Effect of extended scope physiotherapists assessments in orthopaedic diagnostic setting - a systematic review

Trøstrup J 1, Juhl CB 23, Mikkelsen LR 1

1 Elective Surgery Centre, Silkeborg Regional Hospital,
2 University of Southern Denmark, Department of Sports Science and Clinical Biomechanics
3 Department of rehabilitation, University Hospital of Copenhagen

Contact: jeatro@rm.dk
Introduction

OS often consulted for musculoskeletal disease Mackay C, 2010
- but unusual surgery Heywood J, 2005; Desmeules F, 2013

• Potential managed by special trained PTs

• Reduced health care costs

• Ensure quality and satisfaction
Aim

Evaluate effect of PT to make diagnostic assessments

Main outcomes:
1) Diagnostic agreement (PT vs OS)
2) Costs
3) Patient satisfaction

Additional:
5) Wait time
6) Relevant referrals
Methods - studies

Inclusion:
• Adults (18+) with musculoskeletal disease
• Referred to orthopaedic assessment
• Assessment performed by PT

Exclusion:
• Non-orthopaedic, primary care or emergency setting
• Study types: eg. reviews
Methods – search & selection

Search:
• November 2015 - help from a Librarian
• Databases: MEDLINE, Cochrane CENTRAL, EMBASE, CINAHL & PEDro
• Reference lists

Selection:
• Screened independently by two authors → consensus
• Methodological quality (SIGN 50 checklists)
  - High (++) - Acceptable (+) - Unacceptable (0)
Results - study selection

Studies identified: n = 3532

- Pubmed: n = 581
- Embase: n = 2126
- Cinahl: n = 631
- PEDro: n = 102
- Central: n = 92

Title and abstract screened: n = 3104

Full-text assessed for eligibility: n = 74

Studies included in quantitative synthesis: n = 32

1 RCT & 31 observational (14 prospective & 17 retrospective)
## Results – methodological quality

<table>
<thead>
<tr>
<th></th>
<th>n: High (++)</th>
<th>n: Acceptable (+)</th>
<th>n: Uacceptable (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic agreement (n=12)</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Cost (n=4)</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Satisfaction (n=13)</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>
Results - study characteristics

Country:
• UK (n=16), Canada (n=8), Australia (n=4) & Ireland (n=4)

Body parts:
• Knee (n=19)
• Spine (n=10)
• Shoulder (n=9)
• Hip (n=4)
• Diverse musculoskeletal parts (n=9)
Results – Diagnostic agreement

12 studies (650 ptt)

PT vs OS: 84% (range: 65-100 %) (n= 9)

PT & OS vs arthroscopy, MRI or surgery findings
comparable: PT : 78% (range: 52-88 %) (n=3)
OS: 79% (range: 37-92 %) (n=3)

Comparable according to methodological quality
**Results - Cost**

4 studies (1634 ptt)

**Cost savings** 31% (range: 27–61%) (n=3)

PT-led clinic: ↑ expensive but ↑ beneficial (n=1)

High methodological quality: ↑ cost savings
Results - Satisfaction

13 studies (1509 ptt)

Satisfaction with PT : 89% (range: 77-100 %) (n=9)

Ptt satisfaction with PT vs OS:
Favour PT (n=2) - No difference (n=1)

Comparable according to methodological quality
Results – Wait time & relevant referrals

Wait time:
Reduced with 56% (range: 26–87%) (n=5)

Relevant referrals:
Managed solely by PT 71% (range: 34-99%) (n=15)
Surgical conversion rate 69% (range: 25-91%) (n=10)
Discussion

Limitations
• Results with wide intervals
• Varied methodological quality
• Most observational studies

Strengths
• Amount of included studies
• Study selection & quality assessment (JT, LRM)

Generalizability?
• Studies from 4 countries
  1 PT and/or 1 OS - with varied experience and training
Conclusion

Suggests PT as useful as OS

- Findings comparable across included studies
- Results in agreement with previous reviews
- **BUT** evidence is not sufficient to determine the clear effectiveness
Interested in more? Read the paper:

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Authors: J. Trøstrup, C.B. Juhl, L.R. Mikkelsen

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Co-authors:

Carsten Juhl (University of Southern Denmark)
Lone Ramer Mikkelsen (Silkeborg Regional Hospital)

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PTs from CPK, Silkeborg Regional Hospital
Research unit, CPK, Silkeborg Regional Hospital

Tak for opmærksomheden
jeatro@rm.dk
Etik

Et kvalitetssikringsprojekt, som kræver

- ikke anmeldelse til Den Videnskabsetetiske Komité (jf. definitionen i komitéloven § 2, nr. 1 og § 14, stk. 1)

- godkendelse af Centerledelsen for CPK (nødvendigt ift. journalaudit)

- anmeldelse til datatilsynet
Results - study selection

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