduates without the MRCP who compete for HMT posts must provide evidence of appropriate knowledge, training and experience, particularly in the care of acute medical conditions.

Duration and Organisation of Training

Rheumatology

The duration of HMT in Rheumatology alone is 4 years.

General (Internal) Medicine and Rheumatology

Those who wish to obtain dual certification to include General (Internal) Medicine, will require at least a further year in training.

Rheumatology and Rehabilitation

For dual certification in Rheumatology and Rehabilitation a total of six years HMT will be required. At the discretion of both SACs, one year of research relevant to both specialties (eg MSc course in Sports Medicine) may count towards the six years.

Paediatric Rheumatology

For those who wish to practice Paediatric Rheumatology in their local area or become a specialist in Paediatric Rheumatology, the route has been defined and set out within the rules and regulations for the Paediatric sub-specialties.

HMT Programme and Location

HMT will provide experience in both teaching hospital(s), or other major centres with academic activity, and in DGH(s). The programme to which the trainee is appointed will have named consultant trainers (Educational Supervisors). In addition, one consultant within the same region, but not normally involved in the particular training scheme, will act as Programme Director to the trainee.

Research

A period of supervised research of good quality is considered a highly desirable part of HMT in Rheumatology. A relevant research period may contribute up to 12 months towards the total duration of HMT, the balance to be clinical training.. Some trainees may wish to spend two or three years in research, either before entering HMT or by stepping aside from clinical training after entering a programme. This is perfectly acceptable but only one full year will count towards the programme. For those undertaking an extended period of research *after entering a programme* and obtaining their NTN, a limited amount of additional educational credit may be granted at the discretion of the SAC for clinical work relevant to the programme undertaken in the course of research beyond the initial year. This concession does not apply to those undertaking research *prior to entry* to a higher training programme.

Approval of Training Programmes

It is emphasised to both trainees and supervising consultants that any training programme should be carefully thought out. If either party has doubts about a particular programme, prospective advice should be sought from the SAC. Academic posts (eg Lecturers) are perfectly acceptable for Higher Medical Training provided prospective approval has been obtained from the SAC.

Training Record

A written record of training will be maintained by the trainee, to be countersigned by the relevant trainer and trainee annually; it will remain the property of the trainee and must be produced at the annual assessment. It contains details of training requirements and competences to be achieved within the context of the broad curriculum outlined below.

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:

- i Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities to a period of at least half of that provided for full-time trainees;*
- ii The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than those of full-time trainees*

The above provisions must be adhered to. Flexible trainees 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 the equivalent stage.

For details of appointment and funding arrangements for flexible trainees, please see the revised 'Guide to Specialist Registrar Training' (February 1998).

Assessment

Assessment of trainees will be based upon the standard format of annual review, including the Penultimate Year Assessment (PYA) to which particular importance attaches. Full details may be found in the Introduction to the JCHMT handbook. The award of the CCST will be based on satisfactory completion of the entire series of annual assessments.

Higher Medical Training - General Description

A broad experience in general (internal) medicine is considered essential for the practice of rheumatology. For those entering the specialty with the minimum of 2 years general professional training at SHO level, a further year of general medicine experience, preferably in the first year, is highly desirable. During that time the individual should take part in acute unselected medical take at least once a month with responsibility for the continued care of general medical problems and a ward follow up clinic. Specialty Training should include at least two properly supervised out patient clinics of general case mix per week and one ward round, with other clinics as required in order to comply with the Training Programme. The individual should have the experience of continuing care for Rheumatology patients on an inpatient and outpatient basis. During this time the trainee should acquire the knowledge, experience and skill detailed in the syllabus and record them in the training record.

1.1 DESCRIPTION OF THE DISCIPLINE

Rheumatology incorporates the investigation, diagnosis, management and rehabilitation of patients with disorders of the musculoskeletal system ie the locomotor apparatus, bone and soft connective tissues. The rheumatic disorders thus include diverse conditions such as inflammatory arthritis, autoimmune rheumatic disorders, soft tissue conditions including injuries, osteoarthritis, spinal pain and other chronic pain syndromes and metabolic bone disease. Many rheumatologists practice the specialty exclusively but others practice in internal medicine, rehabilitation, paediatric rheumatology or sports medicine. Rheumatology requires interdisciplinary knowledge and awareness of new developments in internal medicine, immunology, orthopaedics, neurology/pain management, rehabilitation, psychiatry, nursing and professions allied to medicine.

1.2 AIMS OF THE POST-GRADUATE TRAINING.

Post graduate training leading to recognition as a specialist should furnish the doctor with knowledge and skills which will enable them to become competent in the field of rheumatology. The curriculum will enable trainees the opportunity to be competent in the:

- Establishment of a differential diagnosis for patients presenting with clinical features of musculoskeletal conditions by appropriate use of history, clinical examination and investigation.
- Performance of the core investigations required for all physicians practising rheumatology
- Development of management plans for the “whole patient” and have sound knowledge of the appropriate treatments including health promotion, disease prevention and long term management plans.
- Communication of the diagnosis and management options with the patient and other members of the multidisciplinary team.
- Application of sufficient knowledge and skill in diagnosis and management to ensure safe independent practice.
- Provision of effective team working and leadership skills
- Application of knowledge of the appropriate basic sciences relevant to rheumatology
- Management of time and other resources to the benefit of their patients and colleagues
- Facilitation of effective learning by other clinical and allied staff.
- Maintenance of professional standards through continuing development and learning
- Critical appraisal and analysis of clinical research methodology and results.

The trainee should also follow the generic professional standards laid out in the GMC document ‘Good Medical Practice’ (GMC 1998).

1.3 TEACHING & LEARNING METHODS

The opportunities and facilities for teaching and learning will vary between training centres. For this reason, trainers will be expected to identify methods appropriate to their local circumstances and to specify these in their trainees manual. Examples of methods which are likely to be appropriate and effective are listed below, but are not intended to be prescriptive or exhaustive.

Teaching method:

a) Knowledge acquisition -

- Personal study including effective use of medical literature
- Tutorials
- Post graduate courses

b) Clinical skills and attitudes -

- Demonstration of examination skills in normal subjects & patients by trainer
- Presenting history, demonstrating clinical findings & use of investigations on ward rounds or tutorial sessions
- Presenting cases for group discussion – grand rounds, PG meetings etc
- Regular radiology meetings
- Personal study including the effective use of medical literature
- Review of paper or electronically based problem cases
- Observation of consultant trainers managing clinical problems in day to day practice

- Observation of consultant trainer communicating with patients and members of team in day to day practice
- Use of role play or video taping of interviews
- Reinforce skills by practice during on the job training with both in-patients and out-patients – the latter should include general unselected rheumatology cases, special rheumatology clinics (eg connective tissue or early arthritis), and some experience of related specialties (eg pain clinic, orthopaedic clinic, radiology reporting session)

c) Procedures –

- Demonstration of injection technique by trained operator in patients requiring the procedure.
- Use of models to practice technique
- Perform procedure under observation
- Reinforce skills during on the job training with both in-patients and out-patients

2. SYLLABUS

2.1 KNOWLEDGE

The overall aim is to acquire a sound knowledge of the natural history and pathophysiology of rheumatic disease and the basic scientific principles and evidence base underpinning the current practice of rheumatology. This knowledge base will be applied to ensure safe and competent clinical practice.

Specific objectives & subject matter:	Teaching & learning methods	Assessment
<p>The trainee will be required to demonstrate working knowledge, as applied to the rheumatic diseases, of –</p> <p>Basic science –</p> <ul style="list-style-type: none"> ▪ anatomy ▪ biochemistry ▪ physiology ▪ immunology ▪ genetics ▪ pharmacology <p>Rheumatic disorders – (Appendix A)</p> <ul style="list-style-type: none"> ▪ epidemiology ▪ aetiology ▪ pathogenesis ▪ pathology ▪ clinical features ▪ natural history ▪ impact on physical and psychological growth and development in children and adolescents ▪ management, and its’ evidence base 	<p>Section 1.3a</p>	

2.2 CLINICAL SKILLS & ATTITUDES

The overall aim is to develop the ability to perform a clinical assessment of patients with musculoskeletal disorders, select and interpret appropriate investigations and formulate a differential diagnosis and management plan. The trainee should be able to communicate their conclusions effectively to the patient and other clinical colleagues. The trainee should have experience of managing patients in Day Care units.

History taking & clinical examination:

Specific objectives & subject matter	Teaching & learning methods	Assessment
<p>History - To be able to elicit and correctly interpret a history of:</p> <ul style="list-style-type: none"> ▪ the presenting symptoms of rheumatic disease ie pain, stiffness, weakness, loss of function & non-articular manifestations ▪ the disability and handicap caused by rheumatic disease ▪ the psychosocial problems associated with rheumatic disease ▪ other general medical problems <p>Examination - To be able to undertake a physical examination as detailed in Appendix "B" and identify</p> <ul style="list-style-type: none"> ▪ the normal musculoskeletal system and its' variations eg at extremes of age ▪ the clinical signs associated with - ▪ inflammation or structural damage of joints & periarticular structures (muscles, tendons, entheses, bursae and bone) ▪ non-articular, systemic and other features of rheumatic disease ▪ general medical complications of rheumatic disease ▪ diffuse or regional pain disorders or somatisation disorders <p>Differential diagnosis - To be able to use the clinical findings to formulate a differential diagnosis and plan of investigation for patients presenting with -</p> <ul style="list-style-type: none"> ▪ monoarthropathy ▪ oligoarthropathy ▪ polyarthropathy ▪ axial arthropathy ▪ multisystem disorder ▪ muscle weakness ▪ regional limb & spinal musculoskeletal pain disorders ▪ unexplained musculoskeletal pain ▪ rheumatological and patient emergencies 	Section 1.3b	

Use of investigations:

Specific objectives & subject matter:	Teaching & learning methods	Assessment
<p>Use of investigations - To know the indications for and limitations of the laboratory and imaging techniques used in the diagnosis and management of rheumatic diseases. To be able, in the light of the clinical assessment, to select and interpret the most appropriate -</p> <ul style="list-style-type: none"> ▪ laboratory investigations <ul style="list-style-type: none"> ▪ haematology ▪ biochemistry ▪ immunology ▪ histopathology ▪ bacteriology ▪ qualitative imaging techniques <ul style="list-style-type: none"> ▪ plain radiography ▪ CT ▪ MRI ▪ ultra-sound ▪ radioisotope scanning ▪ quantitative techniques for assessing bone density <ul style="list-style-type: none"> ▪ DXA ▪ ultrasound 	<p>Section 1.3a Section 1.3b</p> <p>Unit radiology meetings</p> <p>Instruction from radiologist - imaging reporting sessions</p>	

Management & communication:

Specific objectives & subject matter:	Teaching methods	Assessment
<p>Management and communication -</p> <p>To be able to communicate, explain and discuss with the patient -</p> <ul style="list-style-type: none"> ▪ the diagnosis, ▪ the need for further investigations ▪ the evidence-based management options, their risks and benefits and need for clinical monitoring. ▪ the need for orthopaedic/surgical intervention, and the main risks and benefits ▪ the patient's views on causation, management and the risks and benefits of complementary or non-conventional approaches <p>To be able to identify the need for -</p> <ul style="list-style-type: none"> ▪ paramedical intervention, and aids to assist self care, mobility or driving ▪ intervention by other relevant specialists including the neurologist, neurosurgeon, renal physician or rehabilitationist. ▪ referral of children to specialist paediatric colleague ▪ education and self management techniques ▪ disability benefits or re-training to reduce the socioeconomic impact of rheumatic disease on the patient. ▪ multidisciplinary pain management techniques and pain relieving procedures such as epidural and regional nerve blocks ▪ physical treatments such as manipulative and mobilisation techniques <p>To communicate these needs effectively</p> <ul style="list-style-type: none"> ▪ with members of the multidisciplinary team (physiotherapist, occupational therapist, nurse specialist, orthotist, podiatrist or clinical psychologist) ▪ with other clinical colleagues ▪ with relevant support workers including medical social worker and voluntary agencies 	<p>Section 1.3b</p>	

Performing procedures:

Specific objectives & subject matter:	Teaching & learning methods	Assessment
Perform procedures – To be able - <ul style="list-style-type: none">▪ to identify the correct indications for<ul style="list-style-type: none">▪ joint injection/aspiration▪ soft tissue injection.▪ to aspirate and inject joints competently using the appropriate techniques▪ to recognise the macroscopic appearance of normal and abnormal synovial fluid (non-inflammatory, inflammatory, haemorrhagic and septic)▪ to inject soft tissue lesions competently using the appropriate techniques (tennis/golfer's elbow, carpal tunnel, tenosynovitis/flexor tendon nodules, bursitis, tendinitis and plantar fasciitis).	Section 1.3c	

2.3 CLINICAL AUDIT AND ASSESSING OUTCOMES -

Specific objectives & subject matter:
To be able to design, plan and carry out an audit project on a relevant clinical topic. To achieve this the trainee will be required to - <ul style="list-style-type: none">▪ specify an appropriate standard of practice for auditing,▪ identify suitable outcome measures,▪ apply appropriate statistical methods to achieve a robust study design and analysis of results▪ complete the audit 'loop' to demonstrate whether change in practice has occurred.

2.4 MANAGING A RHEUMATOLOGY UNIT -

Specific objectives & subject matter:
To acquire the management skills relevant to participation in and leadership of a rheumatology team. To achieve this the trainee will be required to demonstrate - <ul style="list-style-type: none">▪ effective time management▪ negotiating skills▪ participation in staff organisation▪ effective supervision of junior medical staff

3. OPTIONAL MODULES

3.1 GENERAL DESCRIPTION -

The latest revision of the rheumatology curriculum requires a minimum of 36 months of single specialty training in rheumatology and allows for an additional approved (4th) year, which may be used by the trainee in a number of different ways. Some may elect to undertake a period of research in a subject related to rheumatology. Others may wish to acquire special expertise in a new technique (eg diagnostic musculoskeletal ultrasound) or to develop special clinical skills (eg sports medicine or musculoskeletal medicine). Regardless of the elective programme chosen by the trainee, this will be supervised by their regional specialty advisor and receive the prospective approval of the Postgraduate Dean. If this activity is out of service, designated funding may be required. In some instances, the trainee may undertake this special training *pari passu* with their basic programme, providing it does not interfere with the quality of the programme or the service commitments, and that the basic curricular objectives are met. Some trainees may wish to exchange posts with a trainee in another unit. Overseas work requires prospective approval.

Dual certification in Rheumatology and Rehabilitation Medicine requires a minimum of 5.5 years and must include 36 months of clinical Rheumatology training. Both SACs must prospectively approve the dual training programme. Please refer to the Rehabilitation Medicine Curriculum and contact JCHMT for further details.

3.2 EXAMPLES OF OPTIONAL PROGRAMME TOPICS

This list is not exhaustive and items are not in any order of priority. The elective programme chosen by trainees will to some extent reflect the local training needs as well as local expertise.

- Clinical or lab research
- New imaging methods
- Special clinical interest
- Sports medicine
- Musculoskeletal medicine and manipulation
- EMG
- Paediatric rheumatology

3.3 SPECIFIC OBJECTIVES -

The trainee and trainer will be required to specify and agree suitable educational objectives for the optional module. The trainee will undergo assessment to ensure that these objectives have been met.

APPENDIX A RHEUMATIC DISORDERS

1) Regional pain syndromes:

- spinal pain
- intervertebral disc disorders
- spinal canal or foraminal stenosis & related syndromes
- limb pain syndromes (eg rotator cuff disease, epicondylitis & other soft tissue conditions, non-specific limb pain, plantar fasciitis, bursitis, algodystrophy etc)
- chest wall pain syndromes
- fibromyalgia and related somatoform disorders
- benign joint hypermobility
- specific to childhood – eg nocturnal limb pain, Osgood-Schlatter's, Perthe's etc

2) Osteoarthritis and related conditions:

- osteoarthritis
- DISH
- neuropathic arthritis
- crystal associated arthropathy – urate, CPPD, basic calcium phosphate, oxalate

3) Juvenile Idiopathic Arthritis

4) Spondylarthropathy

- ankylosing spondylitis
- enteropathic arthropathies
- psoriatic arthritis
- reactive arthritis
- Whipple's disease

5) Autoimmune rheumatic disease

- rheumatoid arthritis
- systemic lupus erythematosus and related overlap syndromes
- systemic sclerosis, Sjogrens syndrome
- inflammatory muscle disease
- vasculitides, antiphospholipid syndrome, Behcet's disease

6) Metabolic, endocrine and other disorders

- osteoporosis
- rickets and osteomalacia
- bone & joint dysplasias
- renal bone disease
- endocrine disorders affecting bone, joint or muscle (eg thyroid, pituitary, parathyroid)
- metabolic disorders affecting joints (eg alkaptonuria, haemochromatosis etc)
- heritable collagen disorders
- haemoglobinopathies
- haemophilia and other disorders of haemostasis
- regional disorders – Paget's disease, HPOA, osteonecrosis, Perthe's disease
osteochondritis dissecans, transient regional osteoporosis

7) Neoplastic disease

- primary and secondary neoplastic conditions of connective tissue
- pigmented villonodular synovitis
- paraneoplastic musculoskeletal syndromes

8) Infection and arthritis:

- septic bone and joint lesions
- Lyme disease
- mycobacterial, fungal & parasitic arthropathies
- viral arthritis
- AIDS
- post-infectious rheumatological conditions (eg rheumatic fever, post-meingococcal arthritis))

9) Miscellaneous:

- Sarcoidosis, Eosinophilic fasciitis, Familial Mediterranean Fever, Relapsing polychondritis
- Hypogammaglobulinaemia & arthritis, Amyloidosis, Sweets syndrome (neutrophilic dermatoses)

10) Occupational and sporting related problems

APPENDIX B UNDERTAKING A CLINICAL EXAMINATION

a) Normal anatomy and function:

Subject matter – demonstrating normality.

The trainee should be able to demonstrate on examination

- the surface anatomical features of the shoulder girdle, elbow, hand & wrist, hip/pelvis, knee, ankle/foot, and spine
- the normal range of movement (active and passive) of these joints
- the actions of major muscle/tendons acting on these joints

b) Abnormal anatomy and function:

The trainee should be able, through performing a clinical examination, to identify -

General features of musculoskeletal pathology:

by inspection – swelling, erythema, muscle wasting or deformity

by palpation – tenderness of articular or specific periarticular structures, increased warmth, to distinguish bone from soft tissue swelling and identify fluctuance

by movement – abnormalities of active and passive movements, instability, the presence of tendon lesions by applying appropriate stress tests, and muscle wasting/weakness

- to use these signs to identify inflammation or structural damage of limb joints, spinal joints, soft tissues (muscles, tendons, entheses, bursae)
- to identify the clinical signs associated with the extra-articular & systemic features
- to identify the general medical complications of rheumatic disease

Shoulder pathology:

- Rotator cuff lesions
- Glenohumeral/capsular pathology
- Muscle wasting, proximal myopathy (deltoid)
- S/C joint pathology - OA, synovitis
- A/C joint pathology - OA, synovitis
- Shoulder pain due to pain referred from viscera or neck

Elbow pathology:

- Olecranon bursitis
- Elbow joint pathology
- Radio-ulnar joint pathology
- Medial or lateral epicondylitis

Hand & wrist pathology:

- Radiocarpal joint pathology
- Inf. radio-ulnar joint pathology
- 1st CMC, MCP or IP joint pathology
- Hand deformities
- Muscle wasting
- Flexor or extensor tenosynovitis or tendon nodules
- Rupture or attenuation of flexor or extensor tendons of fingers or thumb
- De Quervain's tenovaginitis
- Carpal tunnel syndrome

Hip/pelvic pathology:

- trochanteric, iliopsoas, gluteal bursitis
- hip joint pathology
- real & apparent leg length inequality
- SI joint pathology
- muscle wasting, proximal myopathy, Trendelenberg sign
- deformities of the hip, Thomas' test
- pathology of symphysis pubis
- pathology of pelvis - fractures
- hip pain due to pain referred from lumbar region
- lesions of tendons and entheses

Knee pathology:

- knee joint pathology, including internal derangements
- deformities
- muscle wasting, myopathy
- prepatellar, anserine bursitis
- popliteal cyst
- damage to collateral ligaments
- knee pain due to pain referred from hip or lumbar spine
- lesions of tendons and entheses

Ankle & foot pathology:

- ankle (tibiotalar) pathology
- subtalar/ midtarsal joint pathology
- MTP & IP joint pathology
- lesions of the Achilles tendon, entheses and retrocalcaneal bursa
- deformities of the ankle and foot
- foot pain due to pain referred from lumbar spine
- plantar fasciitis
- tenosynovitis of tib post and peroneal tendons
- rupture of tib posterior or Achilles tendon
- lesions of bone (eg stress fracture)

Spinal pathology:

- Cervical spine pathology
- Thoracic spine pathology
- Lumbar spine pathology
- Spinal nerve root entrapment syndromes
- Spinal deformities

Extra-articular pathology:

- Raynauds phenomenon
- Vasculitic skin lesions
- Rheumatoid nodules
- Heberdens & Bouchard's nodes
- Rash - psoriasis, pustular psoriasis, onycholysis, balanitis, lupus rashes, erythema nodosum
- Scleritis, episcleritis, conjunctivitis, iritis
- Scrodactyly
- Tophi
- Other medical complications of rheumatic disease affecting internal organs

APPENDIX C ASSESSMENT & COMPETENCE

APPRAISAL

Personal appraisal conducted at suitable intervals during each year, ie outwith the RITA process, would ensure that personal goals and educational needs are being met. Depending on the calibre and progress of the trainee a half yearly review might be sufficient, for others more frequent review might be needed.

ASSESSMENT

Methods of assessment are currently under review by the JCHMT. Set out below are a *provisional* outline of some of the features expected to be included in the assessment process.

The main tool of formative assessment will be observation of the trainee's performance in day to day practice. This requires close interaction between the trainee and trainer, allowing direct observation of the trainee's performance in a range of clinical settings. Formative assessment of knowledge may be undertaken in future using MCQs, when a reliable and valid set has been developed.

The summative assessment of competence is the annual RITA. A portfolio of material documenting the trainees progress and clinical performance may also be required for review at the RITA. This would be maintained by the trainee and might include:

- | |
|--|
| <ul style="list-style-type: none">▪ summaries of exemplary clinical case material,▪ profile of clinical case mix seen and procedures performed each month,▪ training/educational courses attended,▪ published or unpublished audit, critical review of literature▪ presentations of audit, clinical cases & research work at local or national meetings▪ peer reviewed publications |
|--|

Progression to the next year of training would require demonstration of progress and improvement to higher levels of competence during each year of training as assessed at the annual RITA.

COMPETENCE

Levels of competence:

For each aspect of the curriculum, one method of defining levels of competence might be as -

- Basic knowledge only, with little or no practical experience
- Ability to perform/manage under supervision
- Ability to perform/manage with supervision nearby
- Ability to perform/manage independently

Evidence of competence:

Using the methods described above, the documentary evidence of competence might include -

- the trainee's log book
- the trainee's portfolio of achievements and evidence of critical reflection
- the annual RITA assessment
- other written evidence regarding the trainees performance provided by trainers, other members of the rheumatology team, GP's or patient