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2021

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DOI: 10.31236/osf.io/eyxgk

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Funding

This project is funded by the National Institute for Health Research (NIHR) [Health Technology Assessment (HTA) 129388 Exercise therapy for the treatment of tendinopathies]. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Conflicts of interest

The authors declare no conflict of interest.

1.0 Introduction

Tendinopathy is a common musculoskeletal condition associated with degenerative changes within a tendon affecting both athletic and non-athletic populations.[1] The condition is characterized by a combination of pain,[1] and impaired movement[2] and function[3], requiring extended periods for recovery.[2,4-5] Tendinopathy can affect any muscle-tendon unit in the body,[6] however, it is most frequently reported in the Achilles, patellar, lateral elbow, rotator cuff, and hip tendons.[6] Surveys of prevalence of lower extremity tendinopathy in the general population have reported rates of 11.8 and 10.5 per 1000 person-years,[7] whilst prevalence for upper limb tendinopathies have been estimated between 1.3% to 21.0%.[8-10] Tendinopathies can affect children, adolescents, and adults of all ages, and many tendinopathies have a chronic or recurrent course.[6] Costs to the individual, the health service and economy (due to absenteeism and loss of productivity) are substantial such that identifying effective interventions is a priority. Musculoskeletal conditions including tendinopathies also have a substantive influence on primary and secondary healthcare use.[11] By identifying effective interventions across a range of tendinopathies, General Practitioners and other first-contact practitioners (e.g. physiotherapists) can be confident in delivering effective evidence-based practice. With an ageing population, and increasing pressure and demands on healthcare services, the need for clear guidance for evidence-based practice has never been more important.

Exercise therapy is the mainstay of conservative management of tendinopathy and has focused largely on resistance training, and in many instances eccentric strengthening techniques, to date.[12] The objective with exercise therapy is to encourage load tolerance that leads to structural adaptation at the musculotendinous unit and restores function.[13-14] Isometric, isotonic, and heavy slow resistance training have also been recommended for some tendinopathies (e.g. patellar) with suggested efficacy. [15] In the early phase of rehabilitation, range of movement and flexibility exercises are often initiated and incorporated into strengthening regimes to facilitate improvements in mobility. [12] Included exercises range from static stretches to ballistic actions and variations of contract-relax stretching adapted from the proprioceptive neuromuscular facilitation literature. [12] Effective exercise therapy may also require targeting a range of contributing factors, which not only include muscle weakness and decreased flexibility, but also corticospinal and neuromuscular adaptations resulting from persistent pain. [16] As such, movement retraining or motor control-based exercise interventions have been used to retrain normal patterns of muscle recruitment in the rehabilitation of shoulder-related tendinopathies including impingement, with supportive evidence provided in trials and systematic reviews. [16-19] Similarly, balance and core stabilisation exercises have been recommended for patients presenting with lumbo-pelvic instability in conjunction with patellar and Achilles tendinopathy. [20] Whilst various exercise therapies have been proposed for the treatment of tendinopathy and the overarching aims of reducing pain and disability, and improving function, recommendations are frequently equivocal with no consensus on treatment guidelines for major tendinopathies.

Several previous systematic reviews have compared the effectiveness of different exercise therapies, with comparisons investigating exercise specificity (e.g. general vs specific exercises), [21] exercise setting (supervised vs home), [22] contraction mode (e.g. eccentric, concentric or isometric),[23] and application of progressive overload (e.g. progressive vs non-progressive resisted exercise)[24]. While some systematic reviews have provided evidence

of differentiation, [25,26] many have suggested there is equivalence between approaches [21-24] and questioned the validity of entrenched focus on certain exercise protocols.[26] Previous reviews comparing exercise therapies have generally been consistent in their overall approach, with focus on a single tendinopathy, limited range of outcome measures (e.g. pain and function) and restriction to as homogenous an intervention categorisation as possible. As a result, the number of studies included in previous reviews has been limited to between six [21] and fifteen. [23] Additionally, most previous systematic reviews have limited analyses to qualitative syntheses due to concerns regarding both statistical and clinical heterogeneity. However, more recent perspectives in evidence synthesis highlight that with complex interventions statistical heterogeneity should be expected and, as is the case with primary data, variance can present opportunities for informative explanatory analyses. [27] Currently a range of approaches have been developed to best synthesise complex and heterogenous data, with statistical approaches including the use of network meta-analyses (NMA) that potentially combine with meta-regressions. [27] The use of NMA is rapidly increasing in many disciplines with several potential advantages including the ability to combine direct and indirect estimates of treatment effectiveness to enhance precision of estimates.[28] In addition, NMAs may be most effective in areas where there are multiple common treatment options, and an overall hierarchy is unclear. Here NMAs are also particularly suited to assist in creating treatment hierarchies where certain important treatment options are rarely compared directly. When combined with Bayesian methods, therapies can be separated into relatively broad treatment classes or more specific treatments and in both scenarios ranking used to quantify the probability that a specific option is most effective for a given outcome. Where treatments provide similar levels of effectiveness, probability values will be similar, and where there is clear evidence of superiority this should be evident and therefore informative for practitioners. At present there has been limited attempts to conduct NMAs within tendinopathy, with previous studies of conservative treatments primarily limited to Achilles Tendinopathy.[29,30] Comparing 42 treatments and 10 treatment classes across 29 studies, van der Vlist et al.[29] identified strong evidence that all treatment classes were superior to wait-and-see for midportion Achilles tendinopathy, but found no evidence of clinically relevant differences in the effectiveness between active treatments at either 3 or 12-months follow-up. Of the 65 treatments included in the trials, 40 of these comprised exercise therapies and given the associated low costs and few harms, van der Vlist et al.[29] proposed that clinicians should consider at least starting treatment with exercise therapies. The authors identified that the relatively low number of studies included in the review limited the analyses as many of the treatments were not connected to the network and low statistical power negated attempts to explore heterogeneity.[29] Given the extensive use and initial support for exercise therapies across the tendinopathy literature, and the lack of previous attempts to quantitatively synthesise large amounts of effectiveness data across multiple tendinopathy types, the following systematic review and meta-analysis will be conducted. Network structures will be used to compare exercise treatments and treatment classes in attempts to identify a treatment hierarchy. Additionally, the large amount of data synthesised will be used to explore relevant factors that may explain statistical heterogeneity.

2.0 Inclusion criteria

This review is part of a project funded by the National Institute for Health Research (NIHR); Health Technology Assessment (HTA) 129388 Exercise therapy for the treatment of tendinopathies. The inclusion criteria are influenced by the project aims, the results of our initial scoping review mapping the exercise and tendinopathy literature [31] as well as stakeholder workshops.

Participants

This review will include people of any age or gender with a diagnosis of tendinopathy of any severity or duration and at any anatomical location. Studies that include participants with tendinopathy in the absence of full thickness or large tears, will be included. Groups where the tear size cannot be determined will also be excluded as these require different management approaches. We will accept trial authors' diagnoses where a clearly verifiable group of clinical features is reported including: pathognomonic location of pain; a symptom altering response to applied load and/or stretch, with there being a specific test for most tendinopathies; strategies to rule out differential diagnoses; ultrasound or magnetic resonance imaging confirmation of structural change. Studies with mixed groups will have data included where there is clear reporting of the tendinopathic group, or they make up > 90% of the investigated cohort. Our definition of tendinopathy therefore includes tendinopathies such as PTTD (posterior tibial tendon dysfunction), tibialis posterior tendinopathy, peroneal tendinopathy, and GTPS (greater trochanteric pain syndrome). However, it excludes plantar heel pain as this condition may respond differently to exercise therapy and could potentially confound the review findings.

Intervention

The health technology being assessed is exercise therapy for the treatment of any tendinopathy. Exercise therapies considered for inclusion will comprise five treatment classes: 1) resistance; 2) plyometric; 3) vibration; 4) flexibility and 5) proprioception (see appendix I for definitions). To enable more detailed comparisons, individual treatments will also be defined by sub-categorising resistance, flexibility and proprioception treatment classes (see appendix I). Interventions combining exercise with other active therapies (e.g. laser, shockwave, manual therapy or injection) will not be included. Exercise therapy may be delivered in a range of settings (e.g. primary care, secondary care, community, people's homes) by a range of health or exercise professionals (e.g. physiotherapists, strength & conditioning coaches, personal trainers) or support workers, and may be supervised or unsupervised (i.e. self-management). No restrictions will be placed on these factors for inclusion.

To be included in the review, studies are required to report sufficient information regarding the exercise intervention to enable appropriate identification of treatment duration, treatment class, treatment sub-categorisation and exercise dose. In clinical settings it has been recommended that exercise dose is determined by duration, frequency, and intensity; where duration reflects the amount of time accrued in a single exercise session, frequency captures the number of exercise sessions over periods such as a week, and exercise intensity is defined either in absolute terms (such as the metabolic cost of an exercise session), or in relative terms (such as the performance of a given activity as a function of some percentage of measurable maximum capacity. To be included in the review, studies are required to provide sufficient information to describe at least two of the

three parameters describing exercise dose. Where sufficient information is not presented in the main text of a study, a search will be made of the publishers' website to check for supplementary files that may include relevant information.

Comparator

The review will include studies that compare at least two different exercise treatment classes or at least two different exercise treatments (defined in appendix I) to enable calculation of study pairwise effect sizes.

Outcomes

Based on the results of our initial scoping review and subsequent stake holder workshops we will include outcomes that assess ten domains: 1) Disability; 2) Physical function capacity; 3) Pain on loading/activity; 4) Pain over a specified time; 5) Pain without further specification 6) Patient rating overall condition; 7) Participation; 8) Quality of life; 9) Adverse effects/events; and 10) Range of motion (for studies investigating rotator cuff tendinopathy only). Definitions for each domain and example measurement tools are presented in appendix II.

Types of studies

We will include randomized controlled trials and non-randomized controlled trials where at least two intervention arms include different exercise treatments or treatment classes.

Context

The context will include primary care, secondary care or community locations in any developed nation (defined as the top 62 countries in the Human Development Index at the time of protocol development)[32] for the findings to be relevant to the UK context.

3.0 Exclusion criteria

We will exclude self-described pilot studies and non-intervention studies where the purpose of the research is to investigate the acute effects of exercise on physiological or biomechanical variables such as pain, collagen turnover or mechanical properties of tendons.

4.0 Methods

The review will be conducted according to the PRISMA extension statement for reporting of systematic reviews incorporating NMAs of health care interventions [33] and the recent GRADE approach to drawing conclusions from NMA using a minimally contextualised framework.[34]

Search strategy

The search strategy used for this study was part of a larger search conducted to scope the entire tendinopathy and exercise therapy research base. The search comprised three steps; Firstly, a limited search of MEDLINE and CINAHL using initial keywords (MH tendinopathy OR TX tendin* OR TX tendon*) AND (MH exercise OR TX exercis*) was conducted with analysis of the text words in the titles/abstracts and those used to describe articles to develop a full search strategy. Secondly, the full search strategy was adapted to each database and applied systematically to: MEDLINE, CINAHL, AMED, EMBase, SPORTDiscus, Cochrane library (Controlled trials, Systematic reviews), JBI Evidence Synthesis, PEDRo, and Epistemonikos (a full search strategy for MEDLINE is presented in appendix III). The following trial registries were also searched: ClinicalTrials.gov, ISRCTN Registry, The Research Registry, EU-CTR (European Union Clinical trials Registry), ANZCTR (Australia and New Zealand Clinical trials Registry). Finally, the third step involved conducting a search of cited and citing articles using Scopus and hand-searching a total of 130 systematic reviews that were identified to include information relevant to exercise therapy and tendinopathy. No limit was placed on language, with research studies published in languages other than English translated via Google Translate or via international collaborations of the review team members. Searches were initiated from 1998 as (i) the heavy load eccentric calf-training protocol for Achilles tendinosis by Alfredsson et al [35] was published in 1998 and may be considered seminal work in the field of tendinopathy, and (ii) there has been a proliferation of research on exercise interventions for tendinopathies post 1998.

Study selection

Proquest® Refworks will be used to manage references and remove duplicates, before importing to Covidence (Melbourne, Australia) to facilitate screening. Two levels of screening will be conducted. First all titles/abstracts will be reviewed, independently, by two members of the research team. Conflicts will be resolved by discussion or by input from a third reviewer. Full-text copies of all studies included at title/abstract screening stage will be retrieved and these will also be screened independently by two members of the research team with conflicts resolved in the same way.

Data extraction

Data will be extracted independently by 8 members of the review team (PS/KC/LA/RM/LG/EP/JS/AP) into pre-piloted excel sheets. Data will be independently coded as described in the accompanying codebook (appendix IV). To quantify reliability, 10% of studies will be selected at random and extraction completed in duplicate. Reliability will be quantified using Cohens K statistic [36] for categorical variables and percentage agreement for continuous variables.

Risk of bias assessment

We will use the Cochrane Collaboration's Risk of Bias tool [37] and all five domains: 1) selection bias; 2) performance bias; 3) detection bias; 4) attrition bias; and 5) reporting bias, to assess risk of bias for all included RCTs. For non-random designs, we will use the ROBINS-I tool [38] and all seven domains: 1) bias due to

confounding; 2) bias in selection of participants into the study; 3) bias in classification of interventions; 4) bias due to deviations form intended interventions; and 5) bias due to missing data; 6) bias in measurement of outcomes; and 7) bias in selection of the reported. An overall risk of bias judgement will be made for each outcome and time point as either 'low risk', 'some concerns' or 'high risk' of bias. A single assessment will be made by a reviewer from the team with comments saved to justify selection for each signalling question. To quantify reliability, 10% of studies will be selected at random and extraction completed in duplicate.

Statistical analysis

We will fit treatment-level and class-level Bayesian models. Pairwise effect sizes will be calculated with standardised mean differences (SMD_{pre}) for continuous outcomes and proportional odds models used for binary outcomes. Initially, direct pair-wise comparisons will be estimated. We will then combine direct and indirect comparisons using NMA and hierarchical NMA if possible.[39] Outcomes will be analysed separately according to short (≤12 weeks), medium (13-52 weeks) and long (>52) time frames. Following the GRADE approach for presentation and interpretation of results, we will select a reference intervention defined as the most connected node in the network. To maintain a minimally contextualised framework, we will select a no effect threshold and move any treatment or treatment class above or below the reference if 95% credible intervals do not span the threshold. Second classifications will then be made based on comparisons with treatment or treatment classes moved relative to the reference. In each of the classifications, treatment or treatment classes will be separated into: 1) moderate to high certainty; and 2) low to very low certainty based on risk of bias, inconsistency and indirectness.[40] Inconsistency will be assessed using model-based methods and comparison of residual deviance and the deviance information criterion).[41] Finally, consistency of the treatment and treatment class hierarchies created in previous steps will be assessed by examining pairwise comparisons not previously used. Sources of statistical heterogeneity will only be explored in cases where there are 10 or more trials available per comparison.[29]

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Appendix I: Definitions use to define exercise treatments and treatment classes.

Treatment Class	**Definition**	**Treatment**	**Definition**
Resistance	Exercise designed primarily to increase strength of muscles by causing them to produce substantive force against an applied resistance which can take several forms including the mass of the body or its segments, isoinertial resistance, elastic resistance, or strength training equipment such as isokinetic devices. In tendinopathy, the stimulus may also be intended to provoke tendon remodelling, reduce pain and improve function.	Concentric Only	Includes movements where force produced overcomes the resistance such that muscle shortening occurs.
		Eccentric Only	Includes movements where force produced is less than the resistance such that controlled muscle lengthening occurs.
		Concentric and eccentric	Includes movements where force produced exceeds the resistance in one phase and is less than the resistance in another such that controlled muscle lengthening and shortening occurs.
		Isokinetic	Uses specialised exercise equipment such that the resistance is adjusted in real-time to ensure joint angular velocity remains constant.
		Isometric	Includes muscular actions against a resistance such that joint angle remains constant.
Flexibility	Exercise designed to increase joint range of motion and extensibility of muscles and/or associated tissues. Also referred to as range-of-motion exercises or stretching.	Static	Joint range of motion actions where the movement is held at or near the end range of motion.
		Dynamic	Joint range of motion actions where the movement is performed continuously into and out of the end range of motion.
		PNF	Proprioceptive neuromuscular facilitation is a technique combining passive stretching and isometric action to achieve maximum range of motion.
		Ballistic	Uses the momentum of a moving body or a limb to increase joint range of motion, bouncing into (or out of) a stretched position.

Proprioception	Exercise designed to enhance the sensation of the joint relative to body position and movement, sense of force, and to encourage muscular stabilisation of the joint in the absence of external stabilising devices e.g. ankle brace.	Sense of joint position and force	Exercise aimed at enhancing the ability to perceive joint position and force with minimal external cues.
		Balance	Includes exercise that require the person to keep or return the displacement of centre of gravity over the base of support through various environmental conditions and changes in body position.
		Movement pattern retraining	Exercise aimed at re-education of motor control and movement patterns that may involve specific retraining of under- or over-active muscles and alteration of kinematic rotation +- translation timing between body segments. May also be termed motor control or stabilisation.
Plyometric	Exercise where a resistance is overcome by a muscle rapidly stretching then shortening	Plyometric	Exercise where a resistance is overcome by a muscle rapidly stretching then shortening.
Vibration	Exercise where body segments are held stationary or actively displaced as per definitions for other treatment classes whilst applying a rapid oscillating resistance	Vibration	Exercise where body segments are held stationary or actively displaced as per definitions for other treatment classes whilst applying a rapid oscillating resistance

Appendix II: Outcome domains and example outcomes included in review.

Domain	ICON Definition	Example Tools
Disability	Composite scores of a mix of patient-rated pain & disability due to the pain, usually relating to tendon-specific activities/tasks	VISA scales; DASH; quick DASH; SPADI; Patient-rated tennis-elbow evaluation questionnaire; Constant Murley Score; WORC (Western Ontario Rotator Cuff Index); AOFAS (American Orthopaedic Foot & Ankle Society); Roles and Maudsley score; ASES (American Shoulder & Elbow Surgeons Index; Tegner activity score; Lysholm knee scale; Pain free function questionnaire; Ankle activity score; Subjective elbow Value (SEV); Placzek score; Shoulder disability questionnaire; International Knee Documentation Committee form (IKDC); Penn Shoulder score (university of Pennsylvania shoulder score) (PSS); Brief pain inventory (BPI); UCLA Shoulder Rating Scale; FILLA - functional index of leg and lower limb; Neer Shoulder Score; Nirschl phase rating scale; American Shoulder and Elbow Surgeon's (MASES) questionnaire; Mayo Elbow Performance Score (MEPS); Shoulder rating questionnaire (SRQ)
Pain on loading/activity	Patient reported intensity of pain performing a task that loads the tendon	VAS; NRS; Pain experience scale
Pain over a specified time	Patient-reported pain intensity over period of time e.g. morning/night/24-hours/1-week	VAS; NRS Painful days in 3 months
Pain without further specification	Patient asked about pain levels without reference to activity or timeframe	VAS; NRS; Borg CR10 Scale; Pain status
Physical function capacity	Quantitative measures of physical tasks (e.g. hops, times walk, single leg squat) includes muscle strength	Counter movement jump; One-leg triple hop; Single-leg decline squat; Muscle strength measured by dynamometry (hand-held, isokinetic); Repetition maximum; Manual muscle testing.
Patient rating overall condition	Single-assessment numerical evaluation of symptom status	Global impression/rating of change; patient-acceptable symptom status/state
Participation	Patient rating of the level of participation/engagement across areas of their life	Sport participation; return to sport; work ability; return to work; sick leave
Quality of Life	General wellbeing	EQ5D; EQ3D; SF-36 or SF-12; Assessment of Quality of Life (AQoL); Nottingham Health Profile; Gothenburg QoL Instrument
Adverse effects/events	Unwanted unintended effects of treatments	Adverse event reporting
Range of Motion (Shoulder only)	Active or passive range of motion in specified plane, measured in degrees.	Hand-held goniometer; inclinometer

Appendix III: Search strategy

MEDLINE (EBSCoHost)
Search conducted on 27 April, 2020

Search	Query	Records retrieved
#1	MH exercise OR AB exercis* OR MH "isometric contraction" OR MH rehabilitation OR TX eccentric OR TX concentric OR TX "heavy slow resistance" OR TX isokinetic	362,722
#2	MH tendinopathy OR MH "shoulder injuries" OR MH tendons OR MH "tendon injuries" OR TX tendin* OR TX tendon* OR MH bursitis OR AB bursitis OR MH "posterior tibial tendon dysfunction" OR MH "shoulder impingement syndrome" OR AB "greater trochanteric pain syndrome"	96,490
#3	#1 AND #2	4,363
Limited to 1998 to present		

Appendix IV: Extraction codebook

Column		Heading	Description
Study Details	A	Initials Reviewer	Identification of individual extracting information
	B	Covidence Identifier	Reference number for Covidence
	C	Author	First author surname *et al.,*
	D	Year	Year of publication
	E	Title	Study title
	F	Country	Country where study was conducted
	G	Journal	Journal name
	H	Aims/Purpose	Study aims/purpose
	I	Tendinopathy type	1=Achilles; 2= Lateral elbow (tennis); 3 = Patellar; 4 = Rotator cuff (SI)
	J	Study Design	RCT = 1; Quasi-experimental = 2
	K	Age Mean	Mean age of study sample as a whole
	L	Age SD	Standard deviation age of study sample as a whole
	M	Baseline Total N	Total sample across all interventions measured at baseline
	N	Training Status Description	Brief description of training status of study sample as a whole
	O	Training Status Code	1 = Performance; 2 = Sporting; 3 = Other
	P	Sex	Percentage female of study sample as a whole
	Q	BMI Mean	Mean BMI of study sample as a whole
	R	BMI SD	Standard deviation of BMI of study sample as a whole
	S	Symptom Severity Mean	Mean severity measure at baseline of study sample as a whole
	T	Symptom Severity SD	Standard deviation of severity measure at baseline of study sample as a whole
	U	Symptom Duration Mean (Months)	Mean symptom duration reported in months
	V	Symptom Duration SD (Months)	Standard deviation symptom duration reported in months
	W	Population Comments	Any additional information relevant to the participants investigated including diagnostic criteria
Outcomes	X	Outcome Category	1 = Disability; 2 = Pain on loading/activity; 3 = Pain over a specified time; 4 = Pain without further specification; 5 = Physical function capacity; 6 = Patient rating overall condition; 7) Participation; 8) Quality of life; 9) Adverse effects/events; 10) Range of motion
	Y	Outcome Tool	Description of outcome tool
	Z	Reflection	1 = Increase in outcome indicates positive treatment; -1 = Decrease in outcome indicates positive treatment
	AA	Measurement Time (Weeks)	Time of measurement in weeks
Intervention	AB	Dominant Treatment Class	**Only one dominant theme to be selected** 1 = Resistance; 2 = Plyometric; 3 = Vibration; 4 = Flexibility; 5 = Proprioception
	AC	Total Treatment class	**Multiple themes to be selected as required** 1 = Resistance; 2 = Plyometric; 3 = Vibration; 4 = Flexibility; 5 = Proprioception
	AD	Dominant Treatment	**Only one dominant theme to be selected** 1 = Concentric only; 2 = Eccentric only; 3 = Concentric and eccentric; 4 = Isokinetic; 5 = Isometric; 6 = Static; 7 = Dynamic; 8 = PNF; 9 = Ballistic; 10 = Joint position & force; 11 = Balance; 12 = Movement pattern retraining; 13 = Plyometric; 14 = Vibration
	AE	Total Treatment	**Multiple themes to be selected as required** 1 = Concentric only; 2 = Eccentric only; 3 = Concentric and eccentric; 4 = Isokinetic; 5 = Isometric; 6 = Static; 7 = Dynamic; 8 = PNF; 9 = Ballistic; 10 = Joint position & force; 11 = Balance; 12 = Movement pattern retraining; 13 = Plyometric; 14 = Vibration
	AF	Intervention N	Intervention sample size at specified time
	AG	Intervention Total Duration	Total duration of exercise intervention in weeks
	AH	Intervention Adherence %	Reporting of adherence to exercise (reported as a percentage) if applicable
	AI	Intervention Location	Location exercise was performed 1 = Home; 2 = Clinic; 3 = Fitness facility; 4 = NR; 5 = NA

	AJ	Intervention Volume	Numerical value describing volume
	AK	Intervention Volume Category	1 = Duration of session (mins); 2 = sets * repetitions; 3 = number of repetitions; 4 = number of sets
	AL	Intervention Volume Comments	Any additional information relevant.
	AM	Intervention Intensity	Numerical value describing intensity
	AN	Intervention Intensity Category	1 = Absolute; 2 = Relative
	AO	Intervention Frequency	Number of sessions per week. Where there is progression, average value is to be entered.
	AP	Intervention Frequency Comments	Any additional information relevant.
	AQ	Intervention Progression	**Multiple themes to be selected as required** 1 = No progression; 2 = NR; 3 = Progression volume; 4 = Progression intensity; 5 = Progression frequency; 6 = Progression specificity; 7 = Progression capacity; 8 = Other
	AR	Intervention Progression Comments	Any additional information relevant.
Data	AS	Intervention Baseline Mean	Baseline mean for exercise therapy
	AT	Intervention Baseline SD	Baseline standard deviation for exercise therapy
	AU	Intervention Measurement Mean	Mean of outcome for exercise therapy at stated time point
	AV	Intervention Measurement SD	Standard deviation of outcome for exercise therapy at stated time point
	AW	Control Baseline Mean	Baseline mean for control
	AX	Control Baseline SD	Baseline standard deviation for control
	AY	Control Measurement Mean	Mean of outcome for control at stated time point
	AZ	Control Measurement SD	Standard deviation of outcome for control at stated time point
	BA	Measurement Comments	State if a different value has been entered for means (e.g. median), a different value for standard deviations (e.g. standard error, IQR, percentiles, distance from mean to upper bound). Provide the relevant statistic (width of CI's, width of percentiles). Also state if data has extracted by digitization

*** Outcome Specific**