Supplementary Table 5. Percentage (median and interquartile range) of physical therapy treatment choices that involved treatments that were recommended, not-recommended or had no recommendation for 'other' conditions

MUSCULOSKELETAL

RHEUMATOID ARTHRITIS*

	Assessed by surveys of physical therapists				Assessed by clinical notes			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
SHOULD PROVIDE								
Aerobic or strengthening exercise	-				86			1
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Other exercise[a]	82			1	100			1
Advice or education[b]	82			1	-			
Manual therapy[c]	68			1	29			1
Superficial heat	57			1	-			
ES, US, TENS	35			1	95			1
Splinting/orthoses[b]	-				54			1
Walking aids[b]	-				63			1

*classification based on Hurkmans EJ et al. Acta Rheumatol Port. 2011;36(2):146-58.
[a]: exercise that is neither aerobic nor strengthening (not mentioned in the above guideline)
[b]: no review on advice or education, splinting/orthoses and walking aids
[c]: includes massage, mobilisation or manipulation

SPORTS INJURIES*

	Assessed by surveys of physical therapists				Assessed by clinical notes			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Manual therapy[a]	-				20	19	22	2
Exercise	-				16	11	21	2
Electrotherapy	-				13	10	17	2
Heat or cold therapy	-				9	8	9	2
Tape	-				5	4	7	2
Advice or education	-				3			1

*includes two studies that did not specify the type of sports injury. Another study (Athanasopoulos et al. 2007) was not included in this table because of the way the data was reported
[a]: includes massage, mobilisation or manipulation

LUMBAR SPINE STENOSIS*

	Assessed by surveys of physical therapists				Assessed by surveys of patients			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Exercise	97			1	55			1
Advice or education	96			1	11			1
Electrotherapy	90			1	27			1
Manual therapy[a]	87			1	48			1

Superficial heat	76		1	14		1
Acupuncture	63		1	23		1
Traction	61		1	5		1
External support[b]	45		1	11		1

*the same study assessed treatment choices by a survey of physical therapists and survey of patients
[a]: includes massage, mobilisation or manipulation
[b]: corsets, belts, braces, sticks or taping

PREGNANCY-RELATED ACUTE LOW BACK PAIN*

	Assessed by surveys of physical therapists				**Assessed by clinical notes**			
Recommended	**Median (%[€])**	**Q1**	**Q3**	**N**	**Median (%[¥])**	**Q1**	**Q3**	**N**
MUST PROVIDE								
Advice to keep active	87			1	-			
Advice and education to support self-management	85			1	-			
CONSIDER PROVIDING								
Combination of two or more of 1-3	48			1	-			
1. Manual therapy[a]	48			1	-			
2. Exercise	94			1	-			
3. CBT	-				-			
Superficial heat	33			1	-			
Not-recommended	**Median (%[€])**	**Q1**	**Q3**	**N**	**Median (%[¥])**	**Q1**	**Q3**	**N**
External support[b]	68			1	-			
Advice to use rest to relieve pain	51			1	-			
Acupuncture	24			1	-			
US, ES, TENS, IF	14			1	-			
Prescribed rest	6			1	-			
No-recommendation	**Median (%[€])**	**Q1**	**Q3**	**N**	**Median (%[¥])**	**Q1**	**Q3**	**N**
Other advice[c]	98			1	-			
Work-related/ergonomic interventions	88			1	-			
Cold therapy	8			1	-			

*classified as per acute low back pain in Appendix 2
[a]: includes massage, mobilisation or manipulation;
[b]: corsets, belts, braces, sticks or taping;
[c]: includes advice on posture and analgesics

KNEE OR HIP OSTEOARTHRITIS

	Assessed by surveys of physical therapists				**Assessed by clinical notes**			
Recommended	**Median (%[€])**	**Q1**	**Q3**	**N**	**Median (%[¥])**	**Q1**	**Q3**	**N**

Exercise	-				72			1
Manual therapy[a]	-				47			1
Advice or education	-				37			1
Electrotherapy	-				7			1

[a]: unspecified in the paper

ACUTE AND CHRONIC KNEE PAIN

	Assessed by surveys of physical therapists				Assessed by clinical notes			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Exercise	-				38			1
Manual therapy[a]	-				16			1
Electrotherapy	-				13			1
Advice or education	-				1			1

[a]: massage or mobilisation

OSTEOPOROSIS

	Assessed by surveys of physical therapists				Assessed by clinical notes			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
SHOULD PROVIDE								
Strength and balance training	75	73	77	2				

No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Other exercise[a]	95	94	96	2	-			
Advice or education	97			1	-			
Electrotherapy	46			1	-			
Manual therapy[b]	45			1	-			

*classification based on The Royal Australian College of General Practitioners and Osteoporosis Australia. Osteoporosis prevention, diagnosis and management in postmenopausal women and men over 50 years of age. 2nd edn. East Melbourne, Vic: RACGP, 2017.

[a]: exercise that is neither strengthening nor balance

[b]: unspecified in the paper

PELVIC GIRDLE PAIN

Due to pregnancy	Assessed by surveys of physical therapists				Assessed by clinical notes			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Advice or education	62			1	**-**			
Exercise	48			1	**-**			
External support[a]	34			1	**-**			
Manual therapy[b]	33			1	**-**			
CBT	11			1	**-**			
Acupuncture	3			1	**-**			
Electrotherapy	1			1	**-**			
Due to a fall								

Exercise	51		1	-
Manual therapy[b]	37		1	-
Advice or education	18		1	-
CBT	11		1	-
External support[a]	5		1	-
Acupuncture	4		1	-
Electrotherapy	1		1	-

* classification based on Ferreira CWS et al. Physiother Theory Pract 2013; 29: 419–431 (all unknown value or have not been investigated in a systematic review)
[a]: includes tape, compression pants, belt, orthoses or a walking aid
[b]: includes any form of hands on therapy

COMBINED MUSCULOSKELETAL CONDITIONS*

	Assessed by surveys of physical therapists				Assessed by clinical notes			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Massage	-				24			1
Exercise	-				20			1
Electrotherapy	-				7			1
Heat or cold therapy	-				3			1
Advice or education	-				2			1

*includes low back pain, neck pain, shoulder pain, knee pain and acquired deformities of the spine so we were unable to classify the interventions

CHRONIC TENNIS ELBOW

	Assessed by surveys of physical therapists				Assessed by clinical notes			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Stretching and strengthening	62			1	-			
Not-recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Deep friction massage	19			1	-			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Advice or education[a]	94			1	-			
Acupuncture	85			1	-			
Orthotic device[a]	51			1	-			
TENS	26			1	-			

*classification based on Hoogvliet P et al. Br J Sports Med 2013;47(17): 1112-1119
Dingemanse R et al. Br J Sports Med 2014;48(12): 957-965
Tang H et al. eCAM 2015;2015:861849
[a]: no review on advice or education, or orthotic devices

THUMB CMC PAIN

	Assessed by surveys of physical therapists				Assessed by clinical notes			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**

Advice or education	96	1	-	
Self-management	93	1	-	
Exercise	91	1	-	
Splinting	88	1	-	

PATELLA FEMORAL PAIN SYNDROME

	Assessed by surveys of physical therapists				Assessed by clinical notes			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Strengthening	-				100			
Stretching	-				20			

Not-recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
IF, US	-				20			
Mobilisation	-				20			

No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Tape	-				20			
Acupuncture	-				20			
Advice or education	-				20			
Cold therapy[a]	-				20			

*****classification based on Crossley KM et al. Br J Sports Med. 2016;50(14): 844-852.
[a]: no review on cold therapy

ACHILLES TENDINOPATHY

	Assessed by surveys of physical therapists				Assessed by clinical notes			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Eccentric strengthening	-				67			1

No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Deep friction massage	-				100			1
Stretching	-				83			1
IF, US	-				50			1
Acupuncture	-				33			1

*classification based on
Habets B et al. Scand J Med Sci Sports 2015;25(1): 3-15 (for eccentric exercises)
Rowe V et al. (2012). Sports Med 2012;42(11): 941-967 (all other interventions)

ORTHOPEDICS

LUMBAR DISCECTOMY AND FUSION (surveys of physical therapists)

	Inpatients				Outpatients			
Recommended	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Discectomy								
High-intensity exercise[a]	81	81	81	1	-			

Rehabilitation starting 4-6 weeks post-surgery	-				15			1
Fusion								
Exercise and CBT	-				61			1

No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Other exercises[b, c]	96	94	97	2	72	63	82	2
Advice, education or reassurance	86	79	92	2	68	53	83	2
Neural mobilisation	57			1	49	36	61	2
CBT	-				61			1
Rehabilitation starting 0-4 weeks post-surgery (discectomy)	-				49			

*classified based on
Oosterhuis T et al. Cochrane Database Syst Rev. 2014(3):Cd003007
Greenwood J et al. Spine (Phila Pa 1976). 2016;41(1):E28-36.
[a]: includes aerobic or strengthening exercise;
[b]: exercise that is neither aerobic Nor strengthening (for discectomy) or any exercise (fusion)
[c]: no reviews for other exercises, advice, education or reassurance, neural mobilisation and CBT (alone)

DISTAL RADIUS FRACTURE

	Assessed by surveys of physical therapists				**Assessed by clinical notes**			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Exercise	-				97			1
Advice or education[a]	-				90			1
Manual therapy[b]	-				55			1
Compression	-				28			1
Heat or cold therapy	-				10			1
Walking aids[a]	-				1			1
Electrotherapy	-				0			1
Whirlpool	-				0			1
Wax baths[a]	-				0			1

*classification based on Handoll HH and Elliott J. Cochrane Database Syst Rev 2015;(9):Cd003324 (all unknown value)
[a]: no review for advice or education, wax baths, walking aids, heat or cold therapy
[b]: includes massage or mobilisation

POST PELVIC SURGERY

	Assessed by surveys of physical therapists				**Assessed by clinical notes**			
No-recommendation	**Median (%€)**	**Q1**	**Q3**	**N**	**Median (%¥)**	**Q1**	**Q3**	**N**
Exercise	82			1	**-**			
Advice on activity restriction	75			1	**-**			

N=number of studies; Q1: first quartile; Q3: third quartile; CBT: cognitive behavioural therapy; CMC: carpometacarpal; ES: electrical stimulation; TENS: transcutaneous electrical

nerve stimulation; US: Ultrasound.
€: the percentage of physical therapists that report they provide (or would provide) high-value care, low-value care and care of unknown value for a given condition.
¥: the percentage of patients that received high-value care, low-value care or care of unknown value from a physical therapist for a particular condition as determined by audits of clinical notes, treatment recording forms, or surveys of patients.