Guidelines

Development of a competency framework for general practitioners with a special interest in musculoskeletal/rheumatology practice

E. M. Hay1, A. Campbell2, S. Linney1, E. Wise3 and on behalf of the Musculoskeletal GPwSI Working Group

KEY WORDS: General practitioner, Primary care, Musculoskeletal, Competency, Curriculum.

Background

This document outlines a competency framework for general practitioners with a special interest (GPwSI) in musculoskeletal/rheumatology practice, which has been developed by a working group, consisting of clinicians from general practice, musculoskeletal medicine and rheumatology including representatives from the Primary Care Rheumatology Society, the Royal College of General Practitioners, the British Institute for Musculoskeletal Medicine, the British Society for Rheumatology, The Royal College of Physicians and the Arthritis Research Campaign (GP Working Party of the Education Subcommittee). The objective of this working group was to bring together appropriate expertise to debate the content of a curriculum for GPwSI's working within the musculoskeletal/rheumatology field, and to produce a framework of appropriate competencies (knowledge and skills) to inform the content of such a curriculum.

The Working Party acknowledged that the confusion still exists about the definition of a GPwSI [1]. For this piece of work the following definition was agreed:

A GPwSI is defined as a general practitioner who supplements their core professional role, and/or undertakes advanced procedures not normally undertaken by their peers. They will have demonstrated appropriate skills and competencies to deliver an enhanced service, be able to work independently within a defined quality framework, in a clinical area outside the normal general practice setting and be able to accept referrals from colleagues. Robust procedures for clinical governance will be developed locally to assure patients and commissioners that they operate within a coherent and quality assured clinical pathway.

In approaching this work, the working group acknowledged that there were different levels of GP competence to be aware of. For example, in 2000 a Learning Guide for GPs and GP Registrars, which outlined a curriculum and competencies required to achieve a summative assessment level of competence [2]. This will subsequently be referred to as the generalist level of competence. The Royal College of General Practitioners (RCGP) has written a GP curriculum for general practice training (see RCGP website). This will come into effect from August 2007. The current piece of work concerns competencies to be achieved by all musculoskeletal/rheumatology GPwSIs. The group acknowledged that there may also be a further level of competencies for GPwSI working within specialist areas within a musculoskeletal/rheumatology service (e.g., paediatrics, inflammatory arthritis, sports medicine). The working group did not address this latter area. Hence, the aim of this working group was to develop a specialty-specific set of competencies required by a GPwSI working within the field of musculoskeletal/rheumatology practice. Other agencies are developing the generic competencies common to all GPwSIs and are considering what mechanisms are appropriate for GPwSIs to demonstrate acquisition of appropriate competencies.

Process

The process consisted of four phases:

1. Review of current relevant literature and curricula/learning guides/syllabus.
2. Delphi process to agree broad content of the competency framework.
3. Workshop discussions to refine and agree final version.
4. 6 month consultation period with relevant stake-holders.

In Phases 1 and 2, a comprehensive review of existing relevant literature and curricula was carried out and the results collated to produce a list of proposed competencies. This list was circulated to 16 GP opinion leaders and rheumatologists according to a systematic Delphi consensus process to produce a final list for consideration in Phase 3. Phase 3 consisted of two workshops. An initial workshop took place at Keele University in January 2005 and brought together representatives from musculoskeletal GPwSIs, musculoskeletal medicine practitioners, rheumatologists and those with an interest in GP education to produce a draft competency framework. This draft document was presented to a conference of GPwSIs in July 2005 (hosted by

1Primary Care Musculoskeletal Research Centre, Keele University, Keele, Staffordshire ST5 5BG, UK, 2Richmond Medical Centre, Sheffield, UK, 3Department of Rheumatology, Freeman Hospital, Newcastle-upon-Tyne NE7 7DN, UK, and Musculoskeletal GPwSI Working Group, Dr Ade Adebowo, Dr Mike Burke, Dr Anita Campbell, Dr Vince Cooper, Dr Graham Davenport, Dr Mark Devlin, Dr Adrian Dunbar, Dr John Dickson, Dr Libby Duffy, Dr Richard Ellis, Prof. Elaine Hay, Dr Andrew Hassell, Dr Sarah Linney, Dr Garth Logan, Dr Steve Longworth, Dr Bharat Nanavati, Dr Cliff Richards, Dr Peter Skew, Dr John Tanner, Dr Louise Warburton, Dr Elspeth Wise.

Received 1 September 2006; revised version accepted 15 September 2006.

Correspondence to: Prof. Elaine M. Hay, Primary Care Musculoskeletal Research Group, Primary Care Sciences, Keele University, Keele, Staffordshire ST5 5BG, UK. E-mail: e.m.hay@keele.ac.uk

© The Author 2006. Published by Oxford University Press on behalf of the British Society for Rheumatology. All rights reserved. For Permissions, please email: journals.permissions@oxfordjournals.org
the arc) and modified in the light comments from the attendees. The resultant competency framework was subsequently circulated to a number of stakeholders for a 6-month consultation process. This report presents the final competency framework.

Phases 1 and 2
The following curricula/learning guides were reviewed and amalgamated:

(1) Learning guide for GPs and GP Registrars on musculoskeletal problems [2].
(2) British Institute for Musculoskeletal Medicine (BIMM) Modular Course in Musculoskeletal Medicine [3].
(3) Post-graduate Diploma in Primary Care Rheumatology [4].
(4) Higher Medical Training Curriculum for Rheumatology [5].
(5) Department of Health Musculoskeletal Framework for GPwSIs [6].

This process produced a 15 page document that was subjected to a first Delphi Round by 16 consultant rheumatologists, GPs, GPwSIs and physiotherapists. They were asked to score the individual items as follows:

(1) Should definitely be included in the curriculum.
(2) Should probably be included in the curriculum.
(3) Should probably not be included in the curriculum.
(4) Should definitely not be included in the curriculum.

For each item on the curriculum an average score was calculated. All items scoring 3 or 4 (i.e. not be included) were excluded for the next Delphi Round. A second Delphi Round was undertaken by the same participants. They were shown the overall score from the first round and asked to rescore each item using the same scale of score 1–4. They were also asked to indicate, for each competency item, what depth of knowledge was required:

(A) Basic knowledge.
(B) Detailed knowledge.

Two average scores were calculated for each item: for whether or not it should be included (1–4) and to what knowledge depth (A or B). After this analysis any item with an average score of 3 or 4 was excluded. Duplicated items were excluded and repetition was reduced by grouping similar items together.

Phase 3
The list of items generated in Phases 1 and 2 were presented to the participants at the Keele workshop for further debate and refinement. Workshop participants divided into three groups and were asked to consider (i) overarching competencies for musculoskeletal GPwSIs and (ii) competencies relating to specific musculoskeletal problems (spine, lower limb, upper limb, chronic widespread pain). The output from the work shop was formatted according to an educational framework of 12 domains common to other work on practitioners with a special interest [7]. Each group considered competencies only in relation to adults. The consensus was that most GPwSIs were working with adults, and that paediatric problems were best assessed in general practice with pathways directly to secondary care. This view was not universally held, however, and was subsequently highlighted as an area for further debate in the consultation process. A further arc GPwSI conference took place in May 2006, and the view was expressed that all musculoskeletal GPwSIs should have an enhanced level of knowledge in this area in order to fulfill their educational role. Hence, additional competencies in the field of paediatric rheumatology for GPwSIs are being developed separately. The draft competency framework was presented to the arc GPwSI Workshop in July 2005 for further debate and refinement, and was subsequently modified.

Phase 4
The final important phase of the framework development was a 6-month consultation process with certain relevant national bodies to ensure overarching ownership of the document. Following this, editorial changes to the style of the document have been made, but the final document does not differ in content from that produced by the working group.

Competency Framework for Musculoskeletal/Rheumatology GPwSIs
The 12 key competencies, adapted for musculoskeletal GPwSIs, are detailed as follows:

(1) Clinical skills detailed in the disease-based sections.
(2) Practical skills detailed as per the relevant section.
(3) Patient investigation detailed in each section.
(4) Patient management detailed in each section.
(5) Health promotion and disease prevention detailed in each section.
(6) Communication generic skill discussed in relation to patients with musculoskeletal diseases.
(7) Appropriate information handling skills, generic skill for all GPwSIs.
(8) Understanding the basic and clinical science and the underlying principles as per the section.
(9) Appropriate attitudes, ethical understanding and legal responsibilities in relation to all patients with musculoskeletal problems.
(10) Appropriate decision-making skills and clinical reasoning and judgement detailed in each section.
(11) Role of the GPwSI within the health service specific to care pathways in musculoskeletal medicine, orthopaedics and rheumatology.
(12) Personal development common to all GPwSIs.

The key competencies that are considered to be generic to all GPwSIs are not considered further in this article, but should be addressed in their personal development plans (7,12).

Those competencies that are overarching for musculoskeletal GPwSIs (6,9,11) are discussed further. The other competency headings are covered in Tables 1–4 (available via web link).

Communication skills
Patients with musculoskeletal problems are often in pain. Mainly, their lives are not threatened, but their quality of life and independence can be threatened. It is an area where partnership with the patient is the key. Educating and empowering patients to self-manage requires higher level of communication and negotiation skills along with some understanding of cognitive behavioural approaches. It requires the GPwSI to be aware of the impact the condition can have on the patient’s life to develop that empathic understanding with them. The GPwSI should use the language the patient understands reinforced by written information and use of websites. The GPwSI needs to be positive about coping with musculoskeletal problems. A GPwSI will see patients from ethnically, and otherwise, diverse backgrounds. Therefore, the GPwSI will need to understand cultural and religious difference to understand the impact of the problem on peoples’ lives in addition to negotiating culturally sensitive management plans.

The communication skills are also relevant to working in multidisciplinary teams. This requires a knowledge of how allied health professionals work. Excellence in verbal and written communication skills is required when working across the interface between primary and secondary care. Feedback to referring GPs is important and clear letters are required with details of assessment treatment and future plans in addition to what has been discussed with the patient. A knowledge of what is available in the referring practices also enhances communication.
In summary, the GPwSI translates the enhanced communication skills of a GP generalist to the particular problems posed by this group of patients.

**Ethical and legal responsibilities**

Many of these responsibilities are common to all GPwSIs; however, the particular issues related to patients with musculoskeletal problems are:

1. A knowledge of disability both in order to help patients but also to apply the Disability Discrimination Act in relation to premises and other aspects of providing a service.
2. An understanding of the interrelationship of workplace and musculoskeletal problems.
3. Respects carers and a knowledge of help available.
5. Involves the patient and carer in the management of their condition.

**Role within the health service**

The GPwSI role should be developed in the context of an evidence-based, comprehensive musculoskeletal service, and the GPwSI should have an in-depth knowledge of how services interrelate. Any change made by the GPwSI will have a knock-on effect on orthopaedic and rheumatology services including those provided by allied health professionals. A knowledge of local commissioning and care pathways is imperative. The GPwSI needs to be involved in service planning and to contribute to committees respecting the collective responsibility. The GPwSI will have a responsibility for teaching on musculoskeletal problems to a wider group of health professionals. They should be able to access and utilize various teaching resources including the use of IT multimedia resources.

**Condition-specific competencies**

These are detailed in Tables 1–4, grouped according to knowledge and skills, and cover the domains considered to be of relevance to GPwSIs (over and above their generalist competencies). There was an overall agreement by the working party, which has been reinforced during the subsequent consultation process that the management of inflammatory arthritis and autoimmune rheumatic disorders such as systemic lupus erythematosus lies outside the remit of the GPwSI. However, the enhanced diagnostic skills of the GPwSI will contribute to the optimal management of such patients by facilitating early diagnosis and appropriate onward referral to secondary care specialists.

Table 1 includes competencies relevant to the management of spinal disorders. Table 2 covers the lower limb, Table 3 upper-limb disorders and Table 4 covers chronic widespread musculoskeletal pain.

**Summary**

This document outlines the process leading to the development of a list of knowledge and skill-based competencies for musculoskeletal/rheumatology GPwSIs, which has been proposed by an ad hoc working party with representation from a wide range of stake-holders from the fields of general practice, rheumatology and musculoskeletal medicine. The list was modified following an arc-funded GPwSI workshop, and a subsequent period of consultation with relevant national bodies (the Primary Care Rheumatology Society, the Royal College of General Practitioners, the British Institute for Musculoskeletal Medicine, the British Society for Rheumatology, the Royal College of Physicians and the Arthritis Research Campaign). The resulting framework is presented: it is not intended to be prescriptive or exhaustive or to form criteria for accreditation of GPwSIs. It is intended to act as a guide, to be used (for example) to formulate a learning plan for GPs embarking on the path to becoming a GPwSI. Whilst, the framework is not intended to be daunting, and can be modified by health care providers or commissioners to reflect local service provision. As stated previously, there may be specific areas in which the GPwSI requires even greater depth of knowledge (for example, paediatrics or sports medicine).

The working group wishes to emphasize an over-riding requirement of GPwSI posts that they should be developed in the context of a robust musculoskeletal service, spanning primary and secondary care, such as that outlined in ‘The Musculoskeletal Services Framework. A joint responsibility; doing it differently’ (http://www.18weeks.nhs.uk/cms/ArticleFiles/gm5hldexmgmhakbgwzzxfb3219102005124130/Files/MSF.pdf). Clearly the GPwSI brings an understanding of general practice and a generalist focus to the care of patients with musculoskeletal complaints that is different from, and should not be seen as substituting for rheumatologists or orthopaedic surgeons. The GPwSI role should complement specialist services and will hopefully increase the relevance of patient referrals into their services.

**Acknowledgements**

We wish to thank the clinicians who contributed their time to the Delphi study, the participants at the arc GPwSI workshop (Leeds 2005) for their input and the following national bodies for pledging their support to this document: the Primary Care Rheumatology Society, the Royal College of General Practitioners, the British Institute for Musculoskeletal Medicine, the British Society for Rheumatology, the Royal College of Physicians and the Arthritis Research Campaign (GP Working Party of the Education Subcommittee). The initial development of the competency framework took place during a 2-day workshop in January 2005 hosted by the Primary Care Musculoskeletal Research Centre, Keele University (funded by the North Staffordshire Primary Care Research Consortium) and was attended by representatives from the national bodies detailed above. Further refinement of the framework took place during an arc-funded GPwSI meeting (Leeds, 2005) and following a 6-month consultation process.

A.C. has received an honorarium from Abbott Pharmaceuticals for work on an integrated care pathway for rheumatoid arthritis. E.W. is the holder of an Arthritis Research Campaign Educational Research Fellowship. E.M.H. has received research grants from the Arthritis Research Campaign.

**Supplementary data**

Supplementary data are available at *Rheumatology* Online.

**References**

4. Postgraduate Diploma in Primary Care Rheumatology, University of Bath School for Health. www.bath.ac.uk/health/prc (last accessed date November 2004).
7. Ruth Chambers, ed. Practitioners with Special Interests. Supplement to Education for Primary Care 2005;Vol 16(3).