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:

- Diagnostic agreement (PT vs OS)
- II) Costs
- III) Patient satisfaction

Additional:

- V) Wait time
- VI) Relevant referrals

Methods - studies

Inclusion:

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

Exclusion:

- Non-orthopeadic, 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



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

	n: High (++)	n: Acceptable (+)	n: Uacceptable (0)
Diagnostic agreement (n=12)	4	6	2
Cost (n=4)	2	1	1
Satisfaction (n=13)	2	4	7

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 (n=5)

56% (range: 26-87%)

Relevant referrals:

Managed solely by PT (n=15)

Surgical conversion rate (n=10)

71% (range: 34-99%)

69% (range: 25-91%)

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
- <u>BUT</u> evidence is not sufficient to determine the clear effectiveness

Interested in more? Read the paper:

Physiotherapy

Accepted Manuscript

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

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

PII: S0031-9406(17)30083-4

DOI: http://dx.doi.org/10.1016/j.physio.2017.08.004

Reference: PHYST 989

To appear in: Physiotherapy

Acknowledgements

Co-authors:

Carsten Juhl (University of Southern Denmark)

Lone Ramer Mikkelsen (Silkeborg Regional Hospital)

Sounding board:

Thomas Martin Klebe, MD

PTs from CPK, Silkeborg Regional Hospital

Research unit, CPK, Silkeborg Regional Hospital



Tak for opmærksomheden jeatro@rm.dk





Etik

Et kvalitetssikringsprojekt, som kræver

- <u>ikke</u> anmeldelse til Den Videnskabsetiske Komitée (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

