UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES
EUROPEAN UNION OF MEDICAL SPECIALISTS

The UEMS Section of Rheumatology
The European Board of Rheumatology

Health Care Services for those with Musculoskeletal Conditions: A Rheumatology Service

1. Introduction

Musculoskeletal conditions are very common across Europe, affecting all ages and the associated physical disability is an enormous burden on individuals and society. They can be effectively prevented and controlled in many situations but this is not at present fully achieved, in part because people are unaware of what modern management has to offer. Access to such treatment is essential for all who have musculoskeletal problems and this document outlines what services are required.

2. Musculoskeletal conditions and their care

The term 'musculoskeletal conditions' includes all conditions that affect the bones, joints, periarticular structures and muscles such as arthritis of all kinds, systemic disorders of connective tissue, back pain, bone diseases such as osteoporosis, soft tissue rheumatism and regional and widespread pain. There are many possible causes such as mechanical problems, injuries such as

at work or leisure, age-associated changes or inflammatory diseases. Some are self-limiting but many are often recurrent or chronic and some can be life threatening. They are the commonest causes of physical disability. While a large number of these conditions are confined to the musculoskeletal system, many also affect other organ systems making their management complex.

They have an enormous socio-economic cost, the greatest burden coming from back pain, osteoarthritis and rheumatoid arthritis. The majority of the costs are indirect relating to social care, pensions and workers compensation. The burden can be reduced by a bone and joint healthy lifestyle (1) and by identifying and managing in a timely way those at high risk or with the earliest features of a musculoskeletal problem. Effective management of someone with an established musculoskeletal condition can also reduce the burden on the individual and society.

The effective management of musculoskeletal conditions requires integrated co-ordinated multidisciplinary, multiprofessional care focused around the needs of the individual. For many people with musculoskeletal conditions this can be provided in the community and in primary care, but many will also need the diagnostic and management expertise of a specialist in secondary care supported by appropriate facilities and services.

3. Burden of musculoskeletal conditions in Europe

Musculoskeletal conditions are common and their impact is pervasive. They are the most common cause of severe longterm pain and physical disability. They significantly affect the psychosocial status of the individuals with the condition as well as their families and carers (2;3). They are a major burden on health and social care. In Europe 20 - 30% of adults are affected at any one time by musculoskeletal pain (4-6). The WHO Global Burden of Disease Monitoring Programme has identified osteoarthritis as one of the top ten causes of disability for countries within the EU and back pain as a major cause of work incapacity (7;8). Using disability adjusted life years (DALYs), OA is the 4th most frequent predicted cause of problems world-wide in women, and the 8th in men (9). There is a 40% lifetime risk of fracture for women over 50 years in Europe and the burden of osteoporosis is increasingly with increased life expectancy (10). Two in 5 people with a musculoskeletal problem are limited in their everyday activities (11). Musculoskeletal conditions, excluding trauma, represent almost 25% of the total cost of illness in European countries (12). Musculoskeletal conditions are the second most common reason for consulting a doctor, and in most countries constitute up to 10 to 20% of the primary care practice (13). One in 5 of all Europeans are under longterm treatment for rheumatism and arthritis (4). The costs, both direct and indirect are considerable. In the Netherlands musculoskeletal conditions ranked second as a health care cost (14), accounting for 6% of total medical health care costs compared to 8.1% for mental retardation and 4.8% for coronary heart diseases and other circulatory diseases. These costs are sizeable at all ages, in the Netherlands ranking fifth at 15 – 44 years, second at 45 – 64 years and third at 65 – 84 years. In addition they are the commonest cause of health problems limiting work, and up to 60% of persons on early retirement or longterm sick leave claim musculoskeletal problem as the reason (15) with further major economic consequences. Throughout Europe, the burden on the individual and society of musculoskeletal conditions will increase dramatically. The prevalence of many of these conditions increases markedly with age and many are affected by lifestyle factors such as obesity, smoking and lack of physical activity. With the increasing number of older people and the changes in lifestyle occurring throughout Europe, the burden is predicted to increase dramatically unless action is taken now. This has been recognised by the UN and WHO with the endorsement of the Bone and Joint Decade (16).

The incidence and prevalence of some of these have been determined in European countries (Tables 1-4) (17) and has been highlighted as a growing problem by the WHO (7;18).

General Incidence and Prevalence Rates (*Estimates for a Caucasian European population derived from studies in Europe and North America (17))*

Incident Cases per 100,000 Males								
Condition	**0-15**	**16-24**	**25-44**	**45-64**	**65-74**	**75+**	**All ages**	**Rank**
Inflammatory Arthritis	8*	13	25	45	49	64	32	6
Ankylosing Spondylitis (AS)	1	16	23	8	4	4	12	7
Gout		10	360	910	1,500	1,480	760	4
SLE	0	0	1	5	2	0	2	8
Scleroderma							0.1	9
Osteoarthritis		70	400	2,670	4,520	5,350	1,970	3
Backpain	290	1,860	3,680	4,550	3,940	4,220	3,684	2
Soft Tissue Rheumatism	910	1,640	3,360	5,740	5,830	5,540	4,100	1
Hip Fracture		7	13	41	184	602	68	5

Incident Cases per 100,000 Females								
Condition	**0-15**	**16-24**	**25-44**	**45-64**	**65-74**	**75+**	**All ages**	**Rank**
Inflammatory Arthritis	16*	33	53	93	97	49	71	6
Ankylosing Spondylitis(AS)	1	4	5	3	1	0	3	8
Gout		20	40	170	450	640	200	5
SLE	3	4	7	13	5	3	8	7
Scleroderma	0						0.6	9
Osteoarthritis		60	580	3,840	6,480	7,410	3,170	3
Backpain	460	2,290	4,610	5,660	5,000	4,720	4,670	2
Soft Tissue Rheumatism	900	2,290	4,130	7,260	6,240	5,380	5,010	1
Hip Fracture		8	5	52	305	1,509	213	4

Prevalent Cases per 100,000 Males								
Condition	**0-15**	**16-24**	**25-44**	**45-64**	**65-74**	**75+**	**All ages**	**Rank**
Inflammatory Arthritis	*	10	20	580	1,140	2,180	440	6
Childhood Arthritis	43	18	11	9	2	1		
AS	0	30	70	120	20	25	70	7
Gout		10	430	1,250	1,970	1,800	980	5
SLE			8	8	13	10	7	8
Scleroderma		0	1	3	3	2	1	9
Osteoarthritis		110	550	4,660	8,180	10,180	3,470	4
Backpain	350	2,170	4,710	6,240	5,340	5,380	4,810	2
Soft Tissue Rheumatism	1,070	1,890	3,760	6,540	6,950	6,630	4,700	3
Osteoporosis (hip)				3,490	5,180	15,640	5,800	1
Disablement (mHAQ>0.5 + pain)		1,710	7,920	16,725	12,010	18,470	10,820	
All msc	3,730	7,240	12,220	20,540	23,620	24,460	15,510	

Prevalent Cases per 100,000 Females								
Condition	**0-15**	**16-24**	**25-44**	**45-64**	**65-74**	**75+**	**All ages**	**Rank**
Inflammatory Arthritis	*	63	160	1,670	2,330	2,740	1,110	5
Childhood Arthritis	86	36	22	18	13	10		
AS	0	0	20	20	10	0	14	8
Gout		20	40	210	530	690	230	6
SLE			28	45	35	28	32	7
Scleroderma		1	1	9	5	5	5	9
Osteoarthritis		90	820	6,540	12,170	15,820	5,870	3
Backpain	510	3,300	5,670	7,360	6,580	6,260	5,890	2
Soft Tissue Rheumatism	1,100	2,800	4,690	8,360	7,370	6,800	5,800	4
Osteoporosis (hip)				7,660	24,350	49,360	22,500	1
Disablement (mHAQ>0.5 + pain)		2,420	9,140	14,380	18,340	30,740	13,600	
All msc	3,880	9,600	15,660	26,600	29,790	31,630	20,720	

* = Childhood arthritis

4. Strategies for the prevention and treatment of musculoskeletal conditions

The ***European Action Towards Better Musculoskeletal Health*** (1) has developed evidence-based strategies to prevent musculoskeletal problems and to ensure that those people with musculoskeletal conditions enjoy a life with fair quality as independently as possible.

The strategies bring together the evidence-based interventions that have been identified for the different musculoskeletal conditions. They are based on a review of the evidence from existing guidelines and systematic reviews, along with the opinion of experts from across Europe in the areas of rheumatology, orthopaedics, trauma, public health, health promotion and policy implementation. In addition the views of people with musculoskeletal conditions have been taken into account. The strategies are aimed at the whole population to prevent these conditions where possible; those individuals at highest risk of developing these conditions; and those who already have these conditions to reduce the impact that they have upon them.

The strategies focus on commonality of recommendations that will maintain or improve musculoskeletal health whatever the underlying condition. In addition they combine what can be achieved from evidence-based interventions with what those with musculoskeletal conditions, their carers and representatives; and health care providers want to be achieved. A summary of the recommendations is included in the appendix to this document. The full report, which includes the supporting evidence for these recommendations, is available at
http://europa.eu.int/comm/health/ph_projects/2000/promotion/fp_promotion_2000_frep_15_en.pdf

The recommendations are:

i) Strategies for the whole population

Everyone is at risk of developing musculoskeletal conditions, but to reduce the enormous impact on the quality of life of individuals and socio-economic impact on society related to musculoskeletal conditions, people at all ages should be encouraged to follow a bone and joint healthy lifestyle and to avoid the specific risks related to musculoskeletal health. This means:

- Physical activity to maintain physical fitness
- Maintaining an ideal weight

- A balanced diet that meets the recommended daily allowance for calcium and vitamin D
- The avoidance of smoking
- The balanced use of alcohol and avoidance of alcohol abuse
- The promotion of accident prevention programmes for the avoidance of musculoskeletal injuries
- Health promotion at the workplace and related to sports activities for the avoidance of abnormal and overuse of the musculoskeletal system
- Greater public and individual awareness of the problems that relate to the musculoskeletal system. Good quality information on what can be done to prevent or effectively manage the conditions and the need for early assessment. These measures will improve the musculoskeletal health of the population. Their modification will also have many other health benefits, as they are risk factors for other conditions, mainly chronic, such as cardiovascular disease.

ii) Strategies for those at risk

Those at greatest risk must be identified and encouraged to take measures to reduce their risk. This should be on a background of being encouraged to follow a healthy lifestyle and to avoid the specific risks related to musculoskeletal diseases. This requires a case finding approach for the different musculoskeletal conditions to identify those individuals most at risk who will benefit most from evidence-based interventions.

iii) Strategies for those with early features of musculoskeletal conditions

Those with earliest features of a musculoskeletal condition should receive an early and appropriate assessment of the cause of their problem. Once their needs have been identified they should receive early and appropriate management and, in addition, education in the importance of self management. This requires methods to ensure that those who have the earliest features of the different musculoskeletal conditions are assessed by someone with the appropriate competency and that the person should have timely access to care that is appropriate to their needs. This should be on a background of enabling people to recognise the early features of musculoskeletal conditions and to know what to do, either managing the problem themselves or knowing when to seek appropriate professional help. In addition people should be enabled to access the skills necessary to manage and take responsibility for their own condition in the long term and to be able to lead full and independent lives.

iv) Strategies for those with established musculoskeletal conditions

Those with a musculoskeletal condition, that is those who have pain, impairment of function, and limitation of activities and restriction of participation, should have fair opportunity of access to appropriate care which will reduce pain and the consequences of musculoskeletal conditions, with improvement in functioning, activities and participation. Most outcomes are best achieved with good pain management, disease management and rehabilitation. These outcomes should be achieved in the most cost effective way possible for the appropriate environment.

This should be on a background of enabling people to recognise the early features of musculoskeletal conditions and to know what to do, either managing the problem themselves or knowing when to seek appropriate professional help. In addition people should be enabled to access the skills necessary to manage and take responsibility for their own condition in the long term and to be able to lead full and independent lives.

Implementation of these strategies requires access to resources.

5. What service is needed for people with musculoskeletal conditions?

The healthcare needs of people with musculoskeletal conditions have been identified in the ***European Action Towards Better Musculoskeletal Health*** report and services are required to implement these recommendations.

The aspirations of those with musculoskeletal conditions has been expressed in the ***People With Arthritis/Rheumatism in Europe (PARE) Manifesto***.

People With Arthritis/Rheumatism in Europe Manifesto

(http://www.paremanifesto.org/)

- **Raise Public Awareness** of the scale and impact of arthritis/rheumatism to ensure that there is sufficient high quality information about arthritis/rheumatism and to portray us as active members of society not as victims.
- **Empower people with arthritis/rheumatism by funding user-led programmes** that draw on the skills of people with arthritis/rheumatism, to enhance the quality of life and contribute to medical, social and personal support services.
- **Involve people with arthritis/rheumatism in policy development** thus guaranteeing that we are involved in the decision-making processes on all medical, social and personal issues associated with arthritis/rheumatism.
- **Develop and recognise national and international organisations** of people with arthritis/rheumatism and enable us to take leadership roles by providing structural and financial support.
- **Provide prompt and good quality health and community services** through well-qualified and well-funded health and social service professionals and by providing a range of evidence based treatments and therapies, including the development of prevention, health education and promotion, support and rehabilitation services.
- **Ensure doctor and health professional awareness** of arthritis/rheumatism is focussed on patterns of therapy, treatment and support that enhance our independence and autonomy as individuals with arthritis/rheumatism by designing services that acknowledge a mutually respectful relationship between patients and professionals.
- **Involve people with arthritis/rheumatism** in helping to determine relevant medical research priorities and budgets, methodologies and the communication of findings, thus establishing a comprehensive knowledge base for the planning of services.
- **Expand research into the social impacts of arthritis/rheumatism** by involving people with arthritis/rheumatism in all aspects, including helping to determine budgets, areas for investigation, methodologies, conduct of the research and communication of the findings.
- **Strengthen law and regulations that ensure equal opportunity**, access to transport and the built environment and challenge discriminatory policies and attitudes that exclude our full participation.
- **Provide fully accessible education/training programmes** as well as facilities and opportunities for lifelong learning that enable us to fulfil our potential as citizens, volunteers and employees, and ensuring that employers, staff and potential staff, are fully conversant with, and can enforce the law protecting disabled people.

People with a musculoskeletal condition require a continuum of health services that includes all levels, from the community in which they live, primary and secondary care and they will also sometimes need access to specialist tertiary care. The expertise and facilities required will increase from level to level. Services need to centre on the needs of the individual with the musculoskeletal condition.

These multidisciplinary and multiprofessional services need to be co-ordinated and integrated so that the management of a musculoskeletal problem is seamless. It is important to achieve the best outcome for the individual that a musculoskeletal problem is assessed and managed by the appropriate level of expertise. The management of any problem needs to be centred around the needs of the individual with the musculoskeletal problem.

Those with any of the different musculoskeletal conditions, at any stage from the earliest features, should be assessed and managed by someone with the appropriate competency and have timely access to care that is appropriate to their needs (equity).

Timely access for those with the earliest features of a musculoskeletal condition is most important to minimise the associated morbidity.

People should be enabled to gain the skills necessary to take responsibility for their own musculoskeletal condition in the long term, make informed choices and to be able to lead full and independent lives through access to high quality information so that people can develop and

maintain an informed dialogue with health and social care professionals and through self management programmes / expert patient groups.

People with musculoskeletal problems and conditions usually have limitation of activities and restricted participation and there is a need for access to appropriate rehabilitative services as well as to support in the community at home, in education, at work and in leisure pursuits to enable them to live as fully independent lives as is possible.

Public health services need to encourage a bone and joint healthy lifestyle. There should be programmes to maintain physical activity; avoid obesity or excessive thinness; encourage healthy eating; discourage smoking and excess alcohol; and to avoid injuries or abnormal use at leisure or in the workplace. The importance of these on musculoskeletal health needs to be recognised.

Primary care needs to understand the needs of people with musculoskeletal problems and conditions and be able to identify and manage problems appropriately. This may require referring for the support of specialist services.

Secondary care services need to be accessible to support primary care in the management of various musculoskeletal problems and for dealing with potentially progressive, more complex or serious musculoskeletal conditions such as rheumatoid arthritis or connective tissue diseases and their complications. Management may be pharmacological, surgical or rehabilitative. Special investigations may be required.

Tertiary care services are needed for the management of the less common musculoskeletal conditions or for less common interventions, such as for juvenile idiopathic arthritis, complex connective tissue diseases or severe vasculitis.

The human and physical resources should provide timely access for the patient to the appropriate level of expertise of care, appropriate methods of assessment and appropriate treatments.

The facilities for providing care for people with musculoskeletal conditions must be physically accessible, allowing for any difficulties they may have.

Standards of care need to be based on evidence of best practice and outcome.

People with musculoskeletal conditions should have access to health care professionals who are managing musculoskeletal conditions in an evidence-based way through appropriate training, motivation and by maintaining competency. Good facilities for training followed by continuing professional development is required.

A rheumatology service is core to the wide range of health and social services that are required by people with musculoskeletal conditions.

6. What services should a Rheumatology Centre provide to meet these needs?

Rheumatology is that branch of medicine concerned with all medical aspects of musculoskeletal conditions. This term includes systemic disorders of connective tissue, inflammatory arthritis, osteoarthritis (arthrosis), spinal problems, soft tissue (non-articular) rheumatism and regional pain syndromes, and non-traumatic bone disorders.

A rheumatologist is a specialist medical practitioner who has been recognized by the National Authority as having completed postgraduate training (19) leading to theoretical and practical knowledge, professional competence and skills to diagnose, manage symptoms (eg pain, disability) and diseases, rehabilitate and prevent musculoskeletal conditions. They will maintain their competency through continuing professional development (20). They have a lead role in developing and managing clinical services for those with musculoskeletal problems that is pivotal for the provision of high standards of care.

A rheumatologist should work closely with primary care and within an integrated co-ordinated multidisciplinary, multiprofessional team (vide infra) focused around the needs of the individual with a musculoskeletal condition. In particular they will work closely with orthopaedics.

A Rheumatology Centre should provide a service for the diagnosis, management and rehabilitation to meet the needs of patients with any of the wide range of musculoskeletal

conditions. Some Rheumatology Centres are more focused on particular musculoskeletal conditions, such as inflammatory joint disease or connective tissue diseases. Some centres are closely linked with Internal Medicine and others with Physical Medicine/Rehabilitation. This varies both within and between countries. A Rheumatology Centre will however work with others who may manage different aspects of musculoskeletal conditions to ensure there are appropriate services for all people with any such problem.

The broad philosophy of management is to relieve pain, to maintain function, to control diseases when possible and to reverse or minimise disability and its consequent handicaps. There are now effective interventions to control symptoms, the disease process and minimise disability for many musculoskeletal conditions.

Assessment and management of musculoskeletal conditions is predominantly outpatient based. It requires a co-ordinated, integrated, multidisciplinary and multiprofessional approach and access to this is essential. Access to inpatient facilities, however, is also essential for management of the more serious complications, for surgery and for rehabilitation of the severely disabled.

The provision of services needs to be sufficient to provide timely access to care, and consider the evidence that early effective interventions improve the outcome for the patient.

i) Referral Patterns to Rheumatology Centres

The services of a Rheumatology Centre must be appropriate to meet the needs of its caseload. The referral pattern to Rheumatology Centres varies across and within European countries dependent on the roles and competency of different health professionals in the assessment and management of musculoskeletal conditions and methods of access to them.

In general referrals fall into 3 categories

a) PATIENTS WITH SHORT TERM PROBLEMS THAT BENEFIT FROM SPECIFIC THERAPY OR PROCEDURES: These problems, such as regional pain syndromes, although associated with significant pain and disability, respond well to the therapies available from a rheumatology service. Early treatment is associated with a better prognosis, so prompt access is important.

b) PATIENTS REQUIRING DIAGNOSIS, ASSESSMENT, ADVICE OR COUNSELLING: These patients have chronic disorders which, with appropriate advice to the primary care physician, can be managed in the community. Examples include osteoarthritis, gout, fibromyalgia and back pain. It is important to establish the diagnosis, assess the impact on the patient, counsel them and communicate effectively with the primary care physician. They may need further assessment and treatment, including rehabilitation services, if the problem worsens or changes.

c) PATIENTS WITH POTENTIALLY PROGRESSIVE MUSCULOSKELETAL CONDITIONS: These patients with inflammatory joint disease, autoimmune disorders and other chronic progressive diseases require close supervision to ensure the best outcome of treatment. This requires early diagnosis and treatment, expert monitoring and/or long-term follow up and management by a multidisciplinary and multiprofessional team to ensure optimal disease outcome. Complications may require prompt access to local facilities and inpatient care. As many of these disorders are both progressive and multisystem, they are best managed by "shared care" with primary care.

ii) Expertise / competencies required

A Rheumatology Centre should provide access to a service that is multiprofessional and multidisciplinary including specialist medical care (rheumatologist), nursing care, physiotherapy and ergotherapy/occupational therapy. There needs to be an integrated approach to working and decision making between members of the team. A close working relationship needs to be established with other disciplines and professional groups who are caring for patients with musculoskeletal disorders or whose competencies are often needed for the management of

musculoskeletal conditions. Many patients with severe musculoskeletal disorders will require medical, surgical and rehabilitative treatment at some stage in their disease.

As there is such a wide spectrum of musculoskeletal conditions, rheumatologists may develop special interests and it is usual for several to work together in Centres and between them cover the spectrum of conditions. The level of working relationship with the different disciplines and professions may vary between Centres.

Core members of a multidisciplinary multiprofessional team (those mainly committed to the management of those with musculoskeletal conditions and who need to interact closely with other members of the team to optimise management) include:

- Rheumatologists
- Specialist* nurse(s)
- Specialist* physiotherapist(s)
- Specialist* ergotherapist / occupational therapist(s)
- Psychologist(s)
- Social worker(s)
- Orthotist(s)
- Podiatrist(s)
- Pharmacist(s)
- Dietician(s)

*A specialist therapist means that they have developed additional competencies to have expertise in the management of musculoskeletal conditions.

If they are not members of the multidisciplinary team, then easy access is required to their services.

Services which are core to the management of people with musculoskeletal conditions

- Imaging - plain xray, CT scan, MRI, Scintigraphy, diagnostic ultrasound
- Clinical and surgical pathology (includes biochemistry, haematology and immunology laboratory resources)
- Bone densitometry
- Neurophysiology

Some of these services may be provided by the Rheumatology Centre

The rheumatology service will often need to draw on the skills of other disciplines and professions.

Close established working relationships are needed with (ie specialities that work closely with the Rheumatology Centre and may share care or undertake combined clinics)

- Orthopaedic surgery
- Hand surgery
- Spinal surgery
- Specialised rehabilitation services (i.e. vocational rehabilitation)

- Immunology
- Interventional radiology / nuclear medicine
- Pain clinic / pain management programmes
- Dermaology

Other disciplines frequently needed for the management of people with musculoskeletal conditions (ie specialities that need to be readily accessible from the Rheumatology Centre)

- Nephrology
- Neurology
- Neurosurgery
- Obstetrics
- Vascular surgery
- Gastroenterology
- Cardiology
- Pulmonology
- Opthalmology
- Haematology
- ENT / Oto-rhino-laryngology
- Psychiatry

Systemic complications and manifestations of musculoskeletal conditions may occur that will require the facilities of a general hospital including intensive care.

There should also be relationships with patient and professional organisations.

iii) What a rheumatology service should be expected to offer

The following are intended to provide guidance as to how a Rheumatology Centre should provide a service for the community with musculoskeletal conditions and its local primary care physicians:

(a) timely access to expert assessment and diagnosis of musculoskeletal problems and conditions, including access to diagnostic facilities as required

(b) timely access to expert management of musculoskeletal problems and conditions, including access to members of the multidisciplinary, multiprofessional team as appropriate.

(c) access to investigative methods such as joint aspiration and examination of synovial fluid; bone densitometry; diagnostic ultrasound; electromyography; arthroscopy; capillaroscopy; disc aspiration and biopsies as appropriate.

(d) access to therapeutic techniques such as joint or soft tissue injections; non-surgical synovectomy; epidural and regional nerve blocks; manipulation and mobilisation techniques; intervertebral disc injection or nucleolysis;.

(e) expert monitoring of musculoskeletal conditions to ensure optimal management. This should include the use of databases or registers. Protocols should be provided if the monitoring is to be shared between secondary and primary care.

(f) education, counselling and support of those with musculoskeletal conditions to enable them to manage their own problems and to make informed decisions about there care. This should include access to high quality educational material, educational sessions, a telephone helpline, self-management programmes or expert patient groups.

(g) provision of emergency expert support at all times through either telephone advice or rapid hospital assessment when emergencies or urgencies occur.

(h) access to a team skilled in the management and rehabilitation of musculoskeletal conditions e.g. physiotherapists, ergotherapists / occupational therapists, orthotists etc (as above)

(i) agreed protocols for the shared management with general practitioners of more serious and progressive arthritic disorders.

(j) access to appropriate inpatient facilities, with skilled nursing and other professional support, for the treatment of severe complications and rehabilitation of the seriously disabled.

(k) effective and close collaboration with other disciplines and professions who are closely involved in the management of people with musculoskeletal conditions, such as orthopaedic surgery. This may involve shared care and/or combined clinics.

(l) effective and regular communication with general practitioners to ensure safety and efficiency of ongoing management and shared care of the individual with a musculoskeletal condition.

(m) speciality clinics for the management of less common but severe or complicated disorders such as connective tissue diseases or paediatric rheumatology. Depending on local needs, it may be more appropriate for these to be provided at a tertiary level.

(n) an effective educational service to facilitate continuing professional development of other health professionals, such as primary care physicians, to keep them aware of developments in diagnosis, management and understanding of disease processes.

(o) access to self-management programmes and patient support groups.

(p) to ensure it is providing high standards of care by participating in a quality assurance programme.

7. Resources of a Rheumatology Centre

A Rheumatology Centre should provide easy access to the core services that are required. The following facilities are therefore necessary to provide a high quality rheumatology service as described..

i) Clinical facilities

Sufficient space is required to facilitate all the expected activities of a Rheumatology Centre (see section 6). In particular there needs to be sufficient space for consultations by all members of the team, including patient education and counselling. There should be a dedicated and private phone line for providing patient support. There also needs to be a clean area for injections and infusions.

ii) Outpatient facilities

The majority of rheumatology care is provided in an outpatient setting by a specialist rheumatology multidisciplinary, multiprofessional team. Clinics may take place within a general outpatient department or a dedicated rheumatology centre. The advantages of a dedicated unit is flexibility and the availability of a dedicated team and specialist facilities.

iii) Day case facilities

Day case facilities are frequently required for the assessment and investigation of complex problems and / or for interventions such as multiple joint injections, epidural injections, cytotoxic and biologic drug infusions. The requirement for such facilities has increased with the trend from inpatient to outpatient care.

iv) Inpatient facilities

Many patients with complex musculoskeletal problems such as rheumatoid arthritis or connective tissue disorders will require inpatient care as a direct consequence of their disease at some stage. The medical care should be directed by the rheumatologist during that admission.

Inpatient facilities should be appropriate for patients with all levels of physical disability, including items such as bath aids, showers, cutlery and bedding. Adequate day room facilities are essential. The nursing and allied professional staff (e.g.. physiotherapists, ergotherapists /occupational therapists, social workers) should be appropriately trained in and ideally dedicated to rheumatology. It is therefore most effective for rheumatology beds to be located together and not dispersed.

The siting of inpatient facilities varies. As many of these patients are ill with multisystem diseases, inpatient facilities within an acute general hospital offer the widest spectrum of cross-consultative skills and investigative resources.

v) Therapy and rehabilitation facilities

Many patients will require physiotherapy, hydrotherapy / balneotherapy or ergotherapy /occupational therapy and these facilities need to be available within or in close proximity to the Rheumatology Centre.

vi) Personnel

Personnel levels need to be appropriate in skill mix and sufficient to enable the effective delivery of timely care and the use of the facilities of the Rheumatology Centre.

vii) Specialist clinics

Specialist or combined outpatient clinics may be organised to meet specific clinical needs, such as paediatric rheumatology or rheumatology/orthopaedic surgery.

viii) Access

Physical access to the facilities of the Rheumatology Centre should not be a barrier to anyone with a musculoskeletal condition. Car parking, lifts, doors, seating, toilets etc should all be appropriate to enable access by people with physical disabilities.

ix) Patient information

Patient information literature (printed or on web) should be displayed and available to patients, along with contact names and addresses of the organisers of local groups.

x) Other facilities

Appropriate facilities need to be available for any of the other specific services that the Rheumatology Centre is providing, such as diagnostic ultrasound, bone densitometry, imaging-guided injections or biopsies. Polarising light microscopy must be available, either within the department or a service provided by the laboratory service.

xi) Postgraduate and Continued Medical Training

There should be a programme within the Rheumatology Centre for the continuing professional development of all clinical staff. There should be the opportunity for clinicians to discuss cases and their management.

Centres must have convenient access to appropriate postgraduate facilities and a library that stocks and / or has full text web access to the major rheumatology textbooks, the leading rheumatology journals, appropriate rehabilitation journals and specialist non-medical journals. These facilities should be accessible beyond the 9 am to 5 pm working day. Seminar room space, with relevant audio-visual aids should also be available. Adequate clinical space should be available to facilitate training by several doctors working together in clinics and teaching clinics.

xii) Management infrastructure

Good secretarial and administrative support is essential to the effective running of a Rheumatology Centre. This is central to maintaining good communication within the Centre and also with referring clinicians and with patients. There is a need to co-ordinate care between the multidisciplinary, multiprofessional team. There should be clinical databases or registers that need to be maintained. The medical secretary / clerical officer is therefore integral to the organisation of a department. They need an understanding of the problems and needs of people with musculoskeletal conditions. They require appropriate facilities such as a direct telephone, fax line, email, and computer with relevant software. They are best sited within the department. The Rheumatology Centre will also require managerial support for the efficient delivery of care.

8. Quality standards

It is important to be able to ensure that a high quality service is being provided and all Rheumatology Centres should be involved in quality assurance. Several indicators can be used:

(a) Waiting times – What is the time between referral from a primary care physician and being seen by a rheumatologist for a non-urgent problem

(b) Availability - Does a local service exist? Can it meet the requirements of local primary care physicians in a timely fashion?

(c) Access - Is the structure of the outpatient and inpatient facilities appropriate for the needs of disabled people, including car parking?

(c) Audit - Does the unit participate in hospital/supra-district/regional medical or clinical audit?

(d) Skills - Are there appropriate links with other professions relevant to the management of musculoskeletal disorders (e.g. physiotherapy, nursing, occupational therapy, social services, chiropody)?

(e) Professional integration - What are the mechanisms for co-ordinating management of patients with orthopaedic departments?

(f) Protocols - Are there appropriate protocols for monitoring patients/medication with local primary care physicians?

(g) Outcome measurements – Are outcome measurements used that fulfil scientific criteria for reliability, validity, feasibility and clinical relevance?

(h) Specialist services - What are the mechanisms for managing less common disorders (e.g. arthritis in children)?

(i) Investigative services - What is the availability of laboratory services, including more recent developments such as MRI and bone densitometry?

(j) Organisation - What mechanisms are available for dealing with emergencies? What access is there to relevant medical and surgical disciplines? What means are present for ensuring continuing access to the rheumatology team for patients, possibly involving a clinical nurse specialist?

9. Maintaining and improving standards of care

Education

As musculoskeletal conditions are so common and the major cause of physical disability, there is a need for greater awareness and competency amongst all health professionals about the management of musculoskeletal conditions, in particular primary care. A Rheumatology Centre should therefore be involved in the provision of education to the spectrum of other relevant health professionals, giving a distillation of current thinking in the understanding and treatment of those disorders to primary care teams in particular. This should include undergraduate medical students, if locally appropriate.

If the Rheumatology Centre is a Training Centre for rheumatologists, then it needs to meet the requirements of the UEMS Charter on Training of Medical Specialists in the EU (21).

Research

There is still the need for greater knowledge about causes, effects and management of musculoskeletal conditions. All Rheumatology Centres should therefore contribute to research in some way.

10. Conclusion

Musculoskeletal conditions including arthritis of all kinds, connective tissue diseases, back pain, bone diseases such as osteoporosis, soft tissue rheumatism and regional and widespread pain, can now be effectively prevented and treated providing there is access to current agreed standards of care (1) and modern therapies. This requires integrated co-ordinated multidisciplinary, multiprofessional care focused around the needs of the individual. The rheumatology service is central to providing these services, which involve all levels of health and social care. This document states how a rheumatology service can meet these expectations to ensure delivery of the highest standards of care to people with musculoskeletal conditions.

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