

## What are the relative benefits of different models of access to Health Care Practitioners for musculoskeletal patients in Primary Care?

### **Clinical Bottom Line**

We found insufficient evidence to support or refute the benefit of different models of access to nursing, occupational therapy and podiatry for musculoskeletal patients in Primary Care.

In Physiotherapy, there was more research investigating the possible benefit of telephone advice, direct access, and early access for musculoskeletal patients in Primary care, although the evidence was generally of poor quality and was not conclusive.

### **Summary of findings**

#### Telephone advice:

- There is some low quality RCT evidence to suggest it improves patient satisfaction (Taylor et al, 2002).

#### Direct access models:

- may change the patient population treated (Leemrijse et al, 2008). This Dutch study used a large medical record database and concluded that more acute cases were seen using direct access systems, with more young, educated patients presenting, and with a greater proportion having a recurrence of a condition that had previously been successfully treated. However, direct access patients needed fewer treatments than usual access patients (via GP referral).
- Could be cheaper for the NHS (Holdsworth et al, 2007). This Scottish study found that on average an episode of care was £66 for self-referral vs £89 for GP referral, due to changes in prescription costs, numbers of referral for x-ray & to secondary care, and total number/costs of GP and physiotherapy contacts.

#### Early access models:

- a Swedish pilot study for a future RCT of early access to physiotherapy compared to a waiting list control group (Nordeman et al, 2006) suggested that early access patients had greater improvements in pain at 6 months, although it failed to show any differences in disability scores, psychological scores, sick leave, visits to health care and number of physio treatments given.
- a small before and after study/audit of the benefits of a new central musculoskeletal triage clinic in Wales, led by ESPs and GPSIs (Maddison et al, 2004) reported that their new service had double the referral numbers but still led to a reduction in physiotherapy waiting times with increased patient & GP satisfaction levels. Clinical outcomes and cost differences were not assessed.

A large well conducted RCT 'PhysioDirect' is ongoing at present in Bristol/Keele (Salisbury et al, 2009) and will hopefully have some high quality results in 2011.

## **Criteria for Critically Appraised Topic**

***Population:*** Musculoskeletal conditions presenting to Primary Care: OA, rheumatology, back pain, shoulder pain, elbow pain, wrist pain, hip pain, knee pain, ankle pain, neck pain, whiplash, arthritis, foot, hand, acute conditions, chronic conditions

***Intervention:*** Access: models of care, pathways, self referral (patient), GP advice to self refer, telephone consultations, triage, direct access, disease management clinics, telephone advice, telephone service, sports injury clinic, primary care, subgrouping and targeting, nurse practitioner, practice nurse, physiotherapy, occupational therapy, podiatry, interface clinic

***Comparison:*** GP referral

***Outcomes:*** Orthopaedic surgery, work (return to work), pain, disability, re-consultation with GP, cost effectiveness, patient satisfaction

***Primary Outcomes:*** Cost effectiveness

***Secondary outcomes:*** Orthopaedic surgery, work (return to work), pain, disability, re-consultation with GP, patient satisfaction

***Inclusions:*** Adult, English language

***Exclusions:*** Children

## **Search Terms used**

### ***Databases Searched:***

Cochrane	Pedro	Amed	Medline
CINAHL	Embase	HTA	Professional Websites
Management databases	BOHRF (Jo Jordan)	NICE	Clinical guidelines
BNI	Health Business Elite	HMIC	

***Types of study included: Systematic reviews, Randomised controlled Trials, Controlled Trials, cohort studies, Qualitative studies***

### ***Key words searched:***

<b><u>Conditions</u></b>				
Musculoskeletal	Primary Care			
<b><u>Models</u></b>				
Models of care	Pathways	Self Referral	Telephone consultations	Triage
Direct access	Physio direct	Telephone advice	Telephone service	Sports injury clinic
Subgrouping and targeting	Disease management clinic	Interface clinics	Early access	Access
<b><u>HCP</u></b>				
Practice nurse	Physiotherapy	Occupational therapy	Podiatry	Nurse practitioner
Nurse	Physical therapy			

***Time Frame: 1999 – 2009 (10 years)***

**CAT Lead - Carol Doyle  
Completion date - December 2009**

## Available Evidence

Database Searched (Specific to CAT)	Number of abstracts	Number of Relevant Abstracts
Cochrane		
Pedro		
Medline		1
CINAHL		5
Embase		1
Amed		
HTA		
Professional websites		
Management databases		
BOHRF		
NICE		
Clinical guidelines		
<b>Total</b>		

### Results:

The search was divided into four professions for analysis: nursing, occupational therapy and podiatry, physiotherapy.

#### Nursing

The search retrieved 146 abstracts of which only 2 seemed relevant to the question. On further reading neither answered this specific question.

#### Occupational therapy

The search retrieved 94 abstracts none of which answered the question.

#### Podiatry

The search retrieved 4 abstract none of which answered the question

## Physiotherapy

The search retrieved 101 abstracts and nine went on to full article review. Articles were assessed for quality and relevance using the critical appraisal skills programme (CASP) checklist plus discussions and consensus.

### **Articles assessed:**

#### **1. Taylor et al, 2002: Patient satisfaction with a new physiotherapy telephone service for back pain patients.**

This was a randomised controlled trial to investigate patient satisfaction with a physiotherapy telephone advice in addition to standard management for back pain. It concluded that telephone advice improves patient satisfaction with physiotherapy. No other outcome measures were used. This study scored low for methodological quality on Pedro.

#### **2. Leemrijse et al, 2008: Direct access to physical therapy in the Netherlands: results from the first year in community-based physical therapy.**

This study looked at a large medical record database in the Netherlands to compare the types of patients using a new direct access to physio service with patients being referred by their GP.

- They found that direct access service was used more by higher educated and younger patients and those with more acute, recurrent problems and previous physio treatment.
- They also found that direct access patients needed fewer treatment sessions

#### **3. Holdsworth et al, 2007: What are the costs to NHS Scotland of self-referral to physiotherapy? Results of a national trial.**

This was a cost analysis (not the same as a cost-effectiveness analysis) of a direct access physio service compared to GP referral only service in a population of 3010 patients from 26 GP practices in Scotland.

- They found that on average an episode of care was £66 for self-referral vs £89 for GP referral
- Significant associations were seen between referral group and prescription costs, referral for x-ray & to secondary care, and total number/costs of GP and physio contacts.

#### **4. Nordeman et al, 2006: Early access to physical therapy treatment for subacute low back pain in primary health care: a prospective randomized clinical trial.**

This was a small pilot RCT of 60 patients randomised to either an early access physio clinic within 2 days or a waiting list for 4 weeks prior to physio group in Sweden.

- Early access patients had greater improvement in pain at 6 months
- However, it failed to show any differences in disability scores, psychological scores, sick leave, visits to health care and number of physio treatments given.

#### **5. Maddison et al, 2004: Improved access and targeting of musculoskeletal services in northwest Wales: targeted early access to musculoskeletal services (TEAMS) programme.**

This was a small before and after study/audit of the benefits of a new central musculoskeletal triage clinic in Wales, led by ESPs and GPSIs.

- The new service had double the referral numbers but still led to a reduction in physio waiting times with increased patient & GP satisfaction levels.
- Clinical outcomes and cost differences were not assessed.

## **6. Holdsworth et al, 2004: Direct access to physiotherapy in primary care: now? -- and into the future?**

This was a service evaluation study (n=679) to compare a new direct access physio service compared to GP referral only service in 1 GP practice in Scotland.

- They found that direct access patients were more likely to be male, acute, in paid employment, and having less work absence. They were better attenders of treatment, had better clinical outcomes (re: symptom severity at discharge and were more satisfied with treatment) and received less GP consultations over a 12 month period.

## **7. Salisbury et al, 2009: A pragmatic randomised controlled trial of 'PhysioDirect' telephone assessment and advice services for Physiotherapy**

This is an ongoing high quality RCT of PhysioDirect being undertaken @ Keele & Bristol which will be reporting its results in 2011.

### **Implications for practice**

Telephone triage, direct access and musculoskeletal triage clinics are becoming increasingly popular in Physiotherapy and are already part of our practice

There needs to be more high quality research in this area that includes a range of outcome measures to evaluate the clinical and cost effectiveness of these models of access to physiotherapy. This is important in the increasing evidence based funding of NHS services.

In nursing, occupational therapy and podiatry the lack of evidence may be due to lack of input for these professions in the management of musculoskeletal patients in Primary Care. If services are available it is recommended that high quality evidence be provided to support any new models of access.

### **References**

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