National Institute for Health and Care Excellence

Final

Pelvic floor dysfunction: prevention and non-surgical management

[M] Pelvic floor muscle training for the management of symptoms

NICE guideline NG210

Evidence review underpinning recommendations 1.6.13 to 1.6.20 (as well as 1.3.15 and 1.3.16) and 2 research recommendations in the NICE guideline

December 2021

Final

These evidence reviews were developed by the National Guideline Alliance which is a part of the Royal College of Obstetricians and Gynaecologists

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Pelvic floor muscle training for the management of symptoms

Review question

What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Introduction

There are a number of non-surgical management options for the symptoms of pelvic floor dysfunction (PFD) including: pelvic floor muscle training (PFMT), vaginal cones (VC), biofeedback (BF) and electrical stimulation (ES). This review aims to establish whether these interventions are effective and acceptable to women with PFD.

Summary of the protocol

See Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population	Women and young women (aged 12 years and older) with symptoms associated with pelvic floor dysfunction

Intervention	The following pelvic floor training interventions will be considered:
	• Pelvic floor muscle exercises / Kegel exercise, to include:
	  ○ Pelvic floor muscle contraction exercises
	  ○ Pelvic floor muscle strengthening exercises
	  ○ Pelvic floor muscle training
	  ○ Pelvic floor muscle retraining
	  ○ Knack
	• Pelvic floor muscle relaxation exercises / relaxation retraining
	• Biofeedback training, for example:
	  ○ transperineal ultrasound
	  ○ EMG biofeedback
	  ○ pressure perinometry
	  ○ digital biofeedback
	• Weighted vaginal cones
	• Electrical stimulation, for example:
	  ○ transcutaneous stimulation
	  ○ percutaneous stimulation
	  ○ intravaginal stimulation
	• Neuromuscular stimulation
	• Magnetic stimulation
	• Transcutaneous sacral nerve stimulation[1]
	• Transcutaneous posterior tibial nerve stimulation[1]
	• Percutaneous posterior tibial nerve stimulation[1]
	• Any of the above interventions in combination with Botox
	• Any of the above interventions in combination with Duloxetine

Comparison	Any of the above in isolation and combination

	• No treatment/usual care • Duloxetine (only where Duloxetine is used in combination, as listed above) • Botox (only where Botox is used in combination, as listed above)
Outcome	**Critical** • Subjective measure of change in the following symptoms: ○ urinary incontinence ○ emptying disorders of the bladder ○ faecal incontinence ○ emptying disorders of the bowel ○ pelvic organ prolapse ○ sexual dysfunction ○ chronic pelvic pain syndromes • Health related QOL **Important** • Satisfaction with intervention • Adherence to intervention • Anxiety and depression (only validated scales will be included) • Adverse events leading to withdrawal/discontinuation

EMG: electromyographic; QOL: quality of life.
1. These are used within conservative management, and are generally considered minimally invasive, and are therefore included.

For further details, see the review protocol in appendix A.

Methods and process

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual. Methods specific to this review question are described in the review protocol in appendix A and the methods document (supplementary document 1).

Declarations of interest were recorded according to NICE's conflicts of interest policy.

Clinical evidence

Included studies

Systematic reviews

15 systematic reviews of randomised controlled trials (RCTs) were included for this review (Dumoulin 2018, Ge 2020, Hagen 2011, Hay-Smith 2011, Herderschee 2011, Herbison 2013, Imamura 2010, Liang 2018, Lim 2015, Moroni 2016, Nie 2017, Oblasser 2015, Peng 2019, Stewart 2017, Woodley 2020). One of these studies conducted a network meta-analysis (Liang 2018). Randomised controlled trials published since these systematic reviews were also included (see randomised trials section below).

One systematic review included only studies in antenatal or postnatal women (Woodley 2020) and one review included only studies in postnatal women (Oblasser 2015). Two reviews excluded studies in antenatal or postnatal women (Dumoulin 2018 and Hay-Smith 2011). The remainder of the reviews included studies in any adult woman with relevant symptoms (Ge 2020, Hagen 2011, Herbison 2013, Herderschee 2011, Imamura 2010, Liang 2018, Lim 2015, Moroni 2016, Nie 2017, Peng 2019, Stewart 2017).

The included systematic reviews are summarised in Table 2. Randomised controlled trials published since these systematic reviews are summarised in Table 3.

Comparisons of individual treatments

For the comparison of PFMT versus no treatment (or inactive control) there were:

- 2 systematic reviews in women with pelvic organ prolapse (POP; Ge 2020, Hagen 2011)
- 3 systematic reviews in women with stress urinary incontinence (SUI; Dumoulin 2018; Imamura 2010; Moroni 2016)
- 2 systematic reviews in women with urinary incontinence (UI; Dumoulin 2018; Nie 2017)
- 1 systematic review for antenatal treatment and prevention of urinary and faecal incontinence (Woodley 2020)
- 1 systematic review of postnatal treatment for urinary and faecal incontinence (Woodley 2020)

For the comparison of PFMT versus usual care, there was:

- 1 systematic review of antenatal treatment and prevention of urinary and faecal incontinence (Woodley 2020)
- 1 systematic review of postnatal treatment for urinary and faecal incontinence (Woodley 2020)

For the comparison of magnetic stimulation versus sham treatment, there was:

- 1 systematic review in women with SUI (Peng 2019)
- 1 systematic review in women with UI (Lim 2015)

For the comparison of vaginal cones versus no treatment, there were:

- 2 systematic reviews in women with SUI (Imamura 2010; Herbison 2013)
- 1 systematic review in women with UI (Oblasser 2015)

For the comparison of electrical stimulation versus no treatment, there were:

- 3 systematic reviews (including 7 RCTs) in women with SUI (Imamura 2010; Stewart 2017; Moroni 2016)

For the comparison of electrical stimulation versus sham treatment, there was:

- 1 systematic review in women with SUI (Stewart 2017)

For the comparison of PFMT versus electrical stimulation, there was:

- 1 network meta-analysis (Liang 2018) and 2 systematic reviews in women with SUI (Imamura 2010; Stewart 2017)

For the comparison of PFMT versus vaginal cones, there were:

- 1 network meta-analysis (Liang 2018) and 3 systematic reviews in women with SUI (Herbison 2013; Imamura 2010; Moroni 2016)
- 1 systematic review in women with UI (Oblasser 2015)

For the comparison of PFMT versus PFMT + biofeedback, there was:

- 1 network meta-analysis in women with UI (Liang 2018)

For the comparison of PFMT + biofeedback versus electrical stimulation there was:

- 1 network meta-analysis in women with UI (Liang 2018)

For the comparison of electrical stimulation versus vaginal cones, there were:

- 1 network meta-analysis (Liang 2018) and 4 systematic reviews in women with SUI (Herbison 2013; Imamura 2010; Moroni 2016; Stewart 2017)

For the comparison of vaginal cones versus PFMT + biofeedback, there was:

- 1 network meta-analysis in women with SUI (Liang 2018)

For the comparison of PFMT with more versus less contact with health professionals there was

- 1 systematic review in women with UI (Hay-Smith 2011)
- 1 systematic review in women with SUI (Imamura 2010)

For the comparison of group PFMT versus individual PFMT there was

- 1 systematic review in women with UI (Hay-Smith 2011)
- 1 systematic review in women with SUI (Moroni 2016)

For the comparison of direct PFMT (for example voluntary pelvic floor muscle contraction) versus indirect PFMT (for example pelvic floor muscle contraction facilitated through abdominal muscle contraction) there was

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of individualised PFMT versus generic PFMT there was

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of daily PFMT versus PFMT 3 times per week there was

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of upright and supine PFMT versus supine only PFMT there was

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of more intensive PFMT versus less intensive PFMT there was

- 1 systematic review in women with UI (Hay-Smith 2011)

Comparisons of PFMT + other treatment versus PFMT alone

This review also included PFMT + treatment versus PFMT combination comparisons.

For the comparison of PFMT + biofeedback versus PFMT there was:

- 1 network meta-analysis (Liang 2018) and 1 systematic review in women with SUI (Imamura 2010)
- 1 systematic review in women with UI (Herderschee 2011)

For the comparison of PFMT + feedback versus PFMT there was:

- 1 systematic review in women with UI (Herderschee 2011)

For the comparison of PFMT + vaginal cones versus PFMT there was:

- 2 systematic reviews in women with SUI (Herbison 2013; Imamura 2010)

For the comparison of PFMT + electrical stimulation versus PFMT there was:

- 2 systematic reviews in women with SUI (Imamura 2010; Stewart 2017)

For the comparison of PFMT (strength + motor learning) versus PFMT (motor learning alone) there was:

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of PFMT + abdominal exercise versus PFMT there was:

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of PFMT + intravaginal device versus PFMT there was:

- 1 systematic review in women with UI (Hay-Smith 2011)

For the comparison of PFMT + adherence strategy versus PFMT there was:

- 1 systematic review in women with UI (Hay-Smith 2011)

Randomised trials

Twenty RCTs, reported in 22 articles, published since the systematic reviews were also included (Al Belushi 2020, Araujo 2020, Dumoulin 2020, Figueiredo 2020, Fitz 2020, Gungor Ugurlucan 2013, Hagen 2020a, Hagen 2020b, Huang 2020a, Huang 2020b, Jha 2018, Karaman 2020, Kucukkaya 2020, Liang 2019, Mallman 2020, Mundet 2020, Navarro-Brazalez 2020, Nyhus 2020, Okayama 2019, Ptak 2020, Teixeira Alve 2020).

The included RCTs are summarised in Table 3.

Comparisons of individual treatments

For the comparison of PFMT versus no treatment (or inactive control) there were:

- 2 RCTs in women with POP (Liang 2019, Nyhus 2020)
- 2 RCTs in women with SUI (Al Belushi 2020, Okayama 2019)

For the comparison of electrical stimulation versus no treatment, there was:

- 1 RCT in women with OAB (Teixeira Alve 2020)
- 1 RCT in women with SUI (Huang 2020a, Huang 2020b)

For the comparison of electrical stimulation versus percutaneous tibial nerve stimulation, there were:

- 2 RCTs in women with OAB (Gungor Ugurlucan 2013, Mallman 2020)

For the comparison of individual versus group PFMT there were:

- 2 RCTs in women with SUI or MUI (Dumoulin 2020, Figueiredo 2020)

For the comparison of outpatient versus home based PFMT there was:

- 1 RCT in women with SUI or MUI (Fitz 2020)

For the comparison of app-based versus written PFMT there was:

- 1 RCT in women with SUI

Comparisons of PFMT plus other treatment versus PFMT alone

For the comparison of PFMT plus biofeedback versus PFMT alone there was:

- 1 RCT in women with SUI (Hagen 2020a, Hagen 2020b)

For the comparison of PFMT plus electrical stimulation versus PFMT alone there was:

- 1 RCT in women with SUI (Karaman 2020)
- 1 RCT in women with UI (Jha 2018)
- 1 RCT in women with FI (Mundet 2020)

For the comparison of PFMT plus abdominal excercise versus PFMT alone there were:

- 2 RCTs in women with SUI (Kucukkaya 2020, Ptak 2020)
- 1 RCT in women with PFD (Navarro-Brazalez 2020)

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review are listed, and reasons for their exclusion are provided in appendix K.

Summary of studies included in the evidence review

Summaries of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included systematic reviews.

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
Dumoulin 2018 Systematic review	31 studies N=1817 women	• Women with UI - diagnosed as having SUI, UUI or mixed UI	PFMT versus no treatment, placebo or sham treatments, or other inactive control treatments	• Subjective change in urinary incontinence • Health related QOL • Satisfaction with intervention	Cochrane risk of bias tool was used to asses risk of bias
Ge 2020 Systematic review	15 studies N=1309 women	• Women with POP without other serious diseases	• PFMT versus lifestyle advice (6 studies) • PFMT versus watchful waiting (2 studies) • PFMT + lifestyle advice versus lifestyle advice (3 studies) • PFMT versus pessary treatment (1 study) • PFMT versus support device (1 study) • PFMT versus stabilisation advice (1 study) • PFMT + behavioural therapy versus usual care (1 study)	• Self-reported change in symptoms • POP-SS • POPDI-6 • CRADI-8 • UDI-6	The Jadad scoring checklist was used to assess the quality of included studies
Hagen 2011 Systematic review	3 studies N=200 women	• Adult women with any severity of pelvic organ prolapse • Prolapse • included one or more of the following	• PFMT versus no treatment (3 studies)	• Prolapse symptom score • Self-reported improvement • Prolapse QoL score • ICIQ UI-SF • Prolapse interference	Cochrane risk of bias tool was used to asses risk of bias

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
		types: anterior vaginal wall prolapse; posterior vaginal wall prolapse; prolapse of the apical segment of the vagina (uterus or vault) • Women at risk of prolapse		• Ditrovie quality of life score • Satisfaction with treatment • Bladder symptom score • POP-Q stage	
Hay-Smith 2011 Systematic review	21 studies N=1490 women	• All women with urinary incontinence diagnosed as having stress, urge or mixed incontinence on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists	• PFMT: more or less contact with health professionals (6 studies) • Group versus individual PFMT (6 studies) • Direct versus indirect PFMT (6 studies) • Individualised versus generic PFMT (1 study) • Daily versus 3x per week PFMT (1 study) • Upright and supine versus supine exercise (1 study) • More intensive versus less intensive PFMT (15 studies) • Strength and motor learning versus motor learning alone PFMT (1 study) • PFMT and abdominal muscle	• Patients' perception of change • I-QoL • ICIQ-SF • Quality of Life Index • KHQ • Symptom impact • Adherence	Cochrane risk of bias tool was used to asses risk of bias

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
			exercise versus PFMT alone (1 study) • PFMT with intravaginal device versus PFMT alone (2 studies) • PFMT and adherence strategy versus PFMT alone (1 study)		
Herbison 2013 Systematic review	23 studies N=1806 women	Women whose predominant complaint is SUI	• Cones versus control (5 studies) • Cones versus PFMT (11 studies) • Cones versus electrostimulation (5 studies) • Cones + PFMT versus PFMT (2 studies)	• No subjective improvement or cure • No subjective cure	Cochrane risk of bias tool was used to asses risk of bias
Hendersche e 2011 Systematic review	24 studies N=1583 women	Women with SUI, UUI or mixed UI	• PFMT + BF versus PFMT alone (16 studies) • PFMT + feedback versus PFMT alone (2 studies)	• Quality of life • Women's perception of change (cure and/or improvement) • Satisfaction • Symptom distress • Adherence to PFMT	Cochrane risk of bias tool was used to asses risk of bias
Imamura 2010 Systematic review	176 studies N=9721 women	All women had SUI alone; at least 50% of women had SUI alone and the remainder could have UUI or MUI; under 50% of women had stress incontinence alone but the majority (50%	• PFMT versus no treatment (14 studies) • PFMT with additional sessions versus PFMT (1 study) • Electrical stimulation versus no treatment (8 studies) • Vaginal cones versus no	• Cure rate • Improvement rate • Quality of life	Adapted version of a checklist developed by the Cochrane Incontinence Group was used for assessing risk of bias

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
		or more) had MUI with stress symptoms as a predominant pattern, and the remainder could have SUI, UUI or MUI; incontinent women during pregnancy or in the early postpartum period were analysed separately	treatment (2 studies) • PFMT versus electrical stimulation (7 studies) • PFMT versus vaginal cones (6 studies) • PFMT + BF versus PFMT (15 studies) • PFMT + vaginal cones versus PFMT (1 study) • PFMT + electrical stimulation versus PFMT (7 studies)		
Liang 2018 Systematic review with Network Meta-Analysis	17 studies N=880 women	Women with SUI	• PFMT versus electrical stimulation (2 studies) • PFMT versus vaginal cones (4 studies) • Electrical stimulation versus vaginal cones (2 studies) • Vaginal cones versus biofeedback (1 study) • PFMT versus PFMT + biofeedback (8 studies)	• Quality of Life (ICI-Q-SF)	The instrument used to evaluate the risk of bias emphasised seven particular aspects: ran-dom sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, selective reporting, and other sources of bias
Lim 2015 Systematic review	8 studies N=494 women	Women with UI	• Magnetic stimulation versus sham (8 studies)	• Improvement in continence	Risk of bias was assessed using the Jadad Scale
Moroni 2016 Systematic review	37 studies N=964 women	Adult women, aged 18 years or older, with a clinical diagnosis of	• PFMT versus no treatment (2 studies) • Group PFMT versus	• Incontinence specific quality of life (KHQ, IIQ-7 and I-QoL)	Risk of bias was assessed using the Jadad Scale

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
		SUI (complaint, and/or an observation during examination of urinary leakage due to effort or straining), with absence of neurological injuries or diseases	individual PFMT (2 studies) • Intravaginal electrical stimulation versus control (2 studies) • Superficial electrical stimulation versus control (2 studies) • Vaginal cones versus control (2 studies) • PFMT versus vaginal cones (2 studies) • Electrical stimulation versus vaginal cones (2 studies)		
Nie 2017 Systematic review	12 studies N=763 women	Women aged 18 years or older with symptoms of SUI, with or without UUI; non-pregnant and no reports of pelvic organ prolapse, low back pain, spinal or pelvic fracture, urinary tract infection, vaginal infection, history of pelvic surgery, history of PFMT, surgery, or other treatments for urinary incontinence	• PFMT versus no treatment (12 studies)	• IIQ-7 • ICIQ • UDI-6 • Quality of life	Risk of bias was assessed according to the 2011 Cochrane guidelines

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
Oblasser 2015 Systematic review	1 study N=230 women	Women with symptoms of incontinence three months post-partum	The 1 included study had several intervention groups of which the following 2 comparisons were reported: • Vaginal cones versus PFMT (1 study) • Vaginal cones versus control (standard postpartum care) (1 study)	• Self-reported urinary incontinence	Risk of bias was assessed using Cochranes Risk of Bias tool
Peng 2019 Systematic review	4 studies N=232 women	Women who were diagnosed with SUI	• Magnetic stimulation versus sham (4 studies)	• Quality of life • ICIQ	Risk of bias was assessed using the Cochrane Collaboration Reviewers' Handbook
Stewart 2017 Systematic review	35 studies N=3781 women	Adult women (18 years or older, or according to study authors' definitions of adult) with SUI or stress predominant MUI on the basis of symptoms, signs or urodynamic diagnosis. Trials of participants with MUI, UUI and SUI were included only if the data for women with SUI were presented separately. Trials in women with MUI were included if the condition was	• Electrical stimulation versus no active treatment (8 studies) • Electrical stimulation versus sham treatment (6 studies) • Electrical stimulation versus PFMT (9 studies) • Electrical stimulation versus vaginal cones (7 studies) • Electrical stimulation + PFMT versus PFMT (10 studies) • Excluded comparisons: • Electrical stimulation versus PFMT	• Subjective cure • Subjective cure or improvement • Quality of life	Risk of bias was assessed using the Cochrane Risk of Bias tool

Review	No. of studies (No. of participants)	Population inclusion criteria	Comparison interventions	Outcomes	Risk of bias assessment of included RCTs[1]
		SUI-predominant	and vaginal cones (2 studies)		
Woodley 2020 Systematic review	46 studies N= not reported	Antenatal (. pregnant) or postnatal women (women immediately following delivery or women with persistent urinary or faecal incontinence symptoms up to three months after their most recent delivery); women could be with or without urinary, faecal, or both urinary and faecal incontinence symptoms at recruitment	• Antenatal PFMT versus control (no PFMT, usual care or unspecified control) for treatment • Antenatal PFMT versus control for prevention or treatment • Postnatal PFMT versus control for treatment • Postnatal PFMT versus control for prevention or treatment	• Incontinence specific quality of life	Risk of bias was assessed using the Cochrane Risk of Bias tool

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence

1. *The risk of bias assessment of the RCTs reported in the systematic review was used to inform the GRADE risk of bias for each outcome.*

Table 3: Summary of additional RCTs published since the included systematic reviews.

Study	Population	Intervention	Comparison	Outcomes
Al Belushi 2020 RCT Oman	N=73 Women with SUI	**PFMT** Participants were educated individually using audio-visual aids about the anatomy of PFM's, continence mechanisms, and the importance of PFMT in	**Control group** The participants in the control group were invited to a single 15 minute lecture on the anatomy of PFM's, continence mechanisms, and the	• Improvement in ICIQ sum score

Study	Population	Intervention	Comparison	Outcomes
		the management of UI problems. They were also trained about the daily schedule of performing the PFMT which involved endurance and speed training. The aim was to have five home sessions of both slow and fast contractions per day at supine, sitting, and standing positions. Each session consisted of 10 slow and 10 fast contractions. n=36	importance of doing PFMT to alleviate problems related to UI n=37	
Araujo 2020 RCT Brazil	N=33 Women with SUI	**App based PFMT** Women received an app with an alarm with a reminder to perform the exercises twice a day. At home, the women were asked to repeat the exercises by following a dynamic sequence of images on the app screen that correlated with an PFM exercise. Both groups had the same exercise protocol. Each completed protocol comprises 8-second hold/8-second relaxation followed by 3 phasic contractions, repeated 8 times, with a total of 32 contractions and 152 seconds. Exercises were performed 2 times a day for 3 months. n=17	**Written PFMT** Women received printed instructions for home PFMT. The static image of muscular contraction presented in the paper was similar to that obtained through a sEMG screen. n=16	• QUID • ICIQ-UI SF • iCIQ-VS • ICIQ-QoL • ICIQ-SF • Adherence
Dumoulin 2020 RCT Canada	N=362 Women with stress or mixed UI	**Individual PFMT** Women in both treatment arms received a 12-week PFMT program, with each session lasting 1 hour, including a 15-minute educational period and a 45-minute exercise component. The exercise targeted PFM strength. Women in both study arms were expected to perform PFM exercises at home, 5 days per week. Participants in the	**Group PFMT** In addition to the standard protocol, participants in the group-based PFMT arm who reported having difficulty with the PFM exercises were offered short private sessions with the physiotherapist to ensure understanding and correct performance of a PFM contraction n=178	• PGI-I • Satisfaction

Study	Population	Intervention	Comparison	Outcomes
		individual PFMT arm used intravaginal electromyographic biofeedback during each treatment session for 10 to 15 minutes n=184		
Figueiredo 2020 RCT Brazil	N=90 Women with SUI or MUI	**Individual PFMT** Participants received all 12 sessions individually. PFMT included guidance about the anatomy and function of the PFM and how to perform a properly contraction. The women participated in 12 sessions lasting 30 minutes each, once a week, with direct supervision by a physical therapist. n=30 There was a third group which mixed individual and group PFMT but a comparison with this group would not be relevant to the protocol.	**Group PFMT** Participants received all 12 sessions in a group n=30	• KHQ
Fitz 2020 RCT Brazil	N=69 Women with SUI and/or mixed UI with predominant SUI symptoms	**Outpatient PFMT** Participants performed 24 outpatient sessions of PFMT over 3 months under the guidance of a physiotherapist (twice a week) and additional home PFM exercises n=34	**Home PFMT** Participants performed PFMT at home with three outpatient sessions of PFMT under the guidance of a physiotherapist. In the home PFMT group, the patients returned to the clinic once a month to receive a new routine and diary of PFMT exercises to perform at home. n=35	• I-QoL • Patient satisfaction • Adherence
Gungor Ugurlucan 2013 RCT Turkey	N=59 Women with symptoms of urgency/urge incontinence, frequency and nocturia who were diagnosed with OAB	**Electrical stimulation** An electrical simulator and stimulating electrodes were used. Pulses were used for 20 minutes for 6-8 weeks, three times per week. n=38	**Posterior tibial nerve stimulation** PTNS using a neuromodulation system. A fixed pulse width of 200 and a frequency of 20 Hz were used. Treatments were weekly in 30 minute sessions for 12 weeks. n=21	• KHQ
Hagen 2020a	N=600	**PFMT + Biofeedback** Electromyographic biofeedback was	**PFMT** The therapist assessed the pelvic	• Adherence • ICIQ-UI SF

Study	Population	Intervention	Comparison	Outcomes
RCT UK	Women with UI (SUI or MUI)	integrated with PFMT during the appointments. In addition, participants were given the same biofeedback device as used during appointments for their home use with a prescribed programme, along with information on operating, cleaning, and output interpretation n=300	floor muscles, taught the correct technique for exercise, prescribed an individualised PFMT programme to be followed at home (aiming for three sets of exercises daily), and used behaviour change techniques embedded in the protocols to encourage adherence. n=300	• Cure • Improvement • PGI-I • ICIQ-FLUTS • ICIQ-LUTS qol
Hagen 2020b	See Hagen 2020a	See Hagen 2020a	See Hagen 2020a	• Adherence • ICIQ-LUTS qol bother scale
Hwang 2020a RCT Korea	N=34	**Electrical stimulation** Stimulating electrodes, with amplitude set by a physical therapist at a level comfortable to the participant. Participants were given a device and taught how to use it once a day for 15 minutes, 5-6 days per week for 8 weeks n=17	**No treatment** The control group walked for 20 minutes daily n=17	• PISQ
Hwang 2020b	See Hwang 2020a	See Hwang 2020a	See Hwang 2020a	• UDI-6
Jha 2018 RCT UK	N=114 Women with UI and sexual dysfunction	**PFMT + electrical stimulation** Electrical stimulation (no further information). PFMT as in the control group. n=57	**PFMT** PFMT comprised of at least eight contractions performed three times a day n=57	• PISQ
Karaman 2020 RCT Turkey	N=48 Women with SUI	**PFMT (Kegel exercise) + electrical stimulation** An electrical stimulation device was used for external stimulation for 30 minutes, two times a week for 4 weeks. Kegel exercise was carried out as per the control group. n=20	**PFMT (Kegel exercise)** Kegel exercise at least three sets of 10 to 15 repetitions a day for one month during the study period n=28	• Quality of life • UI recurrence
Kucukkaya 2020 RCT Turkey	N=64 Women with SUI	**PFMT + abdominal exercises** No further details Both groups were taught their exercises at the clinic, and the patients then performed the exercises individually in	**PFMT alone** No further details n=32	• IIQ • UDI-6

Study	Population	Intervention	Comparison	Outcomes
		their daily lives (at home, work, etc.) with no supervision. They were provided with a brochure that included a detailed explanation of the applicable exercise programs and healthy lifestyle behaviours. The intervention was 8 weeks. n=32		
Liang 2019 RCT China	N=97 Women with POP undergoing surgery	**PFMT + Lifestyle advice** Four PFMT appointments with physiotherapists lasting 20-30 minutes. Participants were taught contractions and relaxation and were instructed to exercise for 15-30 minutes 2-3 times per day. Participants also received the same lifestyle advice as the control group. n=49	**Lifestyle advice alone** Participants were given routine lifestyle advice, including explaining the causes of POP, common complications, healthy lifestyle, avoiding specific activities, health diet, drinking more water etc. Participants were given a leaflet with lifestyle guidelines n=48	• POPDI-6 • CRADI-8 • UDI-6 • PFDI-20
Mallmann 2020 RCT Brazil	N=50 Women with OAB	**Electrical stimulation** Women used a portable electrical stimulator with a pair of adhesive Carcitrode electrodes. The patients were instructed about the correct position of the electrodes on the bilteral sacral roots. Both groups followed the same protocol at home for 6 weeks, with electrical stimulation applied three times per week. All patients were informed about behavioural therapy. n=25	**Posterior tibial nerve stimulation** The PTNS group used a portable electrical stimulator and a neoprene anklet with Silver Spike Point electrodes in the medial region of the right ankle. Each anklet was adjusted individually according to the correct position of the posterior tibial nerve. The patients in the PTN group were instructed to apply a conductive gel to the skin in contact with the anklet. n=25	• KHQ – symptoms • ISI
Mundet 2020 RCT Spain	N=180 Women with a history of more than 6 months of FI symptoms	**PFMT + Biofeedback** In addition to PFMT, patients received six 45-minute BF sessions administered by a specialist nurse. n=45 **PFMT + electrical stimulation**	**PFMT** Patients were given oral and written instructions on how to perform K at home. They had to exercise for 10 minutes 3 times a day for a 3-month period. n=45	• Clinical severity (Cleveland score) • FIQL • EQ5D • ICIQ-UI

Study	Population	Intervention	Comparison	Outcomes
		In addition to PFMT, patients were instructed on the home use of an electric stimulation unit. The stimulator was to be used for 30 minutes a day, 5 days a week n=45		
Navarro-Brazalez 2020 RCT Spain	N=99 (including a third group that was not relevant to the protocol so was not included N=66 without this group) Women with pelvic floor dysfunction (UI 84%; AI 43%; POP 50%) -	**PFMT + Hypopressive exercise** Women performed both PFMT and hypopressive exercise. Participants learned how to perform the "hypopressive manoeuvre" and were then instructed on the series of "hypopressive postures". After each intervention session, participants were asked to exercise at home, following the exercise prescriptions described for each group, alternating between PFMT and HE between days All groups were given an educational strategy, which consisted of instruction on the anatomy of the pelvic floor and the physiology of the pelvic organs. Women were advised to minimize their risk factors by not gaining weight or smoking, limiting caffeine intake, optimizing nutritional intake to limit constipation, and avoiding weightlifting and other high impact sports. They were also instructed on proper toileting habits to avoid straining the pelvic floor and were taught to use the knack manoeuvre before and during tasks that increase intra-abdominal pressure n=33	**PFMT** At each session, participants were encouraged to achieve ten maximal effort and rapid contractions lasting 1 s each, to maintain an isometric contraction up to 10 s, and to repeat this ten times. If a woman achieved a score < 3 on levator ani testing, intravaginal electrical stimulation was used for 15 min during the session to enhance PFM awareness and contraction. Exercises were performed using a manometry probe, interfaced with an IBM compatible computer for biofeedback. After each treatment session, women were instructed to perform one to three sets of 5 to 10 repetitions PFM exercises daily at home, between 1 and 3 times per day. n=33	• PFDI-20 • POPDI • CRADI • UDI • PFIQ-7 • POPIQ • CRAIQ • UIQ • Adherence
Nyhus 2020 RCT	N=151 Women with an indication	**PFMT** Women received an information leaflet and were encouraged to	**No treatment** Women in the control group received no	• Sensation of vaginal bulge

Study	Population	Intervention	Comparison	Outcomes
Norway	for POP surgery	perform daily PFMT consisting of 8–12 contractions, each held for 6–8 s, three times a day. They received information on prevention and treatment of obstipation and proper emptying of the bladder and bowel. They were also instructed to perform PFM contraction in situations leading to increased intra-abdominal pressure (sneezing, lifting, coughing) and to avoid straining when defecating. n=75	intervention during the wait for surgery. n=76	• Improvement in POP symptoms • Recurrence of POP symptoms
Okayama 2019 RCT Japan	N=150 (including one group that did not match the protocol criteria and was not included, without this group N=100) Women with SUI	**PFMT** PFMT using a training CD with music, at home, twice per week for 12 weeks, with a morning, afternoon and evening Practice n=50	**No treatment** Participants had no treatment during the 12-week period n=50	• Improvement or cure • Cure only • UI episodes per week • ICIQ-SF
Ptak 2020 RCT Poland	N=150 Women with SUI	**PFMT + abdominal exercises** Pelvic floor muscle exercises with a cocontraction of the transverse abdominal muscle, performed four times per week for a period of three months. Each session included three series of PFM exercises with 10 repetitions, with 60-70% of a maximal voluntary contraction lasting for 6-8 seconds, followed by two series with 10 repetitions, with 30-60% of a MVC lasting for 1-2 seconds. n=75	**PFMT** The training program for the PFMT alone group was essentially the same, however, without the cocontraction of the TrA n=75	• ICIQ-LUTS QOL
Teixeira Alve 2020 RCT	N=101 Women with OAB	**TTNS sensitivity threshold and TTNS motor threshold** Patients allocated to groups 1 and 2	**Control group** No intervention. n=29	• ICIQ OAB • Adherence

Study	Population	Intervention	Comparison	Outcomes
Brazil		performed 8 sessions of TTNS for 30 min, twice a week. The intervention comprised an 8-session TTNS treatment program, each 30-minute treatment session performed twice weekly for a continuous period of four weeks. n=72		

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there are no forest plots in appendix E).

Quality assessment of studies included in the evidence review

See the evidence profiles in appendix F.

Economic evidence

Included studies

A single economic search was undertaken for all topics included in the scope of this guideline. One economic study was identified which was relevant to this question (Panman 2017).

See the literature search strategy in appendix B and economic study selection flow chart in appendix G.

Excluded studies

Economic studies not included in this review are listed, and reasons for their exclusion are provided in appendix K.

Summary of studies included in the economic evidence review

See the economic evidence tables in appendix H and economic evidence profiles in appendix I.

One Dutch study (Panman 2017) compared the cost-utility of PFMT with watchful waiting in women aged ≥ 55 years with pelvic organ prolapse. The economic evaluation was conducted alongside a randomised controlled trial. Costs were based on a 2013 price year and included the costs of consultations, consummables and prolapse related treatments. QALYs were derived from the EQ-5D questionnaire based on a UK tariff. Mean costs were €239 per person higher in the PFMT group (95% confidence interval: €161 to €319). The incremental

cost-effectiveness ratio was calculated as €31,983 (95% confidence interval: -€76652 to €88078), which could be considered borderline cost-effective at a cost-effectiveness threshold of £20000 to £30000 per QALY using the exchange rate at the time of writing (£1 = €1.3796, https://www.bankofengland.co.uk/statistics/exchange-rates). Bootstrap simulation estimated that there was a 55% probability that PFMT would result in an incremental QALY gain when compared to watchful waiting, although no cost-effectiveness threshold was specified and therefore the study does not report on a probability cost-effective.

Economic model

Although this was initially prioritised for economic analysis, no economic modelling was undertaken for this review. This was because the committee agreed that other topics were higher priorities for economic evaluation and because the committee considered that their recommendations would not represent a large change from current practice and related NICE guidance.

Brief summary of the evidence

Comparison 1. Pelvic floor muscle training (PFMT) versus no treatment (or inactive control)

Subjective change in symptoms

- **Women with POP**:
  - Moderate quality evidence from 1 systematic review showed a clinically important improvement in subjective POP symptoms with PFMT when compared to no treatment.
  - Moderate to high quality evidence from 1 systematic review showed that women with flatus leakage or loose faecal incontinence were less likely to report an increase in symptom bother after PFMT when compared to no treatment.
  - Low quality evidence from 1 systematic review showed no clinically important difference in the rates of increased symptom bother in women with solid faecal incontinence or bowel emptying difficulty after PFMT when compared to no treatment.
  - Very low quality evidence from 1 systematic review showed inconsistent results in terms of subjective change in symptoms for PFMT compared to no treatment or inactive controls.
  - Very low to low quality evidence from 2 RCTs showed no difference between PFMT and no treatment for subjective change in symptoms.
- **Women with SUI**:
  - Very low to high quality evidence from 3 systematic reviews showed a clinically important improvement in subjective SUI symptoms with PFMT when compared to no treatment.
  - Very low to low quality evidence from 2 RCTs showed a clinically important improvement in symptoms in terms of SUI symptoms with PFMT compared to no treatment.
- **Women with UI**:
  - Very low to moderate quality evidence from 3 systematic reviews showed a clinically important improvement in subjective UI symptoms with PFMT when compared to no treatment.
- **Antenatal treatment/prevention of faecal/urinary incontinence (FI/UI):**
  - Very low quality evidence from 1 systematic review showed a clinically important improvement in subjective UI symptoms with antenatal PFMT when compared to no treatment.
- **Postnatal treatment/prevention of FI/UI:**

- Low quality evidence from 1 systematic review showed no difference in sexual function related quality of life at 10 months post-partum with postnatal PFMT when compared to no treatment.

Satisfaction with intervention

- **Women with POP**:
  - Moderate quality evidence from 1 systematic review showed women were more satisfied with PFMT than with no treatment.
- **Women with SUI**:
  - Moderate quality evidence from 1 systematic review showed women were more satisfied with PFMT than with no treatment.
- **Women with UI**:
  - Moderate quality evidence from 1 systematic review showed women were more satisfied with PFMT than with no treatment

Adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 2. Pelvic floor muscle training (PFMT) versus usual care

Subjective change in symptoms

- **Antenatal treatment/prevention of FI/UI:**
  - Very low quality evidence from 1 systematic review showed a clinically important improvement in subjective incontinence symptoms and sexual function with antenatal PFMT when compared to usual care.
- **Postnatal treatment/prevention of FI/UI:**
  - Low quality evidence from 1 systematic review showed a clinically important improvement in subjective UI symptoms with postnatal PFMT when compared to usual care.

Anxiety and depression

- **Postnatal treatment/prevention of FI/UI:**
  - Low quality evidence from 1 systematic review showed a clinically important improvement in anxiety and depression with postnatal PFMT when compared to usual care.

Satisfaction with intervention, adherence to intervention, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 3. Magnetic stimulation versus sham treatment

Subjective change in symptoms

- **Women with SUI:**
  - Moderate quality evidence from 1 systematic review showed a clinically important benefit in terms of quality of life with magnetic stimulation when compared to sham treatment.
- **Women with UI:**
  - Moderate quality evidence from 1 systematic review showed a clinically important benefit in terms of the number of women with improvements in incontinence with magnetic stimulation when compared to sham treatment.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 4. Vaginal cones versus no treatment

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 2 systematic reviews showed inconsistent findings about the benefits of vaginal cones when compared with no treatment for subjective SUI symptoms.
- **Post-natal women with UI:**
  - Very low quality evidence from 1 systematic review showed a benefit of vaginal cones when compared with no treatment for subjective UI symptoms at 1 year follow-up but not at 2 years follow-up.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 5. Electrical stimulation versus no treatment

Subjective change in symptoms

- **Women with SUI:**
  - Very low to low quality evidence from 3 systematic reviews showed a clinically important reduction in subjective SUI symptoms with electrical stimulation when compared to no treatment.
  - Very low quality evidence from 1 RCT showed a possible clinically important benefit and no clinically important difference in subjective SUI symptoms compared to no treatment.
- **Women with OAB:**
  - Low quality evidence from 1 RCT showed a possible clinically important benefit of electrical stimulation in terms of subjective change in symptoms compared to no treatment.

Adherence to intervention

- **Women with OAB:**
  - Low quality evidence from 1 RCT showed no clinically important difference in adherence between electrical stimulation and no treatment.

Satisfaction with intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 6. Electrical stimulation versus sham treatment

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 1 systematic review showed a clinically important reduction in subjective SUI symptoms with electrical stimulation when compared to sham treatment.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 7. PFMT versus electrical stimulation

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 2 systematic reviews showed no difference in subjective SUI symptoms with PFMT when compared to electrical stimulation.
  - Very low quality evidence from 1 network meta-analysis, however, indicated better incontinence related quality of life with PFMT than with electrical stimulation.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

  - No evidence was identified to for these outcomes.

Comparison 8. PFMT versus vaginal cones

Subjective change in symptoms

- **Women with SUI:**
  - Very low to moderate quality evidence from 3 systematic reviews and 1 network meta-analysis showed no difference in subjective SUI symptoms with PFMT when compared to vaginal cones
- **Post-natal women with UI:**
  - Very low quality evidence from 1 systematic review showed no difference in subjective UI symptoms with PFMT when compared to vaginal cones

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 9. PFMT + biofeedback versus electrical stimulation

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 1 network meta-analysis indicated better incontinence related quality of life with PFMT+biofeedback than with electrical stimulation.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 10. Electrical stimulation versus vaginal cones

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 4 systematic reviews showed no difference in subjective SUI symptoms with electrical stimulation when compared to vaginal cones.
  - Very low quality evidence from 1 network meta-analysis, however, indicated better incontinence related quality of life with vaginal cones than with electrical stimulation.
- **Women with UI:**
  - Very low quality evidence from 1 systematic review showed no difference in subjective UI symptoms with PFMT when compared to vaginal cones

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 11. Electrical stimulation versus PTNS

Subjective change in symptoms

- **Women with OAB:**
  - Very low quality evidence from one RCT indicated a possible clinical benefit of electrical stimulation in terms of the subjective severity of symptoms (mild and moderate), but a possible benefit of PTNS in terms of the subjective severity of symptoms (severe).
  - Low quality evidence from 1 RCT showed no difference between interventions in terms of quality of life and subjective severity of symptoms (very severe), however very low quality evidence from another RCT showed a clinically important benefit of electrical stimulation in terms of total quality of life score compared to PTNS.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 12. Vaginal cones versus PFMT + biofeedback

Subjective change in symptoms

- **Women with SUI:**
  - Very low quality evidence from 1 network meta-analysis indicated no difference in incontinence related quality of life with vaginal cones compared to PFMT + biofeedback.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 13. PFMT with more versus less contact with health professionals

Subjective change in symptoms

- **Women with UI:**
  - Moderate quality evidence from 1 systematic review showed a clinically significant subjective improvement in UI symptoms with more contact compared to less contact with health professionals.
- **Women with SUI:**
  - Very low to low quality evidence from 1 systematic review showed a clinically significant subjective improvement in SUI symptoms with more contact compared to less contact with health professionals.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 14. Group PFMT versus individual PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed a clinically significant subjective improvement in UI symptoms with group PFMT compared to individual PFMT.
- **Women with SUI/MUI:**

- Very low quality evidence from one RCT showed no difference in symptom severity between group PFMT compared individual PFMT.

Adherence to intervention

- **Women with UI:**
  - Low quality evidence from 1 systematic review showed that women with UI were more likely to attend at least half of the supervised sessions with group PFMT than with individual PFMT.

Satisfaction with intervention

- **Women with SUI/MUI:**
  - Low quality evidence from 1 RCT showed no difference in women's satisfaction with group PFMT than with individual PFMT. Low quality evidence from another RCT showed no difference in terms of women's perceived benefit with group PFMT compared to individual PFMT.

Anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 15. Direct PFMT (for example voluntary pelvic floor muscle contraction) versus indirect PFMT (for example pelvic floor muscle contraction facilitated through abdominal muscle contraction)

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed no clinically significant difference in subjective UI symptoms with direct PFMT compared to indirect PFMT.

Adherence to intervention

- **Women with UI:**
  - Low quality evidence from 1 systematic review showed that women with UI were more likely to attend at least half of the supervised sessions with direct PFMT than with indirect PFMT.

Satisfaction with intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 16. Individualised PFMT versus generic PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed no clinically significant difference in subjective UI symptoms with individualised PFMT compared to generic PFMT.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes.

Comparison 17. Daily PFMT versus PFMT 3 times per week

Subjective change in symptoms

- **Women with UI:**

- Very low to low quality evidence from 1 systematic review showed no clinically significant difference in subjective UI symptoms with daily PFMT compared to PFMT 3 times per week.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 18. Upright and supine PFMT versus supine only PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed no clinically significant difference in subjective UI symptoms with upright & supine PFMT compared to supine only PFMT.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 19. More intensive PFMT versus less intensive PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to moderate quality evidence from 1 systematic review showed a clinically significant improvement in subjective UI symptoms with more intensive PFMT compared to less intensive PFMT.

Satisfaction with intervention, adherence to intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 20: PFMT (app based) versus PFMT (written)

Subjective change in symptoms

- **Women with SUI/MUI:**
  - Very low quality evidence from 1 RCT showed inconsistent evidence in terms of subjective change in symptoms between written PFMT and app-based PFMT.

Adherence to intervention

- **Women with SUI/MUI:**
  - Very low to low quality evidence from 1 RCT showed a clinically important benefit of app-based PFMT when measured as the number of repetitions, and a possible clinically important benefit in terms of self-reported adherence, compared to written PFMT.

Satisfaction with intervention, anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 21: PFMT (outpatient) versus PFMT (home)

Subjective change in symptoms

- **Women with SUI:**

- Very low quality evidence from 1 RCT showed inconsistent evidence in terms of subjective change in symptoms between outpatient PFMT and home PFMT.

Adherence to intervention

- **Women with SUI:**
  - Very low quality evidence from 1 RCT showed no difference between outpatient PFMT and home PFMT in terms of adherence.

Satisfaction with intervention

- **Women with SUI:**
  - Very low quality evidence from 1 RCT showed a potential clinically important benefit of outpatient PFMT compared to home PFMT in terms of patient satisfaction.

Anxiety and depression and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 22. PFMT + biofeedback versus PFMT

Subjective change in symptoms

- **Women with SUI:**
  - Very low to low quality evidence from 1 systematic review showed inconsistent findings about the benefit of PFMT and biofeedback in terms of quality of life when compared to PFMT alone.
  - Low quality evidence from 1 network meta-analysis showed no clinically important difference between PFMT + biofeedback compared to PFMT alone for quality of life.
  - Very low to low quality evidence from 1 systematic review however did show a clinically important benefit in terms of subjective change in symptoms with PFMT and biofeedback compared to PFMT alone.
- **Women with UI:**
  - Moderate quality evidence from 1 systematic review showed inconsistent findings about the benefit of PFMT and biofeedback when compared to PFMT alone.
  - Very low to moderate quality evidence from 1 RCT showed no clinically important difference between PFMT + biofeedback and PFMT alone in terms of change in subjective symptoms.
- **Women with FI:**
  - Very low to low quality evidence from 1 RCT showed inconsistent evidence, with the majority of evidence showing no clinically important difference between PFMT + biofeedback and PFMT in terms of change in symptoms, and 1 outcome showing a possible benefit of PFMT alone in terms of change in symptoms, and 1 outcome showing a possible benefit in terms of quality of life.

Adherence to intervention

- **Women with UI:**
  - Very low to moderate quality evidence from 1 systematic review showed inconsistent findings about the benefit of PFMT and biofeedback in terms of adherence when compared to PFMT alone.
  - Moderate quality evidence from 1 RCT showed no clinically important difference between PFMT + biofeedback and PFMT alone in terms of adherence.

Anxiety and depression

- **Women with UI:**

- Low quality evidence from 1 systematic review showed no benefit of PFMT and biofeedback in terms of anxiety and depression when compared to PFMT

Satisfaction with intervention, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 23. PFMT + feedback versus PFMT

Subjective change in symptoms

- **Women with UI:**
  - Moderate quality evidence from 1 systematic review showed a clinically important benefit of PFMT and feedback when compared to PFMT alone.

Satisfaction with intervention

- **Women with UI:**
  - Moderate quality evidence from 1 systematic review showed a clinically important benefit of PFMT and feedback when compared to PFMT alone.

Adherence to intervention, anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 24 PFMT + vaginal cones versus PFMT

Subjective change in symptoms

- **Women with SUI:**
  - Very low to low quality evidence from 2 systematic reviews showed no clinically important difference between PFMT + vaginal cones and PFMT alone.

Adherence to intervention, anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 25. PFMT + electrical stimulation versus PFMT

Subjective change in symptoms

- **Women with SUI:**
  - Very low to moderate quality evidence from 2 systematic reviews showed inconsistent findings about the benefits of PFMT + electrical stimulation when compared with PFMT alone for subjective SUI symptoms and quality of life.
  - Very low to moderate quality evidence from 1 RCT showed a clinically important benefit of PFMT + electrical stimulation in terms of quality of life, and a potential clinical important benefit in terms of recurrence of symptoms compared to PFMT alone.
- **Women with UI:**
  - Low quality evidence from 1 RCT showed no clinically important difference between interventions in terms of subjective change in symptoms.
- **Women with FI:**
  - Very low quality evidence showed no clinically important difference between interventions in terms of subjective change in symptoms, and a possible clinical benefit of PFMT + electrical stimulation in terms of quality of life.

Adherence to intervention, anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 26. PFMT (strength + motor learning) versus PFMT (motor learning only)

Subjective change in symptoms

- **Women with UI:**
  - Very low to moderate quality evidence from 1 systematic review showed no clinically important difference between PFMT (strength and motor learning) when compared with PFMT (motor learning alone) for subjective UI symptoms and quality of life.

Adherence to intervention, anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 27. PFMT + abdominal exercise versus PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed no clinically important difference between PFMT + abdominal exercises and PFMT alone.
- **Women with SUI:**
  - Low quality evidence from 1 RCT showed a clinically important benefit of PFMT + abdominal exercises in terms of subjective symptoms, compared to PFMT alone, whereas another RCT with moderate quality evidence showed no clinically important difference between interventions in terms of subjective change in symptoms.
- **Women with PFD (UI/POP/FI):**
  - Low to moderate quality evidence showed no clinically important difference between interventions in terms of subjective change in symptoms.

Adherence to intervention

- **Women with PFD (UI/POP/FI):**
  - Very low quality evidence showed no clinically important difference between interventions in terms of adherence.

Anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 28. PFMT + intravaginal device versus PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low to low quality evidence from 1 systematic review showed no clinically important difference between PFMT + intravaginal devices and PFMT alone.

Adherence to intervention, anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

Comparison 29. PFMT + adherence strategy versus PFMT

Subjective change in symptoms

- **Women with UI:**
  - Very low quality evidence from 1 systematic review showed a clinically important benefit of PFMT + adherence strategy when compared to PFMT alone.

Adherence to intervention

- **Women with UI:**
  - Low quality evidence from 1 systematic review showed a clinically important benefit of PFMT + adherence strategy when compared to PFMT alone.

Anxiety and depression, and adverse events leading to withdrawal/discontinuation

- No evidence was identified to for these outcomes

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

As pelvic floor dysfunction is a complex, multi-factorial process the committee agreed that subjective improvement in the individual associated symptoms (urinary incontinence, emptying disorder of the bladder, emptying disorder of the bowel, faecal incontinence, sexual dysfunction, pelvic organ prolapse, pelvic pain) were the most appropriate critical outcomes for this review. Effective management of these symptoms should have a positive impact on quality of life – so this was also considered a critical outcome. Adherence to the intervention was also considered important as it can determine the success of an intervention. Satisfaction with the intervention and adverse events leading to discontinuation were also important outcomes due to their impact on the intervention's acceptability. Anxiety and depression were also considered important outcomes because of the longer term impact of unmanaged pelvic floor dysfunction on mental health.

The quality of the evidence

The quality of the evidence for this review was assessed using GRADE and ranged from very low to moderate. In general, the evidence was downgraded for two reasons (i) concerns with the risk of bias, predominately selection of the reported results and (ii) the precision of the data, with either one or both of the confidence intervals crossing the line of no effect or passing default or published MIDs and reducing confidence in the true effect sizes.

While evidence was found for all the classes of interventions there was no evidence for any of the interventions in combination with Botox or Duloxetine. No evidence was found for the outcome adverse events leading to withdrawal or discontinuation.

Benefits and harms

Pelvic organ prolapse (POP)

Evidence from 1 systematic review suggested that PFMT improved symptoms of pelvic organ prolapse although 2 RCTs published since did not show consistent benefit. The committee noted these RCTs were in women in whom POP surgery was indicated and that they the women therefore had more severe symptoms which may respond less to pelvic floor muscle training. Therefore they were more confident about the findings synthesised in the included systematic review which came from many studies and included varying degrees of POP. The committee agreed that subjective measures are particularly important as they indicate the woman's perception of success which can benefit their quality of life. An improvement was seen most in women with a prolapse that did not extend below the hymen (Stage I or II POP stage measured by the Pelvic Organ Prolapse Quantification (POP-Q)) so the recommendation was limited to this group.

The committee were conscious that follow-up was not consistent across the included studies, however agreed that in their experience a 4-month period was appropriate in order to review progress and treatment benefit. No evidence was found on the impact of pessaries with

PFMT in women with symptoms of pelvic organ prolapse. The committee were aware from their clinical experience that PFMT may be used in combination with pessaries in women with pelvic organ prolapse. They agreed that a pessary may improve the effectiveness of PFMT due to the pessary offloading the prolapse from the pelvic floor muscles. Therefore, a research recommendation was made.

Stress urinary incontince or mixed urinary incontinence

The evidence (from both systematic reviews and RCTs published since) showed that PFMT was effective in improving symptoms of stress urinary incontinence. The committee acknowledged that two systematic reviews also showed that PFMT improved symptoms in women with mixed urinary incontinence and all types of urinary incontinence, but no evidence was identified for urgency urinary incontinence alone. Patient follow-up varied across the included studies, however the committee agreed that in their experience 3 months was a suitable time period.

Faecal incontinence

The evidence showed that PFMT was effective for women with pelvic organ prolapse and loose faecal incontinence or flatus leakage which supported the recommendation for PFMT in this group. The committee recommended at least 4 months for consistency with the other PFMT for pelvic organ prolapse recommendation There was uncertainty about the effect of PFMT on solid faecal incontinence as this is an uncommon symptom in women with pelvic organ prolapse so no recommendation was made for this group.

Group and individual training

One systematic review suggested that PFMT provided in a group setting or in combination with individual sessions improved symptoms of urinary incontinence and adherence to PFMT. The committee noted that an RCT published since the review did not find a benefit with group PFMT. Although the evidence was low in quality and inconsistent, it was in keeping with the committee's experience in clinical practice that some women prefer the peer support of a group setting while others feel more motivated by one-to-one supervision. For this reason, they recommended a choice of group and individual PFMT training. The committee agreed that ongoing contact time with a health care professional improves adherence and the addition of peer support may improve this further.

Supervising pelvic floor muscle training and review

The evidence indicated that more contact with health professionals during PFMT was associated with better symptom improvement. The committee acknowledged that the included interventions were based on PFMT provided under direct supervision by a suitably trained health care professional with the appropriate expertise. They agreed that in their experience, increased benefit is seen with PFMT if an initial assessment of ability to contract as well as relax the pelvic floor muscles correctly is made with additional contact time following to review progress. This review should take place at least once during the programme to assess progress and once at the end). A review during development would also encourage adherence to the exercise programme. The committee noted that PFMT should be individualised to each woman to ensure the exercises are manageable as ability will differ based on other co-existing conditions. However, due a shift towards providing care virtually in light of the Covid-19 pandemic, a research recommendation about virtual supervision of PFMT was made to inform future guidance (see appendix L).

Supplementing PFMT

The evidence on the use of additional therapies such as weighted vaginal cones, biofeedback and electrical stimulation was inconsistent: some studies showed benefits, and others showed no effect. Some of the evidence suggested that these interventions could help women with pelvic floor muscle training by improving their ability to contract their pelvic floor muscles. In the committee's experience, effective pelvic floor contractions are important for improving pelvic floor dysfunction symptoms and that most women are able to do this as part of a supervised pelvic floor muscle training programme. However, the committee believed that supplementing pelvic floor muscle training programme with biofeedback, electrical stimulation or vaginal cones, could be cost-effective in a subgroup who make little progress during supervised pelvic floor muscle training, especially if their use avoided the need for surgical intervention.

While in general the committee agreed that ability to perform pelvic floor muscle contraction correctly is more important than the load on the pelvic floor muscles, they acknowledged that in physically active women (such as athletes), increasing the load with intravaginal devices may be beneficial. Therefore, a research recommendation was made to investigate this further by using pessaries or weighted cones in combination with PFMT (see appendix L).

Continuing pelvic floor muscle training and follow-up

The evidence comparing more versus less PFMT suggested effectiveness was linked to the amount of PFMT done. Based on their experience, the committee thought it important that women are advised and encouraged at the end of the programme to continue doing pelvic floor muscle training and that they have the opportunity to discuss progress in regular reviews during the initial training programme.

Cost effectiveness and resource use

A Dutch economic evaluation (Panman 2017) compared PFMT with watchful waiting in women with pelvic organ prolapse. The committee noted that whilst providing some evidence for the cost-effectiveness of PFMT that the data was uncertain. They also agreed with the authors that generic quality-of-life scales might not adequately capture all changes in health related quality of life in a condition like prolapse. The committee also noted that this analysis was not directly applicable to a NHS setting.

The clinical review provided some evidence to suggest that PFMT was effective in improving the symptoms of pelvic organ prolapse, stress or mixed urinary incontinence and faecal incontinence. Whilst, the committee recognised that there was a cost to providing PFMT they also took into account that a beneficial programme of PFMT had the potential to delay or avert surgical alternatives to conservative management. Therefore, given the relatively low cost of PFMT the committee considered that it was likely to be cost-effective. The committee did not anticipate that their recommendations would have a significant resource impact as they reflect current best practice and are consistent with the NICE guideline on urinary incontinence and pelvic organ prolapse in women.

The committee believed that most women are able to perform effective pelvic floor muscle contraction through PFMT without the use of additional therapies and devices. However, the committee believed that. in the sub-group who are unable to perform an effective pelvic floor muscle contraction. additional therapies such as weighted vaginal cones, biofeedback and electrical stimulation would be likely to be cost-effective even if the evidence for their effectiveness was somewhat inconsistent. The committee reasoned that any positive contribution made by these additional therapies to the ability to perform pelvic floor contraction had the potential to avert subsequent expensive surgical intervention.

In the latest NHS National Cost Collection 2018/19 (https://www.england.nhs.uk/national-cost-collection/) , the cost of adult group physiotherapy provided by community health

services is £54 as against £63 for one-to-one physiotherapy. The committee therefore recognised that PFMT provided with one-to-one supervision was costlier than group sessions. However, they also considered that there was some low quality and inconsistent evidence questioning the benefit of group PFMT. The committee considered that effectiveness of PFMT would be influenced by the woman's preferences and they considered that whatever approach worked best for the woman was likely to be cost-effective and they made a recommendation which allowed for individual preference.

Other factors the committee took into account

In addition to the research evidence, the committee also took account of the Independent Medicine and Medical Devices Safety Review and the NHS Long Term Plan, which made recommendations on pelvic floor muscle training.

Recommendations supported by this evidence review

This evidence review supports recommendations 1.6.13 to 1.6.20 and also supports recommendations 1.3.15 and 1.3.16 which are supported by both this review as well as evidence review F (1.6.17 is only a cross reference to these). Two research recommendations were also supported by this review (1 on the effectiveness of pessary or intravaginal device combined with pelvic floor muscle training and 1 on virtual contact with a trainer, compared with in-person contact) in the NICE guideline.

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Appendices

Appendix A – Review protocol

Review protocol for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Table 4: Review protocol

ID	Field	Content
0.	PROSPERO registration number	CRD42020166705
1.	Review title	Pelvic floor muscle training for women with pelvic floor dysfunction
2.	Review question	What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?
3.	Objective	The objective of this review is to determine whether pelvic floor muscle training can effectively improve symptoms (including urinary incontinence, pelvic organ prolapse, emptying disorders of the bladder, faecal incontinence, emptying disorders of the bowel, sexual dysfunction and chronic pelvic pain syndromes) associated with pelvic floor dysfunction.
4.	Searches	The following databases will be searched: • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE Searches will be restricted by: • Date: Limit to 1980 (see section 10 for justification) • Language or publication: English language only • Human studies only Other searches: • Inclusion lists of potentially relevant systematic reviews The full search strategies for MEDLINE database will be published in the final review. For each search, the principal database search strategy is quality assured by a second information scientist using an adaptation of the PRESS 2015 Guideline Evidence-Based Checklist.

ID	Field	Content
		The searches will be re-run 6 weeks before final submission of the review and further studies retrieved for inclusion.
5.	Condition or domain being studied	The following symptoms will be addressed as long as they are associated with pelvic floor dysfunction: urinary incontinence, emptying disorders of the bladder, faecal incontinence, emptying disorders of the bowel, pelvic organ prolapse, sexual dysfunction and chronic pelvic pain syndromes.
6.	Population	Inclusion: • Women and young women (aged 12 years and older) with symptoms associated with pelvic floor dysfunction Exclusion: • Women with the following symptoms that are not associated with pelvic floor dysfunction: urinary incontinence, emptying disorders of the bladder, faecal incontinence, emptying disorders of the bowel, pelvic organ prolapse, sexual dysfunction and chronic pelvic pain syndromes. For example, women who have urinary incontinence due to a neurological condition or pelvic cancer will be excluded. During the screening stage, the reported inclusion/exclusion criteria of studies will be examined carefully. We do not anticipate studies on urinary incontinence, emptying disorders of the bladder or pelvic organ prolapse will explicitly state “associated with pelvic floor dysfunction” therefore this will be a pragmatic decision based on the description of the condition provided by the study authors. Some of these symptoms (for example urinary incontinence) are most often due to a failure in the pelvic floor and therefore unless the exclusion criteria states a different cause, these studies are likely to be included. However, for studies on faecal incontinence, emptying disorders of the bowel, sexual dysfunction and pelvic pain the causes are more numerous. As such for these symptoms unless the study specifically states “associated with pelvic floor dysfunction” they will be excluded. If any ambiguity exists, at least two reviewers will make the final decision if to include or exclude the study. • Men • Babies and children under the ages of 12 years

7.	Intervention/Exposure/Test	The following pelvic floor training interventions will be considered:
		• Pelvic floor muscle exercises / Kegel exercise, to include:
		  ○ Pelvic floor muscle contraction exercises
		  ○ Pelvic floor muscle strengthening exercises
		  ○ Pelvic floor muscle training
		  ○ Pelvic floor muscle retraining
		  ○ Knack
		• Pelvic floor muscle relaxation exercises / relaxation retraining
		• Biofeedback training (for example transperineal ultrasound, EMG biofeedback, pressure perinometry, digital biofeedback)
		• Weighted vaginal cones
		• Electrical stimulation (for example transcutaneous stimulation, percutaneous stimulation, intravaginal stimulation)
		• Neuromuscular stimulation

ID	Field	Content
		• Magnetic stimulation • Transcutaneous sacral nerve stimulation * • Transcutaneous posterior tibial nerve stimulation * • Percutaneous posterior tibial nerve stimulation * • Any of the above interventions in combination with Botox • Any of the above interventions in combination with Duloxetine *these are used within conservative management, and are generally considered minimally invasive, and are therefore included
8.	Comparator/Reference standard/Confounding factors	• Any of the above in isolation and combination • No treatment/usual care • Duloxetine (only where Duloxetine is used in combination, as listed above) • Botox (only where botox is used in combination, as listed above)
9.	Types of study to be included	• Systematic reviews of RCTs • Sytematic reviews of other study designs ○ These will be included in order of hierarchy: that is, if no systematic reviews of RCTs are identified we will include systematic reviews of non-RCT data • RCTs published since the systematic reviews will be included if they report outcomes covered by the reviews, or interventions not covered by the reviews Note: For further details, see the algorithm in appendix H, Developing NICE guidelines: the manual.
10.	Other exclusion criteria	• Conference abstracts will be excluded because these do not typically provide sufficient information to fully assess risk of bias • Studies with a mixed population (that is women with symptoms such as urinary incontinence which are associated with pelvic floor dysfunction and women with symptoms that are not associated with pelvic floor dysfunction) will be excluded, unless subgroup analysis for those women with symptoms associated with pelvic floor dysfunction has been reported • Only articles published after 1980 will be included. This was agreed by the committee as this is the date that the condition “pelvic floor dysfunction” was recognised to include agreed terminology on symptoms. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2 815805/ • Percutaneous sacral nerve stimulation (also known as sacral neruomodulatoin) will be excluded as this is an invasive technique which involves an incision to the skin (in comparison to a puncture to the skin, for example in transcutaneous posterior tibial nerve stimulation which is included)
11.	Context	Studies which explicitly demonstrate a change in outcomes for symptoms associated with pelvic floor dysfunction will be prioritised for decision making in regards to recommendations, and these recommendations will apply to those receiving care in any healthcare settings (for example community, primary, secondary care). However, the context of

ID	Field	Content
		recommendations is likely broader than just the health care setting itself. Women who are not currently accessing services may benefit from the recommendations in order to make lifestyle changes which could improve symptoms they are experiencing. Specific recommendations for groups listed in the Equality Considerations section of the scope may be also be made as appropriate.

12.	Primary outcomes (critical outcomes)	• Subjective measure of change in the following symptoms:
		  ○ urinary incontinence
		  ○ emptying disorders of the bladder
		  ○ faecal incontinence
		  ○ emptying disorders of the bowel
		  ○ pelvic organ prolapse
		  ○ sexual dysfunction
		  ○ chronic pelvic pain syndromes
		• Health related QOL
		
		[To note: Any outcome not identified in the included SR will not be searched for separately. We will only extract outcome data as reported in the eligible and included SRs].
		
		For outcomes listed, only validated tools will be included (for example: ICIQ-UI, ICIQ-VS, BFLUTS, KHQ, UDI, ISI, ePAQ, POPSS, PISQ, POPQ, FISI, FIQL, GIQLI, PAC-QM, PAC –SYM, PDI, BPI)

13.	Secondary outcomes (important outcomes)	• Satisfaction with intervention • Adherence to intervention • Anxiety and depression (only validated scales will be included) • Adverse events leading to withdrawal/discontinuation Outcomes are in line with those described in the core outcome set …..
14.	Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into STAR and de-duplicated. Duplicate screening will not be undertaken for this question. Full versions of the selected studies will be obtained for assessment. Studies that fail to meet the inclusion criteria once the full version has been checked will be excluded at this stage. Each study excluded after checking the full version will be listed, along with the reason for its exclusion.

ID	Field	Content
		A standardised form will be used to extract data from studies. One reviewer will extract relevant data into a standardised form, and this will be quality assessed by a senior reviewer. Standard information from each SR will include: aim number of participants, number of primary studies, intervention, comparator, search dates, and overall ROBIS quality score. We will include all non-overlapping SRs. For groups of overlapping SRs we will create a table to map out the primary studies contained within each review, in line with the Cochrane guide to Overview of Reviews (https://training.cochrane.org/handbook/current/chapterv#_Ref524428160)
15.	Risk of bias (quality) assessment	Quality assessment of individual studies will be performed using the following checklists • ROBIS tool for systematic reviews • Cochrane RoB tool v.2 for RCTs and quasi-RCTs Each potentially relevant SR will be assessed using the ROBIS tool, an initial assessment using the "relevance" section will be carried out to ensure the SR meets the PICO of this review. Only those that meet the relevance criteria will be included, and full ROBIS assessment will be conducted. The quality assessment will be performed by one reviewer and this will be quality assessed by a senior reviewer.
16.	Strategy for data synthesis	Depending on the availability of the evidence, the findings will be summarised narratively or quantitatively. <u>Data Synthesis</u> • An overview of each included SR will be presented to provide the descriptive characteristics of the included SRs (see section 14). • Outcome data of the included SR and RCTs will be summarised; the data contained within each study (including effect sizes and 95% confidence intervals) will be presented narratively. • Data will be summarised by interventions and by symptoms associated with PFD. <u>Heterogeneity</u> Heterogeneity of each included SR will be extracted and reported where studies have been pooled. <u>Minimal important differences (MIDs)</u> MIDs will be used to aid interpretation of the findings of the included SRs and RCTs. For outcomes where validated tools are included (for example ICIQ), then the published MIDs will be used. Where no published MID is available, default MIDs will be used: • For risk ratios: 0.8 and 1.25.

ID	Field	Content	
		• For continuous outcomes: ○ For one study: the MID is calculated as +/-0.5 times the baseline SD of the control arm. ○ For two studies: the MID is calculated as +/-0.5 times the mean of the SDs of the control arms at baseline. If baseline SD is not available, then SD at follow up will be used. ○ For three or more studies (metaanalysed): the MID is calculated by ranking the studies in order of SD in the control arms. The MID is calculated as +/- 0.5 times median SD. ○ For studies that have been pooled using SMD (meta-analysed): +0.5 and -0.5 in the SMD scale are used as MID boundaries. <u>Validity</u> The confidence in the findings across all available evidence will be evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group: http://www.gradeworkinggroup.org/ An adapted GRADE format will be used where metaanalysis has been conducted within the included SR, taking into account all GRADE domains. Where only narrative summaries are presented in the SR, GRADE will not be possible.	
17.	Analysis of sub-groups	Stratification All data will initially be pooled for analysis; however, if data is available, separate analysis will also be conducted on: • Women who are pregnant or women after pregnancy • Women before and after gynaecological surgery • Women aged 65 or older • Women with physical disabilities • Women with cognitive impairment • Women who are in perimenopause or postmenopause • According to those who do not identify themselves as women, but who have female pelvic organs Recommendations will apply to all those with pelvic floor dysfunction unless there is evidence of a difference in these stratified groups	
18.	Type and method of review	☒	Intervention
		☐	Diagnostic
		☐	Prognostic
		☐	Qualitative
		☐	Epidemiologic

ID	Field	Content		
		☐	Service Delivery	
		☐	Other (please specify)	
19.	Language	English		
20.	Country	England		
21.	Anticipated or actual start date			
22.	Anticipated completion date	August 2021		
23.	Stage of review at time of this submission	Review stage	Started	Completed
		Preliminary searches	☐	☐
		Piloting of the study selection process	☐	☐
		Formal screening of search results against eligibility criteria	☐	☐
		Data extraction	☐	☐
		Risk of bias (quality) assessment	☐	☐
		Data analysis	☐	☐
24.	Named contact	5a. Named contact National Guideline Alliance 5b Named contact e-mail PreventionofPOP@nice.org.uk 5e Organisational affiliation of the review National Institute for Health and Care Excellence (NICE) and the National Guideline Alliance		
25.	Review team members	• NGA technical team		
26.	Funding sources/sponsor	This systematic review is being completed by the National Guideline Alliance, which is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists. NICE funds the National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England.		

ID	Field	Content	
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.	
28.	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: [NICE guideline webpage].	
29.	Other registration details		
30.	Reference/URL for published protocol	https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=166705	
31.	Dissemination plans	NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as: • notifying registered stakeholders of publication • publicising the guideline through NICE's newsletter and alerts • issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE.	
32.	Keywords	• Pelvic floor muscle training • Pelvic floor dysfunction	
33.	Details of existing review of same topic by same authors	Not applicable	
34.	Current review status	☒	Ongoing
		☐	Completed but not published
		☐	Completed and published
		☐	Completed, published and being updated
		☐	Discontinued
35..	Additional information		
36.	Details of final publication	www.nice.org.uk	

CDSR: Cochrane Database of Systematic Reviews; CENTRAL: Cochrane Central Register of Controlled Trials; DARE: Database of Abstracts of Reviews of Effects; GRADE: Grading of Recommendations Assessment, Development and Evaluation; HTA: Health Technology Assessment; MID: minimally important difference; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; RCT: randomised controlled trial; RoB: risk of bias; SD: standard deviation

Appendix B – Literature search strategies

Literature search strategies for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Clinical Search

Database(s): Medline & Embase (Multifile)
Last searched on **Embase Classic+Embase** 1947 to 2021 February 01, **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily** 1946 to February 01, 2021
Date of last search: 2nd February 2021

Multifile database codes: emczd = Embase Classic+Embase; ppez= MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily

#	Searches
1	Pelvic Floor/ or Pelvic Floor Disorders/ or exp *Urinary Incontinence/ or *Urinary Bladder, Overactive/ or exp *Pelvic Organ Prolapse/ or *Rectocele/ or *Fecal Incontinence/ or Urinary Retention/ or Fecal Impaction/ or Vaginismus/
2	1 use ppez
3	pelvis floor/ or pelvic floor disorder/ or exp *urine incontinence/ or *overactive bladder/ or *bladder instability/ or exp *pelvic organ prolapse/ or *rectocele/ or *feces incontinence/ or urine retention/ or defecation disorder/ or Feces Impaction/ or female sexual dysfunction/ or vaginism/
4	3 use emczd
5	(pelvi$ adj (floor$ or diaphragm$) adj3 (dysfunction$ or disorder$ or fail$ or impair$ or incompeten$ or insufficien$ or dyssynerg$ or symptom$ or laxity or change$ or care$ or health$ or wellbeing$ or well-being$ or prevent$ or rehabilitat$ or weak$ or hypertonic$ or overactiv$ or over activ$ or over-activ$)).tw.
6	(pelvi$ adj (dysfunction$ or disorder$ or fail$ or impair$ or incompeten$ or insufficien$ or dyssynerg$ or symptom$ or laxity or care$ or health$ or wellbeing$ or well-being$ or prevent$ or rehabilitat$ or weak$ or hypertonic$ or overactiv$ or over activ$ or over-activ$)).tw.
7	((stress$ or mix$ or urg$ or urin$) adj5 incontinen$).ti.
8	(bladder$ adj5 (overactiv$ or over activ$ or over-activ$ or instabilit$ or hyper-reflex$ or hyperreflex$ or hyper reflex$ or incontinen$)).ti.
9	(detrusor$ adj5 (overactiv$ or over activ$ or over-activ$ or instabilit$ or hyper-reflex$ or hyperreflex$ or hyper reflex$)).ti.
10	((urgency adj2 frequency) or (frequency adj2 urgency)).ti.
11	((urin$ or bladder$) adj2 (urg$ or frequen$)).ti.
12	(SUI or OAB).ti.
13	(pelvic$ adj3 organ$ adj3 prolaps$).ti.
14	(urinary adj3 bladder adj3 prolaps$).ti.
15	((vagin$ or urogenital$ or genit$ or uter$ or viscer$ or anterior$ or posterior$ or apical or pelvi$ or vault$ or urethr$ or bladder$ or cervi$ or rectal or rectum) adj3 prolaps$).ti.
16	(splanchnoptos$ or visceroptos$).ti.
17	(hernia$ adj3 (pelvi$ or vagin$ or urogenital$ or uter$ or bladder$ or urethr$ or viscer$)).ti.
18	(urethroc?ele$ or enteroc?ele$ or sigmoidoc?ele$ or proctoc?ele$ or rectoc?ele$ or cystoc?ele$ or rectoenteroc?ele$ or cystourethroc?ele$).ti.
19	((faecal or fecal or faeces or feces or fecally or faecally or anal or anally or stool or stools or bowel or double or defecat$ or defaecat$) adj5 (incontinence or incontinent or urge$ or leak or leaking or leakage or soiling or seeping or seepage or impacted or impaction)).ti.
20	(urin$ adj3 (retention$ or retain$)).tw.
21	(voiding adj (disorder$ or dysfunction$ or problem$)).tw.
22	(empty$ adj disorder$ adj3 (bowel$ or bladder$ or vesical$ or stool$)).tw.
23	((urogeni$ or anorec$ or ano-rec$ or ano rec$) adj3 dysfunction$).tw.
24	((difficult$ or delay$ or irregular$ or infrequen$ or pain$) adj3 (defecat$ or defaecat$ or stool$ or faeces or feces or bowel movement$)).tw.
25	(obstruct$ adj3 (defecat$ or defaecat$)).tw.
26	((defecat$ or defaecat$ or evacuat$) adj3 (disorder$ or dysfunction$)).tw.
27	outlet$ dysfunction$ constipa$.tw.
28	(dys?ynerg$ adj (defecat$ or defaecat$)).tw.
29	(pelvi$ adj3 dyskines$).tw.
30	pelvi$ outlet$ obstruct$.tw.
31	anismus$.tw.
32	puborectal$ contract$.tw.

#	Searches
33	((rectal or rectum) adj3 urge$).tw.
34	(female adj sex$ adj (dysfunct$ or satisf$ or problem$ or symptom$ or arous$ or activit$ or disorder$)).tw.
35	(obstruct$ adj3 intercourse).tw.
36	(vagin$ adj3 laxity$).tw.
37	(vagin$ adj wind).tw.
38	vaginismus$.tw.
39	(vagin$ adj penetrat$ adj disorder$).tw.
40	or/2,4-39
41	exp Exercise Therapy/ or Physical Therapy Modalities/ or Electric Stimulation/ or *Electric Stimulation Therapy/ or Transcutaneous Electric Nerve Stimulation/ or *Magnetics/ or Magnetic Field Therapy/ or Biofeedback, Psychology/ or Resistance Training/
42	41 use ppez
43	*physiotherapy/ or pelvic floor muscle training/ or kinesiotherapy/ or *muscle exercise/ or vaginal cone/ or vagina cone/ or weighted vaginal cone/ or electrostimulation/ or electrotherapy/ or transcutaneous nerve stimulation/ or magnetic stimulation/ or magnetotherapy/ or extracorporeal magnetic innervation therapy/ or feedback system/ or biofeedback/ or perineometry/ or resistance training/
44	43 use emczd
45	(((pelvi$ adj (floor$ or muscl$)) or PFM$) adj3 (training or exercise$ or re-training or retraining or rehabilitat$ or strengthen$)).tw.
46	(pelvi$ adj floor$ adj muscl$ adj (physiotherap$ or therap$ or treatment)).tw.
47	(pelvi$ adj floor$ adj (physiotherap$ or physical therap$)).tw.
48	(PFMT or PFME or PFPT).tw.
49	(kegel$ or kegal$ or knack$).tw.
50	(physiotherap$ or physical therap$).ti.
51	physiotherapy-led.tw.
52	(vagin$ adj3 (cone or cones)).tw.
53	(vagin$ adj (ball or balls)).tw.
54	(weight adj (cone or cones)).tw.
55	(pelvi$ adj floor$ adj2 (cone or cones)).tw.
56	((cone or cones) adj5 (continen$ or incontinen$)).ti.
57	(electr$ adj3 stimulat$).tw.
58	(electrostimulat$ or electro-stimulat$).tw.
59	((transcutaneous$ or percutaneous$ or neuromusc$ or posterior$ or anterior$ or tibia$ or perine$ or intravagin$ or intra-vagin$) adj4 stimulat$).tw.
60	((magnet$ or electro-magnet$ or electromagnet$) adj (stimulation$ or therap$ or treatment$)).tw.
61	((magnet$ or electro-magnet$ or electromagnet$) adj (nerve$ or energ$ or pelvi$ floor or pelvi$ muscl$) adj (stimulation$ or therap$ or treatment$)).tw.
62	((magnet$ or electro-magnet$ or electromagnet$) adj innervation$).tw.
63	(interferential$ adj3 (current or currents or therap$ or treatment$)).tw.
64	hifem$.tw.
65	(biofeedback$ or bio-feedback$).mp.
66	((digital$ or manual$) adj3 (feedback$ or palpat$ or assess$ or contract$)).tw.
67	(pressure$ adj3 perin?ometr$).tw.
68	((strength$ or resistan$) adj3 (training or exercise$ or physiotherap$)).tw.
69	(manual adj3 therap$).tw.
70	(myofascia$ adj3 (release$ or therap$ or technique$)).tw.
71	or/42,44-70
72	40 and 71
73	limit 72 to english language
74	limit 73 to yr="1980 -Current"
75	(controlled clinical trial or pragmatic clinical trial or randomized controlled trial).pt. or drug therapy.fs. or (groups or placebo or randomi#ed or randomly or trial).ab.
76	crossover procedure/ or double blind procedure/ or randomized controlled trial/ or single blind procedure/ or (assign* or allocat* or crossover* or cross over* or ((doubl* or singl*) adj blind*) or factorial* or placebo* or random* or volunteer*).ti,ab.
77	meta-analysis/
78	meta-analysis as topic/
79	systematic review/
80	meta-analysis/
81	(meta analy* or metanaly* or metaanaly*).ti,ab.
82	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
83	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
84	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
85	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
86	(search* adj4 literature).ab.
87	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
88	cochrane.jw.
89	((pool* or combined) adj2 (data or trials or studies or results)).ab.

#	Searches
90	75 use ppez
91	76 use emczd
92	90 or 91
93	(or/77-78,81,83-88) use ppez
94	(or/79-82,84-89) use emczd
95	93 or 94
96	92 or 95
97	letter/ or editorial/ or news/ or historical article/ or anecdotes as topic/ or comment/ or case reports/
98	97 use ppez
99	(conference abstract or letter).pt.
100	(editorial or note).pt. or case report/ or case study/ or letter/
101	(or/99-100) use emczd
102	(letter or comment* or abstracts).ti.
103	or/98,101-102
104	randomized controlled trial/
105	random*.ti,ab.
106	or/104-105
107	103 not 106
108	(animals/ not humans/) or exp animals, laboratory/ or exp animal experimentation/ or exp models, animal/ or exp rodentia/
109	108 use ppez
110	(animal/ not human/) or nonhuman/ or exp animal experiment/ or exp experimental animal/ or animal model/ or exp rodent/
111	110 use emczd
112	(rat or rats or mouse or mice).ti.
113	or/107,109,111-112
114	74 not 113
115	96 and 114

Database(s): Cochrane Library
Last searched on **Cochrane Database of Systematic Reviews**, Issue 2 of 12, February 2021, **Cochrane Central Register of Controlled Trials**, Issue 2 of 12, February 2021
Date of last search: 2nd February 2021

#	Searches
#1	MeSH descriptor: [Pelvic Floor] this term only
#2	MeSH descriptor: [Pelvic Floor Disorders] this term only
#3	((pelvi* NEXT (floor* or diaphragm*) NEAR/3 (dysfunction* or disorder* or fail* or impair* or incompeten* or insufficien* or dyssynerg* or symptom* or laxity or change* or care* or health* or wellbeing* or well-being* or prevent* or rehabilitat* or weak* or hypertonic* or overactiv* or over activ* or over-activ*))):ti,ab,kw
#4	((pelvi* NEXT (dysfunction* or disorder* or fail* or impair* or incompeten* or insufficien* or dyssynerg* or symptom* or laxity or care* or health* or wellbeing* or well-being* or prevent* or rehabilitat* or weak* or hypertonic* or overactiv* or over activ* or over-activ*))):ti,ab,kw
#5	MeSH descriptor: [Urinary Incontinence] explode all trees
#6	MeSH descriptor: [Urinary Bladder, Overactive] this term only
#7	(((stress* or mix* or urg* or urin*) NEAR/5 incontinen*)):ti
#8	(((bladder* NEAR/5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex* or incontinen*)))):ti
#9	(((detrusor* NEAR/5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex*)))):ti
#10	(((((urgency NEAR/2 frequency) or (frequency NEAR/2 urgency))))):ti
#11	(((((urin* or bladder*) NEAR/2 (urg* or frequen*))))):ti
#12	(((SUI or OAB))):ti
#13	MeSH descriptor: [Pelvic Organ Prolapse] explode all trees
#14	MeSH descriptor: [Rectocele] this term only
#15	(((pelvic* NEAR/3 organ* NEAR/3 prolaps*))):ti
#16	(((urinary NEAR/3 bladder NEAR/3 prolaps*))):ti
#17	((((vagin* or urogenital* or genit* or uter* or viscer* or anterior* or posterior* or apical or pelvi* or vault* or urethr* or bladder* or cervi* or rectal or rectum) NEAR/3 prolaps*))):ti
#18	(((splanchnoptos* or visceroptos*))):ti
#19	(((hernia* NEAR/3 (pelvi* or vagin* or urogenital* or uter* or bladder* or urethr* or viscer*)))):ti
#20	(((urethroc?ele* or enteroc?ele* or sigmoidoc?ele* or proctoc?ele* or rectoc?ele* or cystoc?ele* or rectoenteroc?ele* or cystourethroc?ele*))):ti
#21	MeSH descriptor: [Fecal Incontinence] this term only
#22	((((faecal or fecal or faeces or feces or fecally or faecally or anal or anally or stool or stools or bowel or double or defecat* or defaecat*) NEAR/5 (incontinence or incontinent or urge* or leak or leaking or leakage or soiling or seeping or seepage or impacted or impaction)))):ti
#23	MeSH descriptor: [Urinary Retention] this term only
#24	(((urin* NEAR/3 (retention* or retain*)))):ti,ab,kw

#	Searches
#25	(((voiding NEXT (disorder* or dysfunction* or problem*))):ti,ab,kw
#26	(((empty* NEXT disorder* NEAR/3 (bowel* or bladder* or vesical* or stool*))):ti,ab,kw
#27	((((urogeni* or anorec* or ano-rec* or ano rec*) NEAR/3 dysfunction*))):ti,ab,kw
#28	MeSH descriptor: [Fecal Impaction] this term only
#29	(((((difficult* or delay* or irregular* or infrequen* or pain*) NEAR/3 (defecat* or defaecat* or stool* or faecal or fecal or faeces or feces or fecally or faecally or bowel movement*))):ti,ab,kw
#30	(((obstruct* NEAR/3 (defecat* or defaecat*))):ti,ab,kw
#31	(((((defecat* or defaecat* or evacuat*) NEAR/3 (disorder* or dysfunction*))):ti,ab,kw
#32	((outlet* dysfunction* constipa*)):ti,ab,kw
#33	(((dys?ynerg* NEXT (defecat* or defaecat*))):ti,ab,kw
#34	(((pelvi* NEAR/3 dyskines*))):ti,ab,kw
#35	((pelvi* outlet* obstruct*)):ti,ab,kw
#36	((anismus*)):ti,ab,kw
#37	((puborectal* contract*)):ti,ab,kw
#38	(((((rectal or rectum) NEAR/3 urge*))):ti,ab,kw
#39	(((female NEXT sex* NEXT (dysfunct* or satisf* or problem* or symptom* or arous* or activit* or disorder*))):ti,ab,kw
#40	(((obstruct* NEAR/3 intercourse))):ti,ab,kw
#41	(((vagin* NEAR/3 laxity*))):ti,ab,kw
#42	(((vagin* NEXT wind))):ti,ab,kw
#43	MeSH descriptor: [Vaginismus] this term only
#44	((vaginismus*)):ti,ab,kw
#45	(((vagin* NEXT penetrat* NEXT disorder*))):ti,ab,kw
#46	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45
#47	MeSH descriptor: [Exercise Therapy] explode all trees
#48	MeSH descriptor: [Physical Therapy Modalities] this term only
#49	(((((pelvi* NEXT (floor* or muscl*)) or PFM*) NEAR/3 (training or exercise* or re-training or retraining or rehabilitat* or strengthen*))):ti,ab,kw
#50	((pelvi* NEXT floor* NEXT muscl* NEXT (physiotherap* or therap* or treatment))):ti,ab,kw
#51	((pelvi* NEXT floor* NEXT (physiotherap* or physical therap*))):ti,ab,kw
#52	((PFMT or PFME or PFPT)):ti,ab,kw
#53	((kegel* or Kegel* or knack*)):ti,ab,kw
#54	((physiotherap* or "physical therap*")):ti
#55	(physiotherapy-led):ti,ab,kw
#56	((vagin* NEAR/3 (cone or cones))):ti,ab,kw
#57	((vagin* NEXT (ball or balls))):ti,ab,kw
#58	((weight NEXT (cone or cones))):ti,ab,kw
#59	(pelvi* NEXT floor* NEAR/2 (cone or cones)):ti,ab,kw
#60	(((cone or cones) NEAR/5 (continen* or incontinen*))):ti
#61	MeSH descriptor: [Electric Stimulation] this term only
#62	MeSH descriptor: [Electric Stimulation Therapy] this term only
#63	MeSH descriptor: [Transcutaneous Electric Nerve Stimulation] this term only
#64	((electr* NEAR/3 stimulat*)):ti,ab,kw
#65	((electrostimulat* or electro-stimulat*)):ti,ab,kw
#66	(((transcutaneous* or percutaneous* or neuromusc* or posterior* or anterior* or tibia* or perine* or intravagin* or intra-vagin*) NEAR/4 stimulat*)):ti,ab,kw
#67	MeSH descriptor: [Magnetics] this term only
#68	MeSH descriptor: [Magnetic Field Therapy] this term only
#69	(((magnet* or electro-magnet* or electromagnet*) NEXT (stimulation* or therap* or treatment*))):ti,ab,kw
#70	(((magnet* or electro-magnet* or electromagnet*) NEXT (nerve* or energ* or pelvi* floor or pelvi* muscl*) NEXT (stimulation* or therap* or treatment*))):ti,ab,kw
#71	(((magnet* or electro-magnet* or electromagnet*) NEXT innervation*)):ti,ab,kw
#72	((interferential* NEAR/3 (current or currents or therap* or treatment*))):ti,ab,kw
#73	(hifem*):ti,ab,kw
#74	MeSH descriptor: [Biofeedback, Psychology] this term only
#75	((biofeedback* or bio-feedback*)):ti,ab,kw
#76	(((digital* or manual*) NEAR/3 (feedback* or palpat* or assess* or contract*))):ti,ab,kw
#77	((pressure* NEAR/3 perin?ometr*)):ti,ab,kw
#78	MeSH descriptor: [Resistance Training] this term only
#79	(((strength* or resistan*) NEAR/3 (training or exercise* or physiotherap*))):ti,ab,kw
#80	((manual NEAR/3 therap*)):ti,ab,kw
#81	(myofascia* NEAR/3 (release* or therap* or technique*)):ti,ab,kw
#82	#47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75 OR #76 OR #77 OR #78 OR #79 OR #80 OR #81
#83	#46 AND #82

Database(s): CRD: Database of Abstracts of Reviews of Effects (DARE), HTA Database
Date of last search: 2nd February 2021

#	Searches
1	MeSH DESCRIPTOR Pelvic Floor IN DARE,HTA
2	MeSH DESCRIPTOR Pelvic Floor Disorders IN DARE,HTA
3	((pelvi* NEXT (floor* or diaphragm*) NEAR3 (dysfunction* or disorder* or fail* or impair* or incompeten* or insufficien* or dyssynerg* or symptom* or laxity or change* or care* or health* or wellbeing* or well-being* or prevent* or rehabilitat* or weak* or hypertonic* or overactiv* or over activ* or over-activ*))) IN DARE, HTA
4	((pelvi* NEXT (dysfunction* or disorder* or fail* or impair* or incompeten* or insufficien* or dyssynerg* or symptom* or laxity or care* or health* or wellbeing* or well-being* or prevent* or rehabilitat* or weak* or hypertonic* or overactiv* or over activ* or over-activ*))) IN DARE, HTA
5	MeSH DESCRIPTOR Urinary Incontinence EXPLODE ALL TREES IN DARE,HTA
6	MeSH DESCRIPTOR Urinary Bladder, Overactive IN DARE,HTA
7	(((stress* or mix* or urg* or urin*) NEAR5 incontinen*)) IN DARE, HTA
8	((bladder* NEAR5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex* or incontinen*))) IN DARE, HTA
9	((detrusor* NEAR5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex*))) IN DARE, HTA
10	(((urgency NEAR2 frequency) or (frequency NEAR2 urgency))) IN DARE, HTA
11	(((urin* or bladder*) NEAR2 (urg* or frequen*))) IN DARE, HTA
12	((SUI or OAB)) IN DARE, HTA
13	MeSH DESCRIPTOR Pelvic Organ Prolapse EXPLODE ALL TREES IN DARE,HTA
14	MeSH DESCRIPTOR Rectocele IN DARE,HTA
15	((pelvic* NEAR3 organ* NEAR3 prolaps*)) IN DARE, HTA
16	((urinary NEAR3 bladder NEAR3 prolaps*)) IN DARE, HTA
17	(((vagin* or urogenital* or genit* or uter* or viscer* or anterior* or posterior* or apical or pelvi* or vault* or urethr* or bladder* or cervi* or rectal or rectum) NEAR3 prolaps*)) IN DARE, HTA
18	((splanchnoptos* or visceroptos*)) IN DARE, HTA
19	((hernia* NEAR3 (pelvi* or vagin* or urogenital* or uter* or bladder* or urethr* or viscer*))) IN DARE, HTA
20	((urethroc?ele* or enteroc?ele* or sigmoidoc?ele* or proctoc?ele* or rectoc?ele* or cystoc?ele* or rectoenteroc?ele* or cystourethroc?ele*)) IN DARE, HTA
21	MeSH DESCRIPTOR Fecal Incontinence IN DARE,HTA
22	((((faecal or fecal or faeces or feces or fecally or faecally or anal or anally or stool or stools or bowel or double or defecat* or defaecat*) NEAR5 (incontinence or incontinent or urge* or leak or leaking or leakage or soiling or seeping or seepage or impacted or impaction))) IN DARE, HTA
23	MeSH DESCRIPTOR Urinary Retention IN DARE,HTA
24	((urin* NEAR3 (retention* or retain*))) IN DARE, HTA
25	((voiding NEXT (disorder* or dysfunction* or problem*))) IN DARE, HTA
26	((empty* NEXT disorder* NEAR3 (bowel* or bladder* or vesical* or stool*))) IN DARE, HTA
27	(((urogeni* or anorec* or ano-rec* or ano rec*) NEAR3 dysfunction*)) IN DARE, HTA
28	MeSH DESCRIPTOR Fecal Impaction IN DARE,HTA
29	(((difficult* or delay* or irregular* or infrequen* or pain*) NEAR3 (defecat* or defaecat* or stool* or faecal or fecal or faeces or feces or fecally or faecally or bowel movement*))) IN DARE, HTA
30	((obstruct* NEAR3 (defecat* or defaecat*))) IN DARE, HTA
31	(((defecat* or defaecat* or evacuat*) NEAR3 (disorder* or dysfunction*))) IN DARE, HTA
32	(((outlet* NEXT dysfunction* NEXT constipa*))) IN DARE, HTA
33	((dys?ynerg* NEXT (defecat* or defaecat*))) IN DARE, HTA
34	((pelvi* NEAR3 dyskines*)) IN DARE, HTA
35	((pelvi* NEXT outlet* NEXT obstruct*)) IN DARE, HTA
36	((anismus*)) IN DARE, HTA
37	((puborectal* NEXT contract*)) IN DARE, HTA
38	(((rectal or rectum) NEAR3 urge*)) IN DARE, HTA
39	((female NEXT sex* NEXT (dysfunct* or satisf* or problem* or symptom* or arous* or activit* or disorder*))) IN DARE, HTA
40	((obstruct* NEAR3 intercourse)) IN DARE, HTA
41	((vagin* NEAR3 laxity*)) IN DARE, HTA
42	((vagin* NEXT wind)) IN DARE, HTA
43	MeSH DESCRIPTOR Vaginismus IN DARE,HTA
44	((vaginismus*)) IN DARE, HTA
45	((vagin* NEXT penetrat* NEXT disorder*)) IN DARE, HTA
46	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45
47	MeSH DESCRIPTOR Exercise Therapy EXPLODE ALL TREES IN DARE,HTA
48	MeSH DESCRIPTOR Physical Therapy Modalities IN DARE,HTA
49	((((pelvi* NEXT (floor* or muscl*)) or PFM*) NEAR3 (training or exercise* or re-training or retraining or rehabilitat* or strengthen*))) IN DARE, HTA
50	((pelvi* NEXT floor* NEXT muscl* NEXT (physiotherap* or therap* or treatment))) IN DARE, HTA
51	((pelvi* NEXT floor* NEXT (physiotherap* or physical therap*))) IN DARE, HTA

#	Searches
52	(((PFMT or PFME or PFPT))) IN DARE, HTA
53	(((kegel* or Kegel* or knack*))) IN DARE, HTA
54	(((physiotherap* or "physical therap*"))):TI IN DARE, HTA
55	((physiotherapy-led)):TI IN DARE, HTA
56	(((vagin* NEAR3 (cone or cones)))):TI IN DARE, HTA
57	(((vagin* NEXT (ball or balls)))):TI IN DARE, HTA
58	(((weight NEXT (cone or cones)))):TI IN DARE, HTA
59	((pelvi* NEXT floor* NEAR2 (cone or cones))):TI IN DARE, HTA
60	(((((cone or cones) NEAR5 (continen* or incontinen*))))):TI IN DARE, HTA
61	MeSH DESCRIPTOR Electric Stimulation IN DARE,HTA
62	MeSH DESCRIPTOR Electric Stimulation therapy IN DARE,HTA
63	MeSH DESCRIPTOR Transcutaneous Electric Nerve Stimulation IN DARE,HTA
64	(((electr* NEAR3 stimulat*))):TI IN DARE, HTA
65	(((electrostimulat* or electro-stimulat*))):TI IN DARE, HTA
66	(((((transcutaneous* or percutaneous* or neuromusc* or posterior* or anterior* or tibia* or perine* or intravagin* or intra-vagin*) NEAR4 stimulat*))):TI IN DARE, HTA
67	MeSH DESCRIPTOR Transcutaneous Electric Nerve Stimulation IN DARE,HTA
68	MeSH DESCRIPTOR Magnetic Field Therapy IN DARE,HTA
69	MeSH DESCRIPTOR Magnetics IN DARE,HTA
70	((((magnet* or electro-magnet* or electromagnet*) NEXT (stimulation* or therap* or treatment*))))):TI IN DARE, HTA
71	((((magnet* or electro-magnet* or electromagnet*) NEXT (nerve* or energ* or pelvi* floor or pelvi* muscl*) NEXT (stimulation* or therap* or treatment*))))):TI IN DARE, HTA
72	(((((magnet* or electro-magnet* or electromagnet*) NEXT innervation*))):TI IN DARE, HTA
73	(((interferential* NEAR3 (current or currents or therap* or treatment*))))):TI IN DARE, HTA
74	((hifem*)):TI IN DARE, HTA
75	MeSH DESCRIPTOR Biofeedback, Psychology IN DARE,HTA
76	(((biofeedback* or bio-feedback*))):TI IN DARE, HTA
77	(((((digital* or manual*) NEAR3 (feedback* or palpat* or assess* or contract*))))):TI IN DARE, HTA
78	(((pressure* NEAR3 perin?ometr*))):TI IN DARE, HTA
79	MeSH DESCRIPTOR Resistance Training IN DARE,HTA
80	(((((strength* or resistan*) NEAR3 (training or exercise* or physiotherap*))))):TI IN DARE, HTA
81	(((manual NEAR3 therap*))):TI IN DARE, HTA
82	((myofascia* NEAR3 (release* or therap* or technique*))):TI IN DARE, HTA
83	#47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75 OR #76 OR #77 OR #78 OR #79 OR #80 OR #81 OR #82
84	#46 AND #83

Economic Search

One global search was conducted for economic evidence across the guideline.

Database(s): CRD: NHS Economic Evaluation Database (NHS EED), HTA Database
Date of last search: 3rd February 2021

#	Searches
1	MeSH DESCRIPTOR Pelvic Floor IN NHSEED,HTA
2	MeSH DESCRIPTOR Pelvic Floor Disorders IN NHSEED,HTA
3	MeSH DESCRIPTOR Urinary Bladder, Overactive IN NHSEED,HTA
4	(((pelvi* NEXT (floor* or diaphragm*) NEAR3 (dysfunction* or disorder* or fail* or impair* or incompeten* or insufficien* or dyssynerg* or symptom* or laxity or change* or care* or health* or wellbeing* or well-being* or prevent* or rehabilitat* or weak* or hypertonic* or overactiv* or over activ* or over-activ*)))) IN NHSEED, HTA
5	MeSH DESCRIPTOR Urinary Incontinence EXPLODE ALL TREES IN NHSEED,HTA
6	MeSH DESCRIPTOR Urinary Bladder, Overactive IN NHSEED,HTA
7	((((stress* or mix* or urg* or urin*) NEAR5 incontinen*))) IN NHSEED, HTA
8	(((bladder* NEAR5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex* or incontinen*)))) IN NHSEED, HTA
9	(((detrusor* NEAR5 (overactiv* or over activ* or over-activ* or instabilit* or hyper-reflex* or hyperreflex* or hyper reflex*)))) IN NHSEED, HTA
10	((((urgency NEAR2 frequency) or (frequency NEAR2 urgency)))) IN NHSEED, HTA
11	((((urin* or bladder*) NEAR2 (urg* or frequen*)))) IN NHSEED, HTA
12	(((SUI or OAB))) IN NHSEED, HTA
13	MeSH DESCRIPTOR Pelvic Organ Prolapse EXPLODE ALL TREES IN NHSEED,HTA
14	MeSH DESCRIPTOR Rectocele IN NHSEED,HTA
15	(((pelvic* NEAR3 organ* NEAR3 prolaps*))) IN NHSEED, HTA
16	(((urinary NEAR3 bladder NEAR3 prolaps*))) IN NHSEED, HTA
17	((((vagin* or urogenital* or genit* or uter* or viscer* or anterior* or posterior* or apical or pelvi* or vault* or urethr* or bladder* or cervi* or rectal or rectum) NEAR3 prolaps*))) IN NHSEED, HTA
18	(((splanchnoptos* or visceroptos*))) IN NHSEED, HTA

#	Searches
19	(((hernia* NEAR3 (pelvi* or vagin* or urogenital* or uter* or bladder* or urethr* or viscer*)))) IN NHSEED, HTA
20	(((urethroc?ele* or enteroc?ele* or sigmoidoc?ele* or proctoc?ele* or rectoc?ele* or cystoc?ele* or rectoenteroc?ele* or cystourethroc?ele*))) IN NHSEED, HTA
21	MeSH DESCRIPTOR Fecal Incontinence IN NHSEED,HTA
22	((((faecal or fecal or faeces or feces or fecally or faecally or anal or anally or stool or stools or bowel or double or defecat* or defaecat*) NEAR5 (incontinence or incontinent or urge* or leak or leaking or leakage or soiling or seeping or seepage or impacted or impaction)))) IN NHSEED, HTA
23	MeSH DESCRIPTOR Urinary Retention IN NHSEED,HTA
24	(((urin* NEAR3 (retention* or retain*)))) IN NHSEED, HTA
25	(((voiding NEXT (disorder* or dysfunction* or problem*)))) IN NHSEED, HTA
26	(((empty* NEXT disorder* NEAR3 (bowel* or bladder* or vesical* or stool*)))) IN NHSEED, HTA
27	((((urogeni* or anorec* or ano-rec* or ano rec*) NEAR3 dysfunction*))) IN NHSEED, HTA
28	MeSH DESCRIPTOR Fecal Impaction IN NHSEED,HTA
29	((((difficult* or delay* or irregular* or infrequen* or pain*) NEAR3 (defecat* or defaecat* or stool* or faecal or fecal or faeces or feces or fecally or faecally or bowel movement*)))) IN NHSEED, HTA
30	(((obstruct* NEAR3 (defecat* or defaecat*)))) IN NHSEED, HTA
31	((((defecat* or defaecat* or evacuat*) NEAR3 (disorder* or dysfunction*)))) IN NHSEED, HTA
32	((((outlet* NEXT dysfunction* NEXT constipa*)))) IN NHSEED, HTA
33	(((dys?ynerg* NEXT (defecat* or defaecat*)))) IN NHSEED, HTA
34	(((pelvi* NEAR3 dyskines*))) IN NHSEED, HTA
35	(((pelvi* NEXT outlet* NEXT obstruct*))) IN NHSEED, HTA
36	(((anismus*))) IN NHSEED, HTA
37	(((puborectal* NEXT contract*))) IN NHSEED, HTA
38	((((rectal or rectum) NEAR3 urge*))) IN NHSEED, HTA
39	(((female NEXT sex* NEXT (dysfunct* or satisf* or problem* or symptom* or arous* or activit* or disorder*)))) IN NHSEED, HTA
40	(((obstruct* NEAR3 intercourse))) IN NHSEED, HTA
41	(((vagin* NEAR3 laxity*))) IN NHSEED, HTA
42	(((vagin* NEXT wind))) IN NHSEED, HTA
43	MeSH DESCRIPTOR Vaginismus IN NHSEED,HTA
44	(((vaginismus*))) IN NHSEED, HTA
45	(((vagin* NEXT penetrat* NEXT disorder*))) IN NHSEED, HTA
46	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45) IN NHSEED, HTA

Database(s): Medline & Embase (Multifile)
Embase Classic+Embase 1947 to 2021 February 01, **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily** 1946 to February 01, 2021
Date of last search: 3rd February 2021

Multifile database codes: emczd = Embase Classic+Embase; ppez= MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily

#	Searches
1	Pelvic Floor/ use ppez
2	Pelvic Floor Disorders/ use ppez
3	pelvis floor/ use emczd
4	pelvic floor disorder/ use emczd
5	(pelvi$ adj (floor$ or diaphragm$) adj3 (dysfunction$ or disorder$ or fail$ or impair$ or incompeten$ or insufficien$ or dyssynerg$ or symptom$ or laxity or change$ or care$ or health$ or wellbeing$ or well-being$ or prevent$ or rehabilitat$ or weak$ or hypertonic$ or overactiv$ or over activ$ or over-activ$)).tw.
6	(pelvi$ adj (dysfunction$ or disorder$ or fail$ or impair$ or incompeten$ or insufficien$ or dyssynerg$ or symptom$ or laxity or care$ or health$ or wellbeing$ or well-being$ or prevent$ or rehabilitat$ or weak$ or hypertonic$ or overactiv$ or over activ$ or over-activ$)).tw.
7	or/1-6
8	exp *Urinary Incontinence/ use ppez
9	*Urinary Bladder, Overactive/ use ppez
10	exp *urine incontinence/ use emczd
11	*overactive bladder/ use emczd
12	*bladder instability/ use emczd
13	((stress$ or mix$ or urg$ or urin$) adj5 incontinen$).ti.
14	(bladder$ adj5 (overactiv$ or over activ$ or over-activ$ or instabilit$ or hyper-reflex$ or hyperreflex$ or hyper reflex$ or incontinen$)).ti.
15	(detrusor$ adj5 (overactiv$ or over activ$ or over-activ$ or instabilit$ or hyper-reflex$ or hyperreflex$ or hyper reflex$)).ti.
16	((urgency adj2 frequency) or (frequency adj2 urgency)).ti.
17	((urin$ or bladder$) adj2 (urg$ or frequen$)).ti.

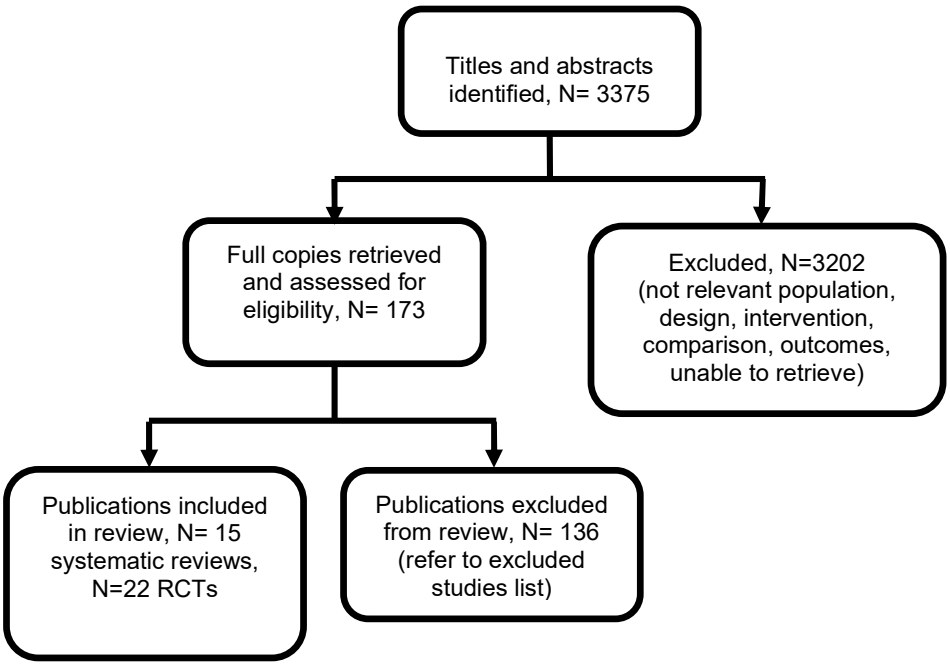
#	Searches
18	(SUI or OAB).ti.
19	or/8-18
20	exp *Pelvic Organ Prolapse/ use ppez
21	exp *pelvic organ prolapse/ use emczd
22	*Rectocele/ use ppez
23	*rectocele/ use emczd
24	(pelvic$ adj3 organ$ adj3 prolaps$).ti.
25	(urinary adj3 bladder adj3 prolaps$).ti.
26	((vagin$ or urogenital$ or genit$ or uter$ or viscer$ or anterior$ or posterior$ or apical or pelvi$ or vault$ or urethr$ or bladder$ or cervi$ or rectal or rectum) adj3 prolaps$).ti.
27	(splanchnoptos$ or visceroptos$).ti.
28	(hernia$ adj3 (pelvi$ or vagin$ or urogenital$ or uter$ or bladder$ or urethr$ or viscer$)).ti.
29	(urethroc?ele$ or enteroc?ele$ or sigmoidoc?ele$ or proctoc?ele$ or rectoc?ele$ or cystoc?ele$ or rectoenteroc?ele$ or cystourethroc?ele$).ti.
30	or/20-29
31	*Fecal Incontinence/ use ppez
32	*feces incontinence/ use emczd
33	((faecal or fecal or faeces or feces or fecally or faecally or anal or anally or stool or stools or bowel or double or defecat$ or defaecat$) adj5 (incontinence or incontinent or urge$ or leak or leaking or leakage or soiling or seeping or seepage or impacted or impaction)).ti.
34	or/31-33
35	Urinary Retention/ use ppez
36	urine retention/ use emczd
37	(urin$ adj3 (retention$ or retain$)).tw.
38	(voiding adj (disorder$ or dysfunction$ or problem$)).tw.
39	(empty$ adj disorder$ adj3 (bowel$ or bladder$ or vesical$ or stool$)).tw.
40	((urogeni$ or anorec$ or ano-rec$ or ano rec$) adj3 dysfunction$).tw.
41	defecation disorder/ use emczd
42	Fecal Impaction/ use ppez
43	Feces Impaction/ use emczd
44	((difficult$ or delay$ or irregular$ or infrequen$ or pain$) adj3 (defecat$ or defaecat$ or stool$ or faeces or feces or bowel movement$)).tw.
45	(obstruct$ adj3 (defecat$ or defaecat$)).tw.
46	((defecat$ or defaecat$ or evacuat$) adj3 (disorder$ or dysfunction$)).tw.
47	outlet$ dysfunction$ constipa$.tw.
48	(dys?ynerg$ adj (defecat$ or defaecat$)).tw.
49	(pelvi$ adj3 dyskines$).tw.
50	pelvi$ outlet$ obstruct$.tw.
51	anismus$.tw.
52	puborectal$ contract$.tw.
53	((rectal or rectum) adj3 urge$).tw.
54	or/35-53
55	female sexual dysfunction/ use emczd
56	(female adj sex$ adj (dysfunct$ or satisf$ or problem$ or symptom$ or arous$ or activit$ or disorder$)).tw.
57	(obstruct$ adj3 intercourse).tw.
58	(vagin$ adj3 laxity$).tw.
59	(vagin$ adj wind).tw.
60	Vaginismus/ use ppez
61	vaginism/ use emczd
62	vaginismus$.tw.
63	(vagin$ adj penetrat$ adj disorder$).tw.
64	or/55-63
65	7 or 19 or 30 or 34 or 54 or 64
66	Economics/ use ppez
67	Value of life/ use ppez
68	exp "Costs and Cost Analysis"/ use ppez
69	exp Economics, Hospital/ use ppez
70	exp Economics, Medical/ use ppez
71	Economics, Nursing/ use ppez
72	Economics, Pharmaceutical/ use ppez
73	exp "Fees and Charges"/ use ppez
74	exp Budgets/ use ppez
75	health economics/ use emczd
76	exp economic evaluation/ use emczd
77	exp health care cost/ use emczd
78	exp fee/ use emczd
79	budget/ use emczd
80	funding/ use emczd
81	budget*.ti,ab.

#	Searches
82	cost*.ti.
83	(economic* or pharmaco?economic*).ti.
84	(price* or pricing*).ti,ab.
85	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
86	(financ* or fee or fees).ti,ab.
87	(value adj2 (money or monetary)).ti,ab.
88	or/66-87
89	65 and 88
90	limit 89 to english language

Appendix C – Clinical evidence study selection

Study selection for: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Figure 1: Study selection flow chart



Appendix D –Evidence tables

Evidence tables for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Table 5: Evidence tables for included systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Dumoulin, C., Cacciari, L. P., Hay-Smith, E. J. C., Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women, Cochrane Database of Systematic Reviews, 2018 **Ref Id** 938956 **Country/ies where the study was carried out** Canada **Study type**	**Sample size** 31 studies N=1817 women Sample sizes ranged from 15-143 participants per studies **Characteristics** All women had UI. Fifteen trials diagnosed the type of UI based on symptoms or signs, or both, thirteen were based on urodynamic diagnoses, one was based on either, and two were unclear. In total, there were 18 SUI studies, one MUI, one UUI, and 9 with a range of UI diagnoses The ages of included participants ranged from 13 to 70+ years.	**Interventions** PFMT versus no treatment, placebo or sham treatments, or other inactive control treatments Three trials gave no information of the PFMT programme used. Two trials had PFMT programmes that clearly or predominantly targeted co-ordination or strength training. Others were difficult to categorise because they were either mixed (strength and endurance) or the key training parameter was not described. Many described a programme of short or short and rapid contractions of one to three seconds and long sustained contractions	**Details** Meta-analyses were conducted where data were available from more than one study assessing the same outcome, using a fixed effect model. Continuous variables used means and SDs to calculate an MD and 95% CI, dichotomous outcomes used the numbers reporting an outcome and the number at risk to calculate a RR and 95% CI	**Results** **Participant perceived cure after treatment** SUI 4 studies, 165 participants, RR 8.38 (3.68, 19.07) UI (all types) 3 studies, 290, RR 5.34 (2.78, 10.26) **Participant perceived cure or improvement after treatment** SUI 3 studies, 242 participants, RR 6.33 (3.88, 10.33) UI (all types) 2 studies, 166 participants, RR 2.39 (1.64, 3.47) **UI specific symptom measures (Kings Health Questionnaire/severity measure after treatment)** SUI 3 studies, 145 participants, MD-13.14 (-21.10, -5.18)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with UI and diagnosed as having SUI, UUI or MUI on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists 2. Intervention: One arm of all eligible trials included a PFMT programme to ameliorate symptoms of existing urine leakage 3. Comparison: no treatment arm, a placebo treatment arm, a sham treatment arm (for example sham electrical

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic review **Aim of the study** To assess the effects of PFMT for women with UI in comparison to no treatment, placebo or sham treatments, or other inactive control treatments; and summarise the findings of relevant economic evaluations **Study dates** The date of the last search was 12 February 2018 **Source of funding** Supported by the NIHR, the primary author was funded by the Canadian Research Chair of the Canadian	**Inclusion criteria** Types of studies: • RCTs • Quasi-randomised trials Types of participants • Women with UI and diagnosed as having SUI, UUI or MUI, defined by trialists Types of interventions and comparisons • One arm must include PFMT to ameliorate symptoms of urine leakage • Another arm of the trial was a no treatment arm, a placebo treatment arm, a sham treatment arm (for example sham electrical stimulation) or an inactive control treatment arm (for example advice on the use of pads) • PFMT included using variations in the purpose and timing of PFMT (for example PFMT for	of 6 to 59 seconds, in addition to contraction prior to and during a cough, or prior to an abdominal strain, and in different body positions. The training programme was progressive in 14 trials, increasing the difficulty of the exercise week by week, including body position or number of repetitions, or holding time Control interventions included • No treatment (19 studies) • Placebo drug (1 study) • Sham electrical stimulation (1 study) Other inactive control treatments including an anti-incontinence device (1 study), advice on incontinence pads (1 study), motivational phone calls (1 study), advice on lifestyle alterations (1 study), general education (2 studies), refraining from special exercises (1 study), access to an		[fixed effects]; -13.44 (-32.44, 5.35) [random effects] **UI specific symptom measures (Kings Health Questionnaire/physical limitation)** SUI 3 studies, 145 participants, MD-11.89 (-20.55, -3.23) **Quality of life measures (Kings Health Questionnaire/general health score)** SUI 3 studies, 145 participants, MD 1.81 (-3.40, 7.03) **Urinary incontinence-specific symptom measures (Incontinence Modular Questionnaire Urinary Incontinence short form)** SUI 3 studies, 196 participants, MD -3.45 (-4.39, -2.52) MUI 1 study, 12 participants, MD -3.97 (-7.85, -0.09) **Urinary incontinence-specific quality of life measures (Incontinence Impact Questionnaire short form)**	stimulation) or an inactive control treatment arm (for example advice on the use of pads). 4. Outcomes: Participant-reported measures (symptomatic cure of UI at the end of treatment; symptomatic cure or improvement of UI at the end of treatment; symptom- and condition-specific QoL measures), participant reported outcomes (Longer-term symptomatic cure and improvement; satisfaction; need for further treatment; self-efficacy), Participant-reported quantification of symptoms, clinicians measures, quality of life, adverse effects, measures of likely moderator variables, measures of PFM function, adherence **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Institute of Health Rsearch	strengthening, and PFMT for urge suppression), different ways of teaching PFMT, types of contractions (fast or sustained), and n umber of contractions • Trials that combined PFMT with a single episode of biofeedback or advice on strategies for symptoms were included Types of outcomes There were 5 outcome categories, including: • the woman's observations (symptoms) • quantification of symptoms (for example urine loss) • the clinician's observations (anatomical and functional) • quality of life (QoL) • socioeconomic measures **Exclusion criteria** • Any other type of controlled clinical trial	education pamphlet (2 studies)		SUI 1 study, 35 participants, MD -19.7 (-30.63, -8.77) UI (all types) 2 studies, 176 participants, MD -7.54 (-14.7, -0.39) **Participant perceived satisfaction** SUI 2 studies, 105 participants, RR 5.32 (2.63, 10.74) UI (all types) 1 study, 108 participants, RR 2.77 (1.74, 4.41) Outcomes not meta-analysed ('totals not selected') **Urinary incontinence-specific quality of life measures (Incontinence Modular Questionnaire Lower Urinary Tract Symptoms Quality of Life)** SUI 1 study, 118 participants, MD -5.3 (-7.66, -2.94) **Urinary incontinence-specific symptom measures (Urinary Distress Inventory short form)** SUI 1 study, 35 participants, MD -16 (-29.81, -2.19)	of a protocol and differences between the protocol and review are reported 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Probably yes - Restrictions included women with UI whose symptoms might be due to significant factors outside the urinary tract, nocturnal enuresis, antenatal/postnatal women. Justifications for most of these were provided 1.5 Yes - No restrictions on language **Domain 2: Identification and selection of studies: Low** 2.1 Yes - the Cochrane Incontinence Specialised Register, which contains trials from CENTRAL, MEDLINE, MEDLINE In-Process, MEDLINE Epub

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Women with UI whose symptoms might be due to significant factors outside the urinary tract (for example neurological disorders, cognitive impairment, lack of independent mobility and cancer or radiotherapy) • Women with nocturnal enuresis • Antenatal or postnatal women specifically • Studies including only asymptomatic women doing PFMT for prevention of UI Combination of PFMT with another conservative therapy or drug therapy			UI (all types) 1 study, 121 participants, MD -7.1 (-10.08, -4.12) **Urinary incontinence-specific quality of life measures (Incontinence Impact Questionnaire long form)** UI (all types) 1 study, 48 participants, MD -52.67 (-95, -10.34) **Urinary incontinence-specific quality of life measures (Incontinence of Quality of Life questionnaire)** SUI 1 study, 50 participants, MD -24.6 (-37.75, -11.45) UI (all types) 1 study, 34 participants, MD -28.93 (-35.12, -22.74) **Participant-perceived cure at up to 1 year** UI (all types) 1 study, 120 participants, RR 23.78 (3.32, 170.49) **Participant-perceived cure or improvement at up to 1 year** SUI 1 study, 51 participants, RR 27.93 (1.75, 444.45)	Ahead of Print, ClinicalTrials.gov, WHO ICTRP, UK Clinical Research Network Portfolio, and handsearching of journals and conference proceedings. 2.2 Yes - reviewers cross-referenced relevant conference abstracts identified from the Cochrane Incontinence Specialised Register search to determine if a full-length report had been published and checked the reference lists of included trials 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on language 2.5 Yes - To review authors independently screened the list of titles and abstracts. Two review authors then independently assessed full test articles/abstracts. Any differences of opinion were resolved by discussion or involvement of a third party

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Urinary incontinence-specific symptom measures at 1 year (Urinary Distress Inventory long form) UI (all types) 1 stuyd, 48 participants, MD -38.58 (-67.61, -9.55) **Urinary incontinence-specific quality of life measures at 1 year (Incontinence Impact Questionnaire long form)** UI (all types) 1 study, 48 participants, MD -41.91 (-83.2, -0.62) **Perception of improvement (visual analogue scale)** UI (all types) 1 study, 55 participants, MD 7.3 (6.84, 7.76)	**Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Two review authors independently undertook data extraction, which was cross-checked by a third review author. Any differences of opinion related to the data extraction were resolved by discussion 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For categorical outcomes, the necessary data was the numbers reporting an outcome and the numbers at risk in each group to derive a risk ratio with 95% confidence intervals. For continuous variables, means and standard deviations were needed to derive mean differences and 95% CIs. Where study data were possibly collected but not reported, or data were reported in a form that could not be used in the formal comparisons, reviewers sought further clarification

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					from the trialists. If this was not possible, the reviewers used the most detailed numerical data available to calculate the actual numbers or means and SDs 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool 3.5 Yes - Two review authors independently assessed these domains, which another review author cross-checked. Any differences of opinion were resolved by consensus. **Domain 4: Synthesis and findings: Low** 4.1 Yes - all included studies provide results in the outcome tables 4.2 Yes - the section on differences between protocol and review makes no mention of differences to analyses. 4.3 Probably yes - meta-analysis was done where appropriate. A fixed effect model was used unless

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					there was significant heterogeneity 4.4 Probably yes - Heterogeneity was investigated using subgroup analysis based on the type of incontinence or other differences in populations or interventions. If heterogeneity remained after appropriate investigation and possible removal of outlying trials, the random effects model was used. 4.5 Probably no - To assess publication bias, Eggers test was planned for analyses of >10 studies, however this was not possible. It was also minimised by the search strategy. 4.6 Probably yes - Sensitivity analyses excluding high risk of bias studies was planned however there was insufficient data to do this **Phase 3: Judging risk of bias: Low** A. Yes - no limitations found B. Yes - There is a section of the discussion focusing on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					completeness and applicability of the evidence which discusses relevance of the evidence C. Yes - outcomes are reported for all studies
Full citation Ge, J., Wei, X. J., Zhang, H. Z., Fang, G. Y., Pelvic floor muscle training in the treatment of pelvic organ prolapse: A meta-analysis of randomized controlled trials, Actas Urologicas EspanolasActas Urol Esp, 03, 03, 2020 **Ref Id** 1290442 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 15 studies N=1309 women **Characteristics** See inclusion criteria **Inclusion criteria** • (1) randomised control trial (RCT) • (2) the research participants were female with POP without other serious diseases • (3) the treatment group received PFMT, and the control group received standard treatment or other relative medicine • (4) only articles published in English were included **Exclusion criteria**	**Interventions** • PFMT versus lifestyle advice (6 studies) • PFMT versus watchful waiting (2 studies) • PFMT + lifestyle advice versus lifestyle advice (3 studies) • PFMT versus pessary treatment (1 study) • PFMT versus support device (1 study) • PFMT versus stabilisation advice (1 study) • PFMT + behavioural therapy versus usual care (1 study)	**Details** Clinical outcomes, such as pelvic organ prolapse quantification (POP-Q) stage change, self-reported change in symptoms, pelvic organ prolapse distress inventory-6 (POPDI-6), pelvic floor prolapse symptom score (POP-SS), urinary distress inventory-6 (UDI-6), and colorectal anal distress inventory-8 (CRADI-8) were used for evaluation. The Jadad scoring checklist was used to appraise the quality of involved studies. We evaluated all the RCTs from the five items: appropriateness of generating randomized sequence; randomization statement; description and use of double blind	**Results** **Self-reported change in symptoms** **Better** • RR (95% CI): 2.90 (1.72, 4.89) - 5 studies **Same** • RR (95% CI): 0.70 (0.45, 1.09) - 4 studies **Worse** • RR (95% CI): 0.67 (0.22, 2.03) - 4 studies **POP-SS (SMD, 95% CI)** • -0.24 (-0.71, 0.22) - 5 studies **POPDI-6** • -0.14 (-0.43, 0.15) - 4 studies **CRADI-8** • -0.33 (-0.16, 0.11) - 4 studies **UDI-6**	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Females with POP without other serious diseases 2. Intervention: The treatment group received PFMT 3. Comparison: The control group received standard treatment or other relative medicine 4. Outcomes: POP-Q stage change, Self-reported change in symptoms, POP-

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To assess the overall effect of pelvic muscle training (PFMT) on patients with pelvic organ prolapse (POP) based on eligible randomized controlled trials (RCT). **Study dates** Up to December 2018 **Source of funding**	• duplication publication of the same result or content • mistakes in data • economic analysis, meta-analysis, theoretical research, conference report, expert comment, systematic review, and case report • irrelevant outcomes.		method; detail of withdrawals and dropouts. Studies with a score of less than 3 represented low-quality and high bias risk studies, studies with a score exceeding 3 were considered as high-quality trials.	• -0.17 (-0.43, 0.10) - 4 studies	SS, POPDI-6, CRADI-8 and UDI-6 **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided, however no mention of a protocol. 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Probably yes, there are restrictions such as the outcomes and format, these are not justified but seem appropriate 1.5 Probably no, no restrictions in eligibility criteria based on sources of information mentioned

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 2: Identification and selection of studies: High 2.1 No information - Cochrane, pubmed and Embase were used, but unpublished reports are not mentioned 2.2 No information - additional searching is not mentioned 2.3 No information - the PICO is reported but specific search terms and how they are combined are not 2.4 No information - language is not mentioned 2.5 Probably yes - inclusion of studies into this review was reached by consensus between the two reviewers, but does not specify that assessments were first done independently

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: Low 3.1 Probably yes - data extraction was carried out for two independent reviewers and consensus for any disagreements was made by discussion 3.2 Yes - included studies tables lists most important study characteristics 3.3 Probably yes - All relevant outcomes are included 3.4 Probably yes - quality assessed using a the Jahad scoring checklist 3.5 Probably yes - two independent reviewers carried out the assessments and then compared scores and resolved disagreements by discussion **Domain 4: Synthesis and findings: High** 4.1 Yes - all included studies provide results in the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					outcome tables, both significant and non-significant findings were reported 4.2 No information - no mention of a protocol or registration with prospero 4.3 Probably yes - included studies had similar designs (all RCT) and were analysed by outcome 4.4 Probably no - There was significant heterogeneity between studies in all meta-analyses. In these cases a random effects model was used 4.5 Yes - A funnel plot is reported which was symmetrical 4.6 Probably no - the specific quality assessment of each study was not reported. The methods states that studies with a score exceeding 3 were high quality and less than 3 was low quality, however unclear what the definition of a score of exactly 3 was, of which 8 studies were

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Phase 3: Judging risk of bias: High A. No - heterogeneity is discussed, however not the other limitations such as the search reporting is not reported B. Probably yes - included studies are directly relevant to the question. C. Yes - but significant and non significant results reported
Full citation Hagen, S., Stark, D., Conservative prevention and management of pelvic organ prolapse in women, Cochrane Database of Systematic Reviews, CD003882, 2011 **Ref Id**	**Sample size** 3 studies N=200 women **Characteristics** Populations in included studies: • women with stage I, II or III prolapse of any type • women undergoing prolapse repair surgery • women with stage I or II cystocele	**Interventions** Comparisons: • PFMT versus no treatment (3 studies) Other comparisons were reported but were not relevant for this review.	**Details** A fixed- effect model was used for calculation of pooled estimates and associated 95% confidence intervals. Differences between trials were further investigated if significant heterogeneity existed or appeared obvious from visual inspection of results. Meta-analysis was	**Results** **PFMT versus no treatment** <u>Prolapse symptom score</u> 1 study, 37 participants, MD -3.37 (-6.23, -0.51) <u>Self-report of no improvement in prolapse</u> 1 study, 40 participants, RR 0.48 (0.26, 0.91) <u>Prolapse QoL score</u> 2 studies, 87 participants, SMD -0.51 (-0.94, -0.07)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Adult women with any severity of pelvic organ prolapse. Prolapse included one or more of the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
376573 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To determine the effects of specified conservative interventions on symptoms of pelvic organ prolapse and prolapse severity **Study dates** The date of the most recent search of the trials register was 6 May 2010 **Source of funding**	• women with stage I or II prolapse • Women undergoing surgery to correct POP and/or incontinence • Women over 60 years with anterior POP **Inclusion criteria** Types of studies • Randomised controlled trials • Quasi-randomised controlled trial Types of participants • Adult women with any severity of pelvic organ prolapse • Prolapse included one or more of the following types: anterior vaginal wall prolapse; posterior vaginal wall prolapse; prolapse of the apical segment of the vagina (uterus or vault) • Women at risk of prolapse Types of intervention • One arm of the trial was allocation to a physical or lifestyle		possible for the prolapse severity outcomes of three trials. Outcomes were not measured in the same way across trials, however in some cases meta-analysis was possible using the standardised mean difference.	<u>Change in ICIQ UI-SF</u> 1 study, 39 participants, MD -1.79 (-3.68, 0.10) <u>Mean score for prolapse interference with everyday life</u> 1 study, 40 participants, SMD -0.05 (-0.67, 0.57) <u>Ditrovie quality of life score</u> 1 study, 47 participants, SMD -0.95 (-1.57, -0.34) <u>Satisfaction with treatment (VAS 0-10)</u> 1 study, 47 participants, MD -3.22 (-3.79, -2.65) <u>Number with POP-Q stage not improved</u> 2 studies, 128 participants, RR 0.83 (0.71, 0.96) <u>Mean bladder symptom score</u> 1 study, 47 participants, MD -9.22 (-10.68, -7.76)	following: anterior vaginal wall prolapse; posterior vaginal wall prolapse; prolapse of the apical segment of the vagina (uterus or vault). 2. Intervention: One arm of the trial was allocation to a physical or lifestyle intervention, or combination including such interventions. 3. Comparison: no treatment, surgery or a mechanical device, or physical or lifestyle intervention if appropriate 4. Outcomes: prolapse symptoms, failure to improve prolapse symptoms, QoL, treatment outcome, severity of prolapse, PFM function, urinary outcomes, bowel outcomes, sexual outcomes, psychological outcomes, economic analysis, treatment adherence, adverse events, any other measure of perceived response, any other outcome not pre-specified but judged to be important

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	intervention, or combination including such interventions. This included ○ PFMT ○ PFMT + biofeedback ○ The knack ○ electrical stimulation ○ Weight reduction ○ Reduction of exacerbating activities ○ Treatment of constipation • Comparison interventions were no treatment, surgery or a mechanical device, or physical or lifestyle intervention if appropriate. Types of outcomes Primary outcomes • Prolapse symptoms (reported as number of women with prolapse symptoms) • Failure to improve prolapse symptoms (reported by the woman) • Prolapse symptom scores and prolapse-specific quality of life assessment for				**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention of a protocol being published in 2002 but no link or Prospero registration 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes- No restrictions on study characteristics explicitly reported 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	example PQoL, ICIQ-VS, POP-SS, POPDI • Global assessment of treatment outcome Secondary outcomes • Severity of prolapse • Measures of pelvic floor muscle function • Urinary outcomes • Bowel outcomes • Sexual outcomes • Generic quality of life measures • Psychological outcome measures • Economic analysis Other outcomes • Treatment adherence • Adverse events • Any other outcome measures of perceived response to treatment • Any other outcome not pre-specified, but judged important when performing the review. **Exclusion criteria** Not reported				2.1 Yes - Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, CINAHL, EMBASE, PEDro, UK National Research Register, ClinicalTrials.gov, Current Controlled Trials register, and ZETOC database of conference abstracts were searched 2.2 Yes- The reference lists of relevant articles were searched for other possibly relevant trials, and hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - Two review authors independently assessed each study against the inclusion criteria. Any differences of opinion were resolved through discussion or by involving a third party.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: High 3.1 Yes - Data extraction was undertaken independently by two reviewers and comparisons made to ensure accuracy. Trial data was processed using the Cochrane Handbook for Systematic Reviews of Interventions 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 No information - data was extracted to calculate risk ratio, or mean differences and SDs. No details are given for how this is calculated if this data is not provided in the required format. 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool 3.5 No information - no details on the process of risk of bias assessments including who performed them.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 4: Synthesis and findings: High 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions 4.4 Probably yes - the meta-analysis with more than 1 study showed heterogeneity, however this was not explored with subgroup analysis, nor was a random effects model used. Because of the limited number of studies, results were mainly presented narratively, which is appropriate 4.5 Probably no - Most outcomes had single studies so sensitivity analyses were necessary. Those with more than 1 study and with heterogeneity did not have

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					sensitivity analyses carried out. Narrative synthesis is thorough. 4.6 Probably yes - risk of bias assessed thoroughly, and most was high quality. **Phase 3: Judging risk of bias: High** A. Probably no - authors discuss the limited evidence and some issues with studies of low quality, but don't refer to the limitations identified in domain 3 B. Probably yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies
Full citation Hay-Smith, E. J. C., Herderschee, R., Dumoulin, C., Herbison, G. P., Comparisons of approaches to pelvic floor muscle training for urinary incontinence in	**Sample size** 21 studies N=1490 women **Characteristics** Diagnosis:	**Interventions** • PFMT: more or less contact with health professionals (6 studies) • Group versus individual PFMT (6 studies)	**Details** Meta-analysis where possible using a fixed-effect model unless otherwise stated.	**Results** **More of less contact with health professionals** <u>Patients' perception of change in incontinence - not cured</u> Additional group supervision with no difference in PFMT: 2	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
women, Cochrane Database of Systematic Reviews, 2011 **Ref Id** 939016 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To assess whether there are differences in the effects of alternative approaches to pelvic floor muscle training in the management of urinary (stress, urge, mixed) incontinence in women **Study dates**	• Urodynamic stress urinary incontinence (8 studies) • Urodynamic stress urinary incontinence or stress urinary incontinence (based on signs or symptoms) (1 study) • Only stress urinary incontinence (based on signs or symptoms) (7 studies) • Either stress urinary incontinence or mixed urinary incontinence (where stress incontinence was the predominant symptom) (2 studies) • Either stress incontinence or mixed urinary incontinence (3 studies) • Only mixed urinary incontinence (1 study) Age Some studies set upper limits: • More than 65 years (7 studies) • More than 70 years (1 study) • more than 75 years (2 studies)	• Direct versus indirect PFMT (6 studies) • Individualised versus generic PFMT (1 study) • Daily versus 3x per week PFMT (1 study) • Upright and supine versus supine exercise (1 study) • More intensive versus less intensive PFMT (15 studies) • Strength and motor learning versus motor learning alone PFMT (1 study) • PFMT and abdominal muscle exercise versus PFMT alone (1 study) • PFMT with intravaginal device versus PFMT alone (2 studies) • PFMT and adherence strategy versus PFMT alone (1 study)		studies, 111 participants, RR 0.89 (0.78, 1.03) Individual supervision versus no supervision with differences in PFMT: 1 study, 64 participants, RR 0.86 (0.73, 1.02) <u>Patients' perception of change in incontinence - not improved</u> Additional group supervision with no difference in PFMT: 4 studies, 177 participants, RR 0.29 (0.15, 0.55) Individual supervision versus no supervision with difference in PFMT: 1 study, 64 participants, RR 0.1 (0.01, 0.71) <u>Incontinence specific QoL</u> Results not meta analysed. I-QoL: 1 study, 44 participants, median only, intervention group (more contact); 89, control group (less contact): 79 ICIQ-SF: 1 study, 59 participants, median (IQR), intervention group: 8 (5-13); control group 8 (6-12) <u>Symptoms</u> Results not meta analysed Social activity index: 1 study, results not usable	**Phase 1: Assessing Relevance** 1. Patients: All women with urinary incontinence diagnosed as having stress, urge or mixed incontinence on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists. 2. Intervention: At least two arms of all trials included the use of PFMT 3. Comparison: Different type of PFMT 4. Outcomes: symptomatic cure or improvement as reported by the woman, condition-specific quality of life assessment, number of leakage episodes; measures of leakage severity; micturition frequency; symptom impact; measures of pelvic floor muscle function; other health status or quality of life measures; formal economic analysis; treatment adherence; any of the primary or secondary outcomes in the longer term;

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
The date of the last search was 17 May 2011 **Source of funding**	• More than 80 years (1 study) Based on median or mean age: • up to 45 years (2 studies) • 45-49 years (4 studies) • 50-54 years (10 studies) • 55+ years (5 studies) **Inclusion criteria** Types of studies: • Randomised controlled trials • Quasi-randomised controlled trials Types of participants: • All women with urinary incontinence diagnosed as having stress, urge or mixed incontinence on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists Types of interventions: • At least two arms of all trials included the use of PFMT to treat the symptoms of urine leakage with some			Unvalidated QoL index: 1 study, 22 participants, mean (SD), intervention group (more contact) 1.7 (0.8); control group (less contact) 3.6 (1.5) *Symptom impact index: 1 study* *Symptom impact index (chinese version): 1 study* <u>Treatment adherence</u> Results not meta analysed Compliance:1 study, both groups 'close to 100%' Number of times exercised per week: 1 study, 59 participants, median (IQR), intervention group (more contact) 4 (2 to 6.5), control (less contact) 5 (2 to 6) Clinic attendance: intervention group 21/31, control group N/A **Group versus individual supervision of PFMT** <u>Patients' perception of change in incontinence - not cured</u> Individual supervision versus individual and group supervision, no differences in PFMT: 2 studies, 111 participants, RR 0.89 (0.78, 1.03)	adverse events; any other outcome not pre-specified, but judged important when performing the review. **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention of a protocol in the 'differences between protocol and review' section. This section states that originally, PFMT with/without BF was included, however there were so many studies of BF that this became its own review. Subgroup analysis also changed. 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	difference in the PFMT between the two arms • PFMT was defined as any programme of repeated voluntary pelvic floor muscle contractions, or 'indirect' voluntary pelvic floor muscle contraction irrespective of variations in purpose and training parameters. ○ 'Direct' PFMT includes focusing specifically on a voluntary contraction of the pelvic floor muscles ○ 'Indirect' PFMT includes pelvic floor muscle contraction that is facilitated or enhanced through co-contraction of another related muscle grou • Other comparisons of interest included different exercise parameters, the addition of resistance devices, types of instruction (that is verbal, written), the amount and type of			<u>Patients' perception of change in incontinence - not improved</u> Individual and group supervision versus individual supervision, no difference in PFMT: 3 studies, 133 participants, RR 0.16 (0.05, 0.46) Group supervision versus individual supervision, with difference in PFMT: 1 study, 69 participants, RR 1.2 (0.61, 2.34) <u>Incontinence specific QoL</u> Results not meta analysed Individual only vs individual and group ICIQ-SF: 1 study, only reported for one group Quality of life index: 1 study, mean (SD), group supervision 1.7 (0.8); individual supervision 3.6 (1.5) Individual versus group only *King's health questionnaire: 1 study, reports each item, no total score* *I-QoL: 1 study, reports each item, no total score* I-QoL: 1 study, 240 participants, total score (mean, SD), intervention group 78.1 (17.6); control group 83.1 (15.1)	1.4 Probably yes - restrictions included studies where UI might be due to significant factors outside the urinary tract. Nocturnal enuresis, postnatal/antenatal women were also excluded, as well as interventions for example PFMT with BF, lifestyle advice, and another standalone therapy. All of these seem appropriate and justification was provided for some but not all 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low** 2.1 Yes - the Cochrane Incontinence Group Specialised Trials Register was used which contains trials from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE and CINAHL, and handsearching

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	health professional supervision of training, and the addition of adjuncts for adherence Types of outcomes • the woman's observations (symptoms); • quantification of symptoms (for example, urine loss); • the clinician's observations (anatomical and functional); • quality of life and socioeconomic measures **Exclusion criteria** • Other forms of controlled clinical trials • women with urinary incontinence whose symptoms might be due to significant factors outside the urinary tract, for example neurological disorders, cognitive impairment, lack of independent mobility.			<u>Symptom impact</u> Results not meta-analysed Unvalidated QoL index: 1 study, 22 participants, mean (SD), group supervision 1.7 (0.8), individual supervision 3.6 (1.5) <u>Adherence</u> Results not meta-analysed Compliance: 1 study, both groups 'close to 100%' Number of times exercised per week: 1 study, median (IQR), intervention group 4 (2-6.5), control group 5 (2-6) Unclear: 1 study, intervention group 95%, control group 90% Participated in <50%: 1 study, 16/84, 6/92 Did not attend supervision sessions: 1 study, 11/84, 12/92 No exercise at home: 1 study, 100/123, 86/117 **Direct versus indirect methods of PFMT** <u>Patients' perception of change in incontinence - not cured</u> PFMT versus 'Sapsford approach': 1 study, 64 participants, RR 1.16 (0.98, 1.36)	of journals and conference proceedings 2.2 Probably yes - the Cochrane Incontinence Group Specialised Trials Register included trials identified by handsearching of journals and conference proceedings 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - Two review authors independently evaluated records of all studies retrieved by the Trials Search Coordinator for eligibility without prior consideration of the results. Cross checking took place. Full text assessment was then done by two review authors and cross checked. Any disagreement was resolved through discussion

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Studies investigating nocturnal enuresis in women • Studies that specifically recruited antenatal or postnatal women • PFMT with adjunctive biofeedback unless the same biofeedback intervention was given in both arms • PFMT combined with lifestyles or fluid management advice (such as weight loss) unless the same advice was given in both arms. • PFMT combined with another 'stand alone' conservative therapy (such as bladder training [that is a scheduled voiding regimen], electrical stimulation, vaginal cones), or drug therapy (for example, an anticholinergic).			<u>Patients' perception of change in incontinence - not improved</u> PFMT versus sham/imitation PFMT: 2 studies, 138 participants, RR 0.69 (0.47, 1.02) PFMT versus 'Sapsford' approach: 1 study, 64 participants, RR 10.33 (1.42, 75.4) <u>Incontinence specific QoL</u> Results not meta-analysed I-QoL: 1 study, median % increase, direct 7.8%, indirect 4.8% I-QoL: 1 study, 59 participants, mean SD, change in total score: direct -4.6 (69.0); indirect 8.6 (18.8) *Also reports separate domains* I-QoL: 1 study, 240 participants, mean (SD), total score: direct 78.1 (17.6), indirect 83.1 (15.1) KHQ: 1 study, 11 participants, mean (range), symptom severity scores - PFMT 5.5 (2-9), pilates 3.5 (1-6) KHQ: 1 study, 11 participants, mean, range, composite score - PFMT 152.4 (83.82-197.2), Pilates 256.9 (147.2-416.6)	**Domain 3: Data collection and study appraisal: Low** 3.1 Yes - Data extraction was undertaken independently by two reviewers. A data extraction form used in a previous review was adapted and tested. Extractions were cross-checked. Any disagreements were resolved by discussion 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Probably yes - Where trial data were reported in a form that could not be used in the formal comparisons, reviewers sought further clarification from the trialists. If outcome data was reported in a way such that data could not be combined, it was presented in tables rather than forest plots. 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Symptom impact Results not meta-analysed Symptom impact index (Chinese version): 1 study, 62 participants, avoiding activities due to worry about leaking - direct 15/31, indirect, 8/31. Avoiding activities due to needing a toilet - direct 16/31, indirect 7/31 Adherence Results not meta-analysed Compliance: 1 study, 97 participants, 4 weeks - direct 82%, indirect 91%; 8 weeks - direct 90%, indirect 84%; 12 weeks - direct 89%, indirect 88% Number of exercise sessions per week: 1 study, 44 participants, direct 52 sessions, indirect 54 sessions Participated in <50% of supervised sessions: 1 study, PFMT 16/84, Paula method 6/92 Did not attend any supervised sessions: 1 study, PFMT 11/84, Paula method 12/92 Documented no exercise at home: 1 study, PFMT 100/123, Paula method 86/117 Clinic attendance: 1 study, PFMT group 21/31, Sapsford N/A	3.5 Yes - Two review authors assessed risk of bias independently. Any disagreements were resolved by consensus or discussion **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. Subgroup analyses were said to be different from protocol 4.3 Probably yes - meta-analysis was done where appropriate (where there were enough trials). If meta-analysis was not considered appropriate a narrative synthesis was done. 4.4 Probably yes - heterogeneity was assessed in 3 ways. If there was significant heterogeneity, subgroup analysis was planned in

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Individualised versus generic PFMT Patients' perception of change in incontinence - not improved 1 study, 60 participants, RR 0.83 (0.43, 1.63) Incontinence specific QoL Results not meta-analysed *KHQ: 1 study, only reports each domain, not total score* Adherence Results not meta-analysed Unclear: 1 study, Individualised group 90%; generic PFMT: 95% **Daily versus 3 times per week PFMT** Patients' perception of change in incontinence - not cured 1 study, 40 participants, RR 1.18 (0.84, 1.65) Patients' perception of change in incontinence - not improved 1 study, 40 participants, (no events in either group) **Upright and supine versus supine exercise positions** Adherence	terms of type of UI (stress or urgency) 4.5 Probably no - no funnel plots were produced, however the search strategy should have reduced the risk of publication bias. Many of the analyses had single studies which may make the results precarious. 4.6 Probably yes - risk of bias assessed thoroughly. Sensitivity analysis with respect to risk of bias was planned, however there was insufficient trials to do this. **Phase 3: Judging risk of bias: Low** A. Yes - no issues were identified B. Probably yes - there is a section of the discussion that focuses on completeness and applicability of the evidence C. Yes - outcomes are reported for all studies, with

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Results not meta-analysed Number of clinic visits: 1 study, 44 participants, upright and supine group 8.9 (3.0); supine only 8.4 (2.8) **Strength and motor learning versus motor learning PFMT alone** Patients' perception of change in incontinence - not cured 1 study, 123 participants, RR 1.05 (0.98, 1.13) Patients' perception of change in incontinence - not improved 1 study, 123 participants, RR 0.65 (0.31, 1.40) Incontinence specific QoL Results not meta-analysed *KHQ: 1 study, reports separate domains, not total score* **PFMT and abdominal muscle exercise versus PFMT alone** Patients' perception of change in incontinence - not cured 1 study, 40 participants, RR 0.9 (0.63 (1.25) Patients' perception of change in incontinence - not improved	no specific studies/results over-emphasised

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study, 40 participants, no events in either group <u>Symptom impact</u> Results not meta-analysed Question 5 from ICIQ-LUTSqol: 1 study, PFMT and device 5/15, PFMT alone 5/15 **PFMT with intravaginal resistance device versus PFMT alone** <u>Patients' perception of change in incontinence - not cured</u> 2 studies, 120 participants, RR 1.07 (0.96, 1.20) <u>Patients' perception of change in incontinence - not improved</u> 2 studies, 120 participants, RR 0.86 (0.62, 1.20) <u>Adherence</u> Results not meta-analysed Did not do routine: 1 study, PFMT with adherence strategy 0/41; PFMT 12/34 Did not do twice daily PFMT: 1 study, PFMT with adherence strategy 7/41, PFMT 30/34 **PFMT and adherence strategy versus PFMT alone**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Patients' perception of change in incontinence - not improved 1 study, 41 participants, RR 0.56 (0.34, 0.91) **'More intensive' versus 'less intensive' PFMT programmes** Patients' perception of change in incontinence - not cured 'High' contrast: 3 studies, 175 participants, RR 0.89 (0.80, 0.98) 'Low' contrast: 5 studies, 304 participants, RR 1.06 (1.00, 1.13) Patients' perception of change in incontinence - not improved 'High contrast: 6 studies, 335 participants, RR 0.37 (0.17, 0.84) 'Moderate' contrast: 1 study, 44 participants, RR 0.34 (0.17, 0.71) 'Low' contrast: 7 studies, 405 participants, RR 0.75 (0.59, 0.95)	
Full citation Herbison, G. P., Dean, N., Weighted vaginal	**Sample size** 23 studies N=1806 women	**Interventions** • Cones versus control (5 studies)	**Details** Data were combined when possible, using rate ratios (RR) for	**Results** **Cones versus control** No subjective improvement or cure	**Limitations** Limitations were assessed using the ROBIS tool to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
cones for urinary incontinence, Cochrane Database of Systematic Reviews, 7, CD002114, 2013 **Ref Id** 542506 **Country/ies where the study was carried out** New Zealand/UK **Study type** Systematic review **Aim of the study** To determine the effectiveness of vaginal cones in the management of female urinary stress incontinence **Study dates** Date of the most recent search of the Specialised	**Characteristics** One trial recruited pre-menopausal women, and one post- menopausal women, while another recruited women at three months postpartum. Most trials recruited women with urodynamically-proven stress incontinence with few other inclusion or exclusion criteria. In seven trials, symptoms of stress incontinence were sufficient for women to be included, but in one study it was unclear what inclusion criteria had been used **Inclusion criteria** Types of studies • Randomised or quasi-randomised controlled trials Type of participants • Women whose predominant complaint is stress urinary incontinence (SUI), diagnosed either by symptom classification or	• Cones versus PFMT (11 studies) • Cones versus electrostimulation (5 studies) • Cones + PFMT versus PFMT (2 studies) Excluded comparisons: • Cones + PFMT versus electrostimulation (3 studies) • Cones versus PFMT + cones (2 studies) Most studies involved holding the cone in place for two sessions of 15 minutes per day. Studies that differed from this protocol included: • two times per day for 10 minutes each (1 study) • one time per day for 10 minutes (1 study) • one time per day for 15 minutes (1 study) • women exercised while holding the weighted balls two times a day and carried the weight for one session of 15 minutes (2 studies)	dichotomous data and mean differences (MD) for continuous data. A fixed-effect analysis was used to calculate the pooled estimates and their 95% confidence intervals	2 studies, 215 participants, RR 0.72 (0.52, 0.99) No subjective cure 4 studies, 375 participants, RR 0.84 (0.76, 0.94) **Cones versus PFMT** No subjective improvement or cure 6 studies, 358 participants, RR 0.97 (0.75, 1.24) No subjective cure 5 studies, 338 participants, RR 1.01 (0.91, 1.13) **Cones versus electrostimulation** No subjective improvement of cure after treatment 3 studies, 151 participants, RR 1.26 (0.85, 1.87) No subjective improvement of cure after 6 months 3 studies, 154 participants, RR 1.24 (0.98, 1.59) **Cones + PFMT versus PFMT** No subjective improvement or cure after 6 weeks 1 study, 46 participants, RR 1.41 (0.81, 2.45) No subjective improvement or cure after 12 weeks	assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women whose predominant complaint is stress urinary incontinence (SUI), diagnosed either by symptom classification or urodynamics. 2. Intervention: One arm of the study must have included the use of weighted vaginal cones following a standardised (within trial) protocol 3. Comparison: other conservative treatments such as pelvic floor muscle training (PFMT) or electrostimulation, or surgery, injectables etc. 4. Outcomes: patient symptoms, QoL, physical measures, health economics

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Register was 19 September 2012 **Source of funding** Sources of support include Dunedin Faculty of Medicine, Southern Regional Health Authority, New Zealand Health Research Council, National Institute for Health Research	urodynamic testing or diagnosis? Type of intervention • One arm of the study must have included the use of weighted vaginal cones • Comparators could include other conservative treatments such as pelvic floor muscle training (PFMT) or electrostimulation, or surgery, injectables etc Types of outcomes • Patient symptoms - perception of cure and improvement of urinary incontinence; number of incontinent episodes in 24 hours. • Quality of life measures - general health status (for example SF36), severity of incontinence, psychosocial measures, impact of incontinence. • Physical measures - change in weight of cone retained, perineometry or other measures of pelvic	One study used a different type of cone, varied the weight by asking that the degree of reclining was varied, and instructed women to contract the pelvic floor muscles around the cone Seven trials used 9 weights, 7 used 5 weights, 1 used 3 weights and 1 used 1 weight, and 1 had variable amount of weights. Two studies used balls instead of cones. Three used an unknown number of weights. Comparison groups used a wide range of treatments.		1 study, 46 participants, RR 0.92 (0.51, 1.64) No subjective cure 1 study, 33 participants, RR 1.21 (0.63, 2.32) **Cones + PFMT versus electrostimulation** No subjective improvement or cure after treatment 2 studies, 160 participants, RR 1.46 (0.82, 2.61) **Cones versus PFMT + cones** No subjective cure 1 study, 35 participants, RR 0.83 (0.44, 1.58)	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is no mention of a protocol and a protocol couldn't be located by searching the cochrane library 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes- No restrictions on study characteristics explicitly reported 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	floor muscle strength, pad tests with measured leakage, ultrasound or radiographic measures of bladder neck descent and mobility. • Health economics - cost of interventions, resource implications of differences in outcome, formal economic analysis (for example cost effectiveness, cost utility), teaching time **Exclusion criteria** Not reported				2.1 Yes - trials were identified from the Group's Specialised Register of controlled trials, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, and CINAHL. EMBASE was also searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - at least two review authors checked eligibility. Any differences of opinion were resolved through discussion with a third party. Unclear if two authors assessed titles and abstracts, or just full text.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: Low 3.1 Probably yes - Data extraction was undertaken one author and cross checked by a second. Doesn't explicitly state that what the cross checking involved. 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Probably yes - For the pad tests outcome, the different tests used were dichotomised into improvement/no improvement, sometimes requiring the help of authors. Rate ratios (RR) were used for dichotomous data and mean differences (MD) for continuous data. 3.4 Yes - Two review authors made an independent assessment of methodological quality using the Cochrane Collaboration 'Risk of bias' tool. 3.5 Probably yes - Data were abstracted by the lead

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					author and cross-checked by the co-author **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions 4.4 Yes - there was no substantial heterogeneity. Subgroup analysis was pre-specified for investigation if heterogeneity was present 4.5 Probably no - There were too few studies to make funnel plots clearly interpretable, or to place any reliance on small sample bias statistics. It was also not possible to conduct potential sensitivity analyses for methodological quality

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					due to the small number of trials in each comparison 4.6 Yes - risk of bias assessed thoroughly, and taken into account in the discussion **Phase 3: Judging risk of bias: Low** A. Yes - no limitations identified B. Probably yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies **Other information** Other outcomes include pad test, leakage episodes, PFM strength, leakage (grams)
Full citation Herderschee, R., Hay-Smith, E. J. C., Herbison, G. P., Roovers, J. P., Heineman, M. J., Feedback or	**Sample size** 24 studies N=1583 women **Characteristics** Method of diagnosis	**Interventions** • PFMT + BF versus PFMT alone (16 studies) • PFMT + feedback versus PFMT alone (2 studies)	**Details** For dichotomous data, such as number of women cured or improved, the numbers reporting an outcome to the numbers at risk in each group were	**Results** **PFMT + BF versus PFMT alone** <u>Quality of life - data not meta-analysed</u> Berghmans 1996: Protection, Amount, Frequency, Adjustment, Body image	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
biofeedback to augment pelvic floor muscle training for urinary incontinence in women, Cochrane Database of Systematic Reviews, 2011 **Ref Id** 939021 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To determine whether feedback or biofeedback adds further benefit to PFMT for women with urinary incontinence. To compare the effectiveness of different forms of feedback or biofeedback	• 13 trials diagnosed the type of UI based on urodynamics • 6 trials diagnosed based on urodynamics or symptom questionnaire, or both • One trial based confirmation of SUI on more than 2 g leakage on a 1-hour pad test • In three trials the diagnosis of UI was symptomatic • In one trial it was not stated how UI was diagnosed Type of UI • SUI only: 14 studies • SUI and MUI: 5 studies • SUI, MUI and UUI: 2 studies • UUI and MUI: 1 study • UUI: 2 studies **Inclusion criteria** Types of studies • Randomised controlled trials and quasi-randomised trials Types of participants	Other comparisons were reported but not relevant for this review • PFMT + BF + feedback versus PFMT alone (1 study) • PFMT + BF versus PFMT + feedback (5 studies) • PFMT + BF versus PFMT + BF (2 studies) • **PFMT** There were two main differences between the PFMT in the feedback (or BF) and non-feedback (or BF) arms: the amount of PFMT supervision (and health professional contact) and the PFMT parameters. Amount of supervision • Seventeen trials stated that the amount of supervision was equal in both groups • Seven trials reported different amounts of supervision between the groups, including different numbers of	related to derive a risk ratio, with 95% confidence intervals. For continuous outcome data, such as quality of life scores, results from each study are expressed as a difference in means with 95% confidence intervals. If similar outcomes were reported on different scales the standardised mean difference (SMD) was calculated. Ninety five percent confidence intervals were presented for all outcomes.	(PRAFAB), mean (SD) PFMT+BF 11.1 (5.9) n=20; PFMT 13.1 (8.6) n=20 Laycock 2001a: King's Health Questionnaire (KHQ), mean (SD), PFMT+BF 6.14 (2.59) n=22; PFMT 8.13 (4.44) n=16 McClurg 2006: KHQ total score (also reports the 4 subscales), mean (SD), PFMT+BF 55.1 (39.5) n=10; PFMT 96.7 (44.8), n=10 Schmidt 2009: KHQ total score, mean SD, PFMT+BF 44.25 (9.11) n=11; PFMT 48.7 (22.21) n=11 Smidt 1997: PRAFAB, mean SD, PFMT+BF 7.94 (10.13) n=18; PFMT 11.47 (8.62) n=15 Burgio 2002b: IIQ, SF36SF - no data Goode 2003: IIQ, SF36SF - no data Tejero 2008: IIQ - no data Wang 2004: KHQ - only the 9 reports subscales, not total score <u>Women's perception of change in incontinence - not cured or improved</u> 7 studies, 520 participants, RR 0.75 (0.66, 0.86) Women's perception of change in incontinence - not cured	**Phase 1: Assessing Relevance** 1. Patients: Women of all ages with SUI, UUI or MUI, diagnosed by symptoms (as reported by the woman), signs (as reported or observed by the health care professional) or urodynamics, regardless of cause. 2. Intervention: use of a PFMT programme in two or more arms of the study 3. Comparison: at least one PFMT arm had to include a form of feedback or biofeedback 4. Outcomes: women's observations, clinicians obervations, quantification of symptoms, symptom distress, socioeconomic measures, adverse events, non-prespecified outcomes judged important when performing the review.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates The date of the last search was 13 May 2010 **Source of funding**	• Women of all ages with SUI, UUI or MUI, diagnosed by symptoms (as reported by the woman), signs (as reported or observed by the health care professional) or urodynamics, regardless of cause • Women whose ability to identify and train the pelvic floor muscles might be impaired by trauma or disease were included • Studies that used urodynamic diagnosis of detrusor overactivity as an inclusion criterion that included participants who had urgency but no UUI were included as long as two thirds or more of the study participants had UUI Types of intervention • The trial must have made use of a PFMT programme in two or more arms of the study, to treat UI • At least one PFMT arm had to include a form of	clinic check ups, different durations of sessions (15 minutes vs 1 hour), different number of contacts with health professionals (one appointment and instruction sheet on PFMT in PFMT only groups, vs multiple contacts in BF groupss PFMT parameters • Five trials described a difference in exercise programme across the comparison groups (e.g. different types or number of exercises) • Four trials used the PERFECT scheme to confirm a correct voluntary pelvic floor muscle contraction at baseline or to design an individualised training program • Three trials stated that a correct voluntary pelvic floor muscle contraction was confirmed prior to training by use of		5 studies, 321 participants, RR 0.92 (0.81, 1.05) Women's satisfaction with progress - not satisfied 3 studies, 294 participants, RR 0.65 (0.46, 0.90) <u>Symptom distress - not meta-analysed</u> McClurg 2006: UDI total score (3 subscales also reported), mean (SD) PFMT+BF 81.6 (36.7) n=10; PFMT 113.3 (69.4) n=10 Morkved 2002: leakage index (mean, SD); PFMT+BF 1.9 (0.7) n=48; PFMT 1.9 (0.7) n=46 Morkved 2002: Social activity index, mean (SD); PFMT+BF 9.5 (0.7) n=48; PFMT 9.4 (0.7) n=46 Burgio 2002b: Hopkins symptom checklist 90-R - no data Goode 2003: Hopkins symptoms checklist 90-R - only reports 10 subscales, not total score, does report anxiety - PFMT+BF 45.9 (13.2); PFMT 47.3 (12.2) and depression - PFMT+BF 50.4 (12.1); PFMT 52.8 (12.5) <u>Adherence to treatment - not meta-analysed</u>	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Mention of a protocol in the 'contribution of authors' and 'differences between protocol and review' sections 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes - there are restrictions based on population and interventions, but clear justification for this is provided 1.5 Yes - No restrictions on language and publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	feedback (or BF) to teach, modulate or encourage pelvic floor muscle contractions • PFMT was defined as programme of repeated voluntary pelvic floor muscle contractions taught by a health care professional • Interventions that gave advice on strategies for symptoms of urge and/or frequency or other lifestyles advice were eligible for inclusion provided the same advice was given to both study arms being compared • Feedback studies were defined as those which use a clinician mediated method of giving information about a voluntary pelvic floor muscle contraction back to the woman performing the contraction • Biofeedback studies were defined as those using an instrument or device to record the biological signals during a	digital vaginal palpation **Feedback and Biofeedback (BF)** • Six trials used verbal feedback from the health professional during or after digital vaginal palpation of a voluntary pelvic floor muscle contraction • One also described clinician feedback based on observation of the perineum BF was more commonly used than feedback. Devices included • electrical activity using electromyography (10 trials) • vaginal and/or anal squeeze pressure (10 trials) • movement with ultrasound (1 trial)		Berghmans 1996: adherence to clinical sessions, %, PFMT+BF 100% n=20; PFMT 100% n=20 Laycock 2001a: adherence to home treatment, %, PFMT+BF 79% n=22; PFMT 81% n=16 McClurg 2006: adherence to clinical sessions, %, PFMT+BF 78% n=10; PFMT 78% n=10; adherence to home BF use, %, PFMT+BF 75%, PFMT n/a Morkved 2002: % exercise >3x a week, %, PFMT+BF 88.9% n=48; PFMT 85.3% n=46 Schmidt 2009: compliance with treatment - no data Sherman 1997: adherence to exercises, n, PFMT+BF 0=rarely, 5=occasionally, 9=frequently, 1=all the time, n=15; PFMT 1=rarely, 15=occasionally, 6=frequently, 0=all time time Smidt 1997: adherence to exercises - not data Glavind 1996: number of participants exercising regularly, n, PFMT+BF 17/19; PFMT 7/14 Tejero 2008: 'compliance', n, PFMT+BF 16/16; PFMT 16/18 Wang 2004: adherence to treatment, median %,	**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - trials were identified from the Cochrane Incontinence Group Specialised Trials Register, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, CINAHL. EMBASE was not searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Yes - two review authors independently screened titles and abstracts. Excluded studies were cross checked. Full text was then independently assessed by the two authors.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	voluntary pelvic floor muscle contraction and present this information back to the woman in auditory or visual form • Intravaginal resistance devices that resisted the muscle contraction but also gave biofeedback Types of outcomes • woman's observations • quantification of symptoms • clinician's observations • quality of life • socioeconomic measures **Exclusion criteria** • Studies of women with hypertonic pelvic floor muscles • Studies where PFMT was used to prevent UI • Studies where PFMT was combined with any other physical therapy that might influence pelvic floor muscle performance or drug therapy that might influence urethral			PFMT+BF 0.75 (0.54-1.00) n=34; PFMT 0.833 (0.25-1.00) n=34. Adherence to home training, days (median), PFMT+BF 14.5 (0-44); PFMT 8.5 (0-44) Wilson 1987: adherence to clinical sessions, 'no difference stated' <u>Follow up data - not meta-analysed</u> McClurg 2006: UDI at 24 weeks, total score, mean (SD), PFMT+BF 77.9 (33.5) n=10; PFMT 139.6 (66.5) n=9 McClurg 2006: IIQ at 24 weeks, total score, mean (SD), PFMT+BF 62.5 (44.2) n=10; PFMT 101.6 (46.1) n=9 McClurg 2006: UDI at 16 weeks, total score, mean (SD), PFMT+BF 93.5 (50.9) n=10; PFMT 150.6 (79.7) n=9 McClurg 2006: IIQ at 16 weeks, total score, mean (SD), PFMT+BF 67.8 (44.8) n=10; PFMT 105.6 (58.8) n=9 Schmidt 2009: KHQ total score, mean (SD), PFMT+BF 41.12 (15.44), n=11; PFMT 49.3 (24.96) n=11 Glavind 1996: Women still doing PFM exercises regularly at 2-3 years, PFMT+BF 17/19, PFMT	**Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Data extraction was undertaken by two people and results were cross checked. Any differences were resolved by discussion. A data extraction form was designed an tested to extract the data. 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For dichotomous data the numbers reporting an outcome to the numbers at risk in each group were related to derive a risk ratio, with 95% confidence intervals For continuous outcome data, results from each study are expressed as a difference in means with 95% confidence intervals. If similar outcomes were reported on different scales the standardised mean difference (SMD) was calculated.

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	closure pressure or detrusor contraction • Studies where the trialists described the use of an intra-vaginal resistance device, which did not give auditory or visual feedback on the pelvic floor muscle contraction			7/14. Women still subjective 'cured' at 2-3 years, PFMT+BF 5/19, PFMT 0/14. Women still subjective 'improved' at 2-3 years, PFMT+BF 8/19, PFMT 4/14 Pages 2001: subjective cure and improvement at 3 months, PFMT+BF 13/13, PFMT 27/27; subjective cure at 3 months, PFMT+BF 8/13, PFMT 19/27 Wilson 1987: symptomatic improvement reported by women 'much better', PFMT+BF 3/14; PFMT 2/15 **PFMT+F versus PFMT alone** <u>Quality of life - not meta-analysed</u> Burgio 2002a: IIQ+ SF36SF - no data, text reported no differences between groups <u>Women's perception of change in incontinence - not cured or improved</u> 1 study, participants, RR 0.53 (0.37-0.78) <u>Women's satisfaction with progress - not satisfied</u> 1 study, 116 participants, RR 0.33 (0.16, 0.66) <u>Symptom distress - not meta-analysed</u>	3.4 Yes - The risk of bias for the included studies was assessed using the Cochrane Risk of Bias Assessment Tool 3.5 Yes - Risk of bias was assessed by two authors, and any disagreements were resolved by consesnsus or discussion with a third author. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions. Where there was heterogeneity,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Burgio 2002a: Hopkins symptom checklist - no data **PFMT+F+BF versus PFMT alone** <u>Quality of life - not-meta-analysed</u> Williams 2006: Leicestershire Impact Score - no data <u>Women's perception of change in incontinence - not cured - not meta-analysed</u> Williams 2006: women reporting no symptoms, OR, face to face vs leaflet 1.59 (0.43, 5.87) <u>Symptom distress - not meta-analysed</u> Williams 2006: Number of participants reporting they would be "satisfied with current urinary symptoms for the rest of life", PFMT+F 30/80; PFMT 34/79 <u>Adherence to treatment - not meta-analysed</u> Williams 2006: number of exercises daily performed, %, PFMT+BF+F 76%; PFMT 80%. Women exercising 'most or all of the time', PFMT+F+BF 58/76, PFMT 61/76 **PFMT+BF versus PFMT + F**	pre-specified subgroup analysis was performed. 4.4 Yes - there were pre-specified subgrouping for where there was heterogeneity 4.5 Probably yes - Sensitivity analysis with respect to risk of bias was planned but there were insufficient studies to carry this out. The influence of allocation of concealment was investigated in one comparison (PFMT + BF versus PFMT alone) with a reasonable number of trials 4.6 Probably yes - risk of bias assessed thoroughly. The influence of allocation of concealment was investigated in one comparison **Phase 3: Judging risk of bias: Low** A. Yes - No limitations identified B. Yes - included studies are directly relevant to the question. Conclusions reflect

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Quality of life - not meta-analysed Burgio 2002c: IIQ + SF36SF - no data Tsai 2002: IIQ-7, mean (SD), PFMT+BF 6.91 (3.93) n=43; PFMT+F 7.96 (5.27) n=26 Women's perception of change in incontinence - not cured or improved 2 studies, 130 participants, RR 1.02 (0.64, 1.63) Women's perception of change in incontinence - not cured 1 study, 20 participants, RR 1.0 (0.42, 2.40) Women's satisfaction with progress - not satisfied 1 study, 107 participants, RR 1.59 (0.71, 3.57) Symptom distress - not meta-analysed Burgio 2002c: Hopkins Symptom checklist - no data Aksac 2003: Social Activity Index, median (SD), PFMT+BF 8.1 (0.8) n=20; PFMT+F 7.5 (1.2) n=20 Adherence to treatment - not meta-analysed Tisseverasinghe 2006: % compliance with home exercises, PFMT+BF 76.8% n=10, PFMT+F 63.4% n=10 Tsai 2002: Adherence calculated as a proportion,	both significant and non significant findings C. Yes - outcomes are reported for all studies whether significant or not

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				mean % score (SD), PFMT+BF 88.68 (14.79) n=49; PFMT+F 65.53 (24.86) n=49 <u>Follow up data - not meta-analysed</u> Tisseverasinghe 2006: KHQ at 3 months, reports 9 domains but not total score **PFMT+BF versus PFMT+BF** <u>Quality of life - not meta-analysed</u> Wong 2001: IIQ-7, mean, total score, control 14.29 n=19; experimental 14.29 n=19 <u>Symptom distress - not meta-analysed</u> Wong 2001: UDI-6, mean total score, PFMT+(extra)BF 27.78 n=19; PFMT+BF 16.67 n=19 <u>Adherence to treatment - not meta-analysed</u> Aukee 2002: adherence to home BF group, mean trainings, PFMT+(extra) BF 68 (9-130); PFMT+BF n/a. Adherence to treatment, mean days (range), PFMT+(extra) BF 47.5 (6-93) n=16; PFMT+BF 56.2 (21-87) Also reports data for subgroups	

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Full citation Imamura,M., Abrams,P., Bain,C., Buckley,B., Cardozo,L., Cody,J., Cook,J., Eustice,S., Glazener,C., Grant,A., Hay-Smith,J., Hislop,J., Jenkinson,D., Kilonzo,M., Nabi,G., N'Dow,J., Pickard,R., Ternent,L., Wallace,S., Wardle,J., Zhu,S., Vale,L., Systematic review and economic modelling of the effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence, Health Technology Assessment, 14, 1-215, 2010 **Ref Id**	**Sample size** 176 studies N=9721 women The sample size ranged from 11 to 683, with a total of N=9721 participants. A large proportion of the participants (N = 4197) came from 11 pharmaceutical trials comparing SNRI with placebo **Characteristics** See inclusion criteria **Inclusion criteria** Types of participants • all women had SUI alone (type-1 population) • at least 50% of women had SUI alone; the remainder could have UUI or MUI (type-2 population) • under 50% of women had stress incontinence alone but the majority	**Interventions** • PFMT versus no treatment (14 studies) • PFMT with additional sessions versus PFMT (1 study) • Electrical stimulation versus no treatment (8 studies) • Vaginal cones versus no treatment (2 studies) • PFMT versus electrical stimulation (7 studies) • PFMT versus vaginal cones (6 studies) • PFMT + BF versus PFMT (15 studies) • PFMT + vaginal cones versus PFMT (1 study) • PFMT + electrical stimulation versus PFMT (7 studies) • Excluded combinations; drug treatments; bladder training comparisons	**Details** For trials with multiple publications, only the most up-to-date or complete data for each outcome were included. Overall, there was inconsistency in outcome measures chosen by the trialists. For this reason, quantitative synthesis was performed on primary outcomes only. A random effects model was used to derive summary estimates with 95% CI of odds ratio (OR) for dichotomous variables (cure and improvement rates) and standardised mean difference (SMD) for continuous variables (quality of life measures). The random effects model was chosen because of variability in the characteristics of included studies in terms of participants' diagnoses (inclusion of women with stress, urge or mixed incontinence), variation	**Results** **PFMT versus no treatment** Cure rate 8 studies, PFMT 70/308; control 20/297, OR 5.41 (1.64, 17.82) Adverse events - not meta-analysed 1 study: PFMT 4/33; control 0/33 1 study: PFMT 2/79; control 0/79 **PFMT + BF versus no treatment** Cure rate 2 studies, PFMT 25/60; control 1/50, OR 21.54 (3.65, 126.98) **PFMT versus PFMT plus biofeedback** Cure rate 8 studies, PFMT 61/191; PFMT + BF 87/179, OR 0.48 (0.3, 0.77) Improvement rates 7 studies, PFMT 120/157, PFMT+BF 119/139, OR 0.41 (0.18, 0.97) Adverse events - not meta-analysed 1 study: PFMT 3/15; PFMT+BF 4/15 1 study: PFMT 3/46; PFMT+BF 7/48	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with SUI or incontinence that was predominantly SUI (however diagnosed). Classification of diagnoses was accepted as defined by the trialists. 2. Intervention: non-surgical treatment (could be undertaken in a heath-care professional's office or clinic and patients' homes). Including lifestyle, physical/behavioural therapy (PFMT, electrical stimulation, vaginal cones, bladder training), pharmacotherapy 3. Comparison: A valid comparator was one of the included interventions or no treatment 4. Outcomes: Number of women cured, number of women cured or improved,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
135762 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To assess the clinical effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence (SUI) **Study dates** The main searches were run during September to November 2007, with updates in December 2007/January–February 2008	(50% or more) had MUI with stress symptoms as a predominant pattern; the remainder could have SUI, UUI or MUI (type-3 population) • Incontinent women during pregnancy or in the early postpartum period were considered for inclusion but were analysed separately Types of intervention • Non-surgical treatment was defined as that which could be undertaken in a heath-care professional's office or clinic and patients' homes. Any of the following interventions, alone or in combination, were included ○ lifestyle for example weight loss ○ Physical or behavioural therapy for example PFMT ○ Electrical stimulation ○ Weighted vaginal cones ○ Bladder training • Pharmacotherapy		in the treatment programmes, and the frequency and duration of treatment. Odds ratios were used because of their symmetry compared with relative risks and were therefore unaffected by outcome definitions (for example number of women cured or not cured). Odds ratios were also chosen to fulfil a requirement of the MTC model.	<u>Quality of life - not meta-analysed</u> Social activity index 1 study: median (SD), PFMT 7.5 (1.2) n=20; PFMT+BF 8.1 (0.8) n=30 1 study: mean (SD), PFMT 9.5 (0.74) n=34; PFMT+BF 9.6 (0.61) n=36 Modified PRAFAB 1 study: mean (SD), PFMT 13.1 (8.6) n=20; PFMT+BF 11.1 (5.9) n=20 King's Health Questionnaire 1 study: change in mean (SD), PFMT 8.13 (9.06) n=16; PFMT+BF 6.14 (6.20) Incontinence Impact Questionnaire 1 study, change in mean (SD), PFMT 24.5 (10.8) n=7; PFMT+BF 8.5 (19.9) n=10 **PFMT versus PFMT with additional sessions** <u>Cure rate</u> 3 studies: PFMT 9/60; control 25/58, OR 0.11 (0.03, 0.43) Improvement rates 2 studies: PFMT 21/39; control 34/35, OR 0.05 (0.01, 0.28) <u>Quality of life - not meta-analysed</u> Social activity index 1 study: mean (SD), PFMT 8.2 (2.06) n=29;	adverse events, condition-specific quality of life, quantification of symptoms, participant satisfaction or desire for further treatment, number of women having incontinence surgery, return of symptoms/recurrence, socioeconomic measures, other intermediate, explanatory or treatment specific outcomes **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and very detailed PICO is provided. No mention of a protocol 1.2 Yes - eligibility criteria are appropriate and detailed 1.3 Yes - criteria is detailed and unambiguous. 1.4 Probably yes - there are some restrictions on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Funded by an educational grant by American Medical Services	Where studies reported a comparison involving a programme of interventions (for example PFMT plus BT), then these studies were included, provided that every participant in the intervention arm received all of the specified treatments. Types of comparator • Either one of the included interventions or no treatment Types of outcomes Primary outcomes • Number of women cured. • Number of women cured or improved • Adverse events. • Condition-specific (and generic measures of health-related) quality of life Secondary outcomes • Quantification of symptoms • Participant satisfaction or desire for further treatment • Long-term data			PFMT+additional sessions 9.3 (0.73) n=23 Quality of life index 1 study: mean (SD), PFMT 3.6 (1.5) n=10; PFMT+ additional sessions 1.7 (0.8) n=12 Incontinence quality of life 1 study: median, PFMT 29, n=29; PFMT+additional sessions 89, n=23 **Electrical stimulation versus no treatment** <u>Cure rate</u> 6 studies: ES 9/152; Control 8/136, OR 1.10 (0.41, 2.94) <u>Improvement rate</u> 7 studies: ES 71/192; Control 23/177, OR 3.93 (1.43, 10.80) <u>Adverse events - not meta-analysed</u> 1 study: ES 10/32; Control 0/32 1 study: ES 14/35; Control 7/17 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: change in mean (SD): ES 0.6 (1.02) n=25; Control -0.2 (1.68) n=30 Incontinence Impact questionnaire 1 study: change in mean (SD): ES -4.1 (16.4) n=12; Control -9.1 (17.1) n=12 Urogenital Distress Inventory	population however there is no justification given for most of these 1.5 Yes - there were no restrictions in terms of language or date **Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - the Cochrane Incontinence Group Specialised Register of controlled trials of interventions for urinary incontinence was used, which contained trials identified from MEDLINE, the Cochrane Central Register of Controlled Trials (CENTRAL), CINAHL, and from hand searching relevant journals and conference proceedings. Additional databases were searched: CINAHL, EMBASE, BIOSIS, Science Citation Index and Social Science Citation Index, Current Controlled

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Socioeconomic measures. • Other intermediate, explanatory or treatment specific outcomes for example treatment adherence **Exclusion criteria** • The proportion of women with predominantly SUI was not reported, if the type of incontinence (stress, urge, mixed) was unknown or undiagnosed • If predominant symptoms (stress or urgency) of women with MUI were not specified • Women with urinary incontinence whose symptoms might be due to significant factors outside the urinary tract • Studies investigating nocturnal enuresis in women • Studies investigating prevention of incontinence among childbearing women			11 study: change in mean (SD): ES -11.8 (15.9) n-12; Control -3.3 (8.3) n=12 **Vaginal cones versus no treatment** <u>Improvement rates</u> 2 studies: VC 68/106; Control 54/105, OR 5.43 (0.07, 396.77) <u>Adverse events - not meta-analysed</u> 1 study: VC 18/19; Control 0/32 1 study: VC 2/80; Control 0/79 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: change in mean (SD): VC 0.1 (1.06) n=27; Control -0.2 (1.68) n=30 The Leicester Impact Scale 1 study: Median (IQR): VC 2 (0.00 to 5.0) n=79; Control 1.5 (0.0 to 5.0) n=75 **Bladder training versus no treatment** <u>Cure rate - not meta-analysed</u> 1 study: BT 7/60; Control 2/63, OR 4.03 (0.80, 20.23) <u>Improvement - not meta-analysed</u> 1 study: BT 45/60; Control 15/63, OR 9.60 (4.22, 21.87) <u>Quality of life - not meta-analysed</u>	Trial, ClinicalTrials.gov, UKC RN Portfolio Databas 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy reported in appendices 2.4 Yes - no restrictions on language or publication date 2.5 Probably yes - Titles and abstracts were screened by one reviewer. Full texts were independently assessed by two reviewers. Any disagreements were resolved by consensus or arbitration by a third person. **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - One reviewer extracted data and another reviewer checked the extracted data. Any disagreements that could not be resolved by discussion were referred to an arbiter. A data extraction form was

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Electrical nerve stimulation (for example sacral nerve) was excluded			Incontinence impact questionnaire (0-3) 1 study: Mean (SD): BT 0.25 (0.29) n=39; Control 0.5 (0.59) n=39 **PFMT and ES versus no treatment** <u>Cure rates</u> 2 studies: PFMT+ES 13/78; Control 10/77, OR 1.76 (0.27, 11.54) <u>Improvement rates</u> 2 studies: PFMT+ES 52/58: Control 32/50, OR 8.39 (1.87, 40.32) <u>Adverse events - not meta-analysed</u> 1 study: PFMT+ES 4/67; Control 0/67 <u>Quality of life - not meta-analysed</u> Incontinence Impact Questionnaire 1 study: PFMT+ES n=67; Control n=67, No difference between groups **PFMT versus ES** <u>Cure rates</u> 5 studies: PFMT 15/62; ES 7/62, OR 2.65 (0.82, 8.60) <u>Improvement rates</u> 6 studies: PFMT 69/92; ES 57/98, OR 2.18 (0.76, 6.28) <u>Adverse events - not meta-analysed</u>	developed. Unclear if this was piloted. 3.2 Yes - full included studies tables with all important characteristics at the end of the report 3.3 Probably yes - reports that there was often ambiguity in terms of the reported data from studies. Where possible reported data was used, and did not make the assumption that missing data represented failed treatment 3.4 Probably yes - The assessment used the adapted version of a checklist developed by the Cochrane Incontinence Group 3.5 Probably yes - Two reviewers independently assessed all of the studies that met selection criteria for potential risk of bias. **Domain 4: Synthesis and findings: High**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: PFMT 0/29; Control 10/32 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: Change in mean (SD) PFMT 0.6 (1.02) n=25; ES 0.6 (1.02) n=25 **PFMT with/without BF versus VC** <u>Cure rate: PFMT versus VC</u> 3 studies: PFMT 6/121; VC 11/124, OR 0.61 (0.09, 3.95) <u>Improvement rates: PFMT versus VC</u> 5 studies: PFMT 110/167; VC 108/164, OR 1.01 (0.52, 1.95) <u>Cure rate: PFMT+ BF versus VC</u> 1 study: PFMT+BF 12/30; VC 7/16, OR 0.86 (0.25, 2.93) <u>Improvement rates: PFMT+BF versus VC</u> 1 study: PFMT+BF 16/30; VC 8/16, OR 1.14 (0.34, 3.85) <u>Adverse events: PFMT versus VC - not meta-analysed</u> 1 study: PFMT 0/29; VC 18/29 1 study: not defined 1 study: PFMT 2/79; VC 2/80 <u>Adverse events: PFMT+BF versus VC - not meta-analysed</u> 1 study: PFMT+BF 0-30; VC 14/30	4.1 Probably yes - number of studies in the PRISMA diagram matches number of studies that there are outcomes for 4.2 No information 4.3 Yes - meta-analysis was appropriate for the RCT studies included. A random effects model was used or all analyses due to variability in the characteristics of included studies. Appropriate weighting was used 4.4 Probably yes - a random effects model is used. However, where there is still heterogeneity, forest plots do not have any subgroup sensitivity analyses, although potential reasons for heterogeneity is discussed in the narrative synthesis and describes sensitivity analyses that is removing studies believed to be the cause 4.5 No information - no mention of funnel plots. No mention of sensitivity analyses in regard to robustness. Publication bias

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Quality of life: PFMT versus VC - not meta-analysed Social Activity Index 1 study: Change in mean (SD): PFMT 0.6 (1.02) n=25; VC 0.1 (1.06) n=27 King's Health Questionnaire 1 study: change in mean (SD): PFMT 8.13 (9.06) n=16; VC 7.03 (7.74) n=30 The Leicester Impact Scale 1 study: Median (IQR): PFMT 2 (0-5) n=77; VC 2 (0-5) n=79 Quality of life: PFMT+BF versus VC - not meta-analysed King's health questionnaire 1 study: change in mean (SD): PFMT+BF 6.14 (6.2) n=22; VC 7.03 (7.74) n=30 **PFMT with/without BF versus bladder training** Cure rate: PFMT versus BT 1 study: PFMT 19/40; BT 9/35, OR 2.61 (0.98, 6.96) Cure rate: PFMT+BF versus BT 1 study: PFMT+BF 8/64; BT 12/68, OR 0.67 (0.25, 1.76) Improvement: PFMT+BF versus BT 1 study: PFMT+BF 48/63; BT 43/66, OR 1.71 (0.79, 3.70) Quality of life: PFMT versus BT - not meta-analysed ICIQ-UI SF	was not formally assessed in the analysis, as the number of studies available for each comparison was very limited 4.6 Probably no - risk of bias was assessed using a recommended tool. No mention of sensitivity analysis with respect to trial quality. **Phase 3: Judging risk of bias: Low?** A. Probably no - discusses heterogeneity of studies, but makes no reference to possible publication bias, although grey literature was searched for so this should be minimised. B. Yes - included studies are directly relevant to the question. C. Yes - results are discussed based on the primary analysis and includes both significant and non significant result

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: median (IQR): PFMT 5 (4) n=43; BT 8 (7) n=41 <u>Quality of life: PFMT+BF versus BT - not meta-analysed</u> Urogenital distress inventory 1 study: mean (SD): PFMT+BF 81.2 (36.6) n=45; BT 99.2 (54.4) n=47 Incontinence Impact questionnaire 1 study: mean (SD): PFMT+BF 43.5 (47.4) n=45; BT 68.4 (69.7) n=47 **Electrical stimulation versus vaginal cones** <u>Cure rates</u> 2 studies: ES 5/55; VC 4/51; OR 1.00 (0.26, 3.91) <u>Improvement rates</u> 3 studies: ES 55/71; VC 50/70; OR 1.30 (0.59, 2.84) <u>Adverse events - not meta-analysed</u> 1 study: ES 10/32; VC 18/29 1 study: ES 4/36; VC 5/33 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: Change in mean (SD): ES 0.6 (1.02) n=25; VC 0.1 (1.06) n=27 **PFMT with/without BF versus PFMT with/without BF plus electrical stimulation**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Cure rates: PFMT vs PFMT + BF 4 studies: PFMT 22/104; PFMT+ES 22/108; OR 1.02 (0.29, 3.55) Improvement rates: PFMT vs PFMT + ES 3 studies: PFMT 65/79; PFMT+ES 68/81; OR 0.84 (0.34, 2.07) Improvement rates: PFMT +BF vs PFMT + BF + ES 2 studies: PFMT+BF 21/33; PFMT+BF+ES 46/69; OR 0.86 (0.36, 2.08) Adverse effects: PFMT versus PFMT + ES 1 study: PFMT 0/66; PFMT+ES 4/67 Quality of life: PFMT versus PFMT+ES 1 study: PFMT no difference n=66; PFMT+ES no difference n=67 **PFMT versus PFMT + vaginal cones** Cure rate 1 study: PFMT 3/25; PFMT+VC 5/21; OR 0.44 (0.09, 2.10) Improvement rate 1 study: PFMT 12/25; PFMT+VC 11/21; OR 0.84 (0.26, 2.68) **PFMT + BF versus PFMT + BF + BT**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Cure rate 1 study: PFMT+BF 8/64; PFMT+BF+BT 16/61; OR 0.32 (0.13, 0.79) Improvement rate 1 study: PFMT+BF 48/63; PFMT+BF+BT 55/61; OR 0.35 (0.13, 0.97) Quality of life Urogenital Distress inventory 1 study: mean (SD): PFMT+BF 81.2 (39.6) n=45; PFMT+BF+BT 63.2 (49.2) n=44 Incontinence Impact Questionnaire 1 study: Mean (SD): PFMT+BF 43.5 (47.4) n=45; PF+BF+BT 52.3 (73.4) n=44 **PFMT + ES versus ES** Cure rate 1 study: PFMT+ES 3/11; ES 1/11; OR 3.75 (0.33, 43.31) Improvement rate 1 study: PFMT+ES 7/11; ES 3/11; OR 4.67 (0.77, 28.47) **PFMT + VC versus VC** Improvement rate 1 study: PFMT+VC 14/15; VC 14/19; OR 5.00 (0.52, 48.46) **PFMT+BF+BT versus BT** Cure rate 1 study: PFMT+BF+BT 19/61; BT 12/68; OR 2.11 (0.92, 4.82)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Improvement rate 1 study: PFMT+BF+BT 55/61; BT 43/66; OR 4.90 (1.84, 13.10) Quality of life Urogenital Distress Inventory 1 study: mean (SD): PFMT+BF+BT 63.2 (49.2) n=44; BT 99.2 (54.4) n=47 Incontinence impact questionnaire 1 study: mean (SD): PFMT+BF+BT 52.3 (73.4) n=44; BT 68.4 (69.7) n=47 **Strength and motor learning PFMT versus motor learning PFMT** Cure rate 1 study: 123 participants, OR 0.24 (0.03, 2.23) Improvement rate 1 study: 123 participants; OR 1.69 (0.67, 4.25) **PFMT (maximal contraction) + BF versus PFMT (submaximal contraction) + BF** Cure rate 1 study: 32 participants; OR 1.80 (0.39, 8.22) **PFMT + perineometer versus PFMT + urethral conductance** cure rate	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: 27 participants; OR 1.09 (0.13, 9.12) Improvement rate 1 study: 20 participants; OR 1.17 (0.26, 5.29) **PFMT+BF+ES (faradism) versus PFMT+BF+ES (inferential)** Improvement rate 1 study: 39 participants; OR 1.38 (0.29, 6.60) **PFMT+BF+ES (maximal) versus PFMT+BF+ES (low)** Improvement rate 1 study: 39 participants; OR 4.44 (1.08, 18.36)	
Full citation Liang, J., Fang, S., Li, W., Zhao, L., Sun, X., Xie, Z., Comparative effectiveness of nonsurgical treatment for stress urinary incontinence in adult women: A systematic review and network meta-analysis of randomized controlled trials,	**Sample size** 17 studies N=880 women **Characteristics** Diagnosis of incontinence • Urodynamics (UD) (6 studies) • Clinical and/or UD (2 studies) • Clinical (7 studies)	**Interventions** • PFMT versus electrical stimulation (2 studies) • PFMT versus vaginal cones (4 studies) • Electrical stimulation versus vaginal cones (2 studies) • Vaginal cones versus biofeedback (1 study) • PFMT versus PFMT + biofeedback (8 studies)	**Details** Relative EEs from NMA are presented as median differences with a credible interval (CrI) of 95%, which could be regarded as the conventional mean difference (MD) and confidence interval (CI), respectively EEs of NMA were displayed as forest plots in terms of not only binary but also continuous outcome.	**Results** **Network Meta-analysis results** **Quality of Life - ICI-Q-SF (mean, 95%CI and 95%PrI)** • BF + PFMT: 0.14 (-5.11, 5.39) (-15.06, 15.34) • ES vs PFMT 6.96 (3.72, 10.20) (-5.23, 19.16) • PFMT+BF vs PFMT -0.15 (-2.43, 2.12) (-11.25, 10.94) • VC vs PFMT: -0.01 (-2.64, 2.62) (-11.48, 11.45)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: adult women with SUI

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
International journal of clinical and experimental medicine, 11, 10397-10416, 2018 **Ref Id** 1174578 **Country/ies where the study was carried out** China **Study type** Systematic review **Aim of the study** To explore the most effective nonsurgical therapy to treat stress urinary incontinence (SUI) **Study dates** The date of the most recent searches was 31 August 2017	• UD and pad test (2 studies) **Inclusion criteria** • RCT study design • No less than 2 arms of various therapies • Patients with SUI • Studies exploring effect estimates via comparison of nonsurgical methods in women with SUI according to the UI questionnaire (ICI-Q-SF) were included in the meta-analysis **Exclusion criteria** • Cases, case series, letters, narratives, and systematic reviews • Studies that failed to distinguish UUI from SUI		Surface under the cumulative ranking (SUCRA) values were evaluated to determine if a certain therapeutic method is optimal than other methods. However, it did not actually mean that it was appropriate to apply this method to patients with other crucial clinical features, which were not included in the analysis.	• ES vs BF: 6.82 (1.24, 12.40) (-8.93, 22.58) • PFMT+BF vs BF: -0.29 (-6.02, 5.43) (-16.29, 15.70) • VC vs BF: -0.15 (-4.70, 4.39) (-14.21, 13.91) • PFMT+BF vs ES: -7.12 (-11.08, -3.16) (-20.30, 6.06) • VC vs ES: -6.97 (-10.21, -3.74) (-19.17, 5.22) • VC vs PFMT+BF: 0.14 (-3.34, 3.62) (-12.37, 12.65) PFMT (n=122), BF (n=49), combination of both PFMT and BF (n=91), VC (n=76), and ES (n=64)	2. Intervention: non-surgical methods 3. Comparison: each other 4. Outcomes: ICI-Q-SF **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - Aim of the study is stated clearly. No mention of a protocol. Eligibility criteria is missing detail 1.2 Probably yes - eligibility criteria seem appropriate for the aim of the review however lacking sufficient detail 1.3 No - criteria is lacking details regarding population (definition of SUI, how this should be diagnosed, definition of adult), and intervention/comparison (no definition of what is included

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Zhejiang Provincial Institute of Chinese Medicine Science and Technology Plan Key Research Project					under 'non-surgical methods') 1.4 Probably no - there are some restrictions on population with no justification 1.5 Yes - there were no restrictions in terms of language or publication time **Domain 2: Identification and selection of studies: High** 2.1 Probably no - MEDLINE and cochrane databases were searched. EMBASE was not used. Cochrane searched although systematic reviews were excluded 2.2 No information 2.3 Yes - full search strategy reported in appendices 2.4 Yes - no restrictions on language 2.5 Yes - Two researchers independently carried

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					out primary screening by browsing titles and abstracts. Full texts were then assessed. A discussion was carried out when there was disagreement, which was managed via consensus. **Domain 3: Data collection and study appraisal: High** 3.1 Probably no - Two review authors independently undertook data extraction. No mention of the data extraction form used. No mention of cross checking. 3.2 Probably yes- a table of characteristics of included studies is reported, however this is lacking some information for example age of participants, details of the interventions/comparisons 3.3 Probably no - outcome required was the ICI-Q-SF. Unclear what approach was used if this data was missing.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					3.4 Yes- quality assessed using Cochrane's risk of bias tool 3.5 No information **Domain 4: Synthesis and findings: High** 4.1 Unclear - results are reported in terms of the comparisons rather than individual studies, so unclear if all included studies contribute to the results 4.2 No information 4.3 Probably no - meta-analysis for comparisons of at least 2 studies was appropriate, however this is displayed in a forest plot of all the different comparisons, rather than for each study, with 1 forest plot per comparison. NMA is used, however unclear if there are enough studies for each comparison for this to be stable 4.4 Unclear - methods section states that where there is significant heterogeneity, a random effects model was applied,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					however this data isn't reported so unclear if this was done 4.5 Yes - funnel plots are included and show no significant publication bias 4.6 Probably no - risk of bias was assessed using a recommended tool. No sensitivity analysis regarding RoB assessments was carried out **Phase 3: Judging risk of bias: High** A. Probably no - briefly mentions some of the identified issues, such as methodological quality, but no mention of measures that could have been done or how these limitations may have impacted the results B. Probably no - included studies are directly relevant to the question, however relevance is not discussed C. Yes - results are discussed based on the primary analysis and includes both significant and non significant results

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Lim, R., Lee, S. W., Tan, P. Y., Liong, M. L., Yuen, K. H., Efficacy of electromagnetic therapy for urinary incontinence: A systematic review, Neurourology & Urodynamics, 34, 713-22, 2015 **Ref Id** 542515 **Country/ies where the study was carried out** Malaysia **Study type** Systematic review **Aim of the study** To review whether patients with urinary incontinence (UI) treated with magnetic stimulation (MS) have a higher	**Sample size** 8 studies N=494 women **Characteristics** Three studies focused on SUI only, two studies included UUI only, two studies on MUI, and one study on overactive bladder (OAB) Mean age ranged from 50.1 to 65.2 years. **Inclusion criteria** Studies were eligible if they were randomized, blinded and sham-controlled, using MS for UI. Where there were duplicates in congress abstracts and published journals, the data was crosschecked to verify equivalence, and the most up-to-date or complete publications were chosen **Exclusion criteria** Not stated	**Interventions** • Magnetic stimulation versus sham (8 studies) Specific intervention details included: • 5 sec/min for 30 min; 50% of maximum output, 15Hz, once only • 15 min, 3 days a week for 2 weeks; 60% intensity; 15 Hz, 3 sec • 10 min stimulation, 3 min rest, 10 min stimulation, maximum tolerated intensity, 10 Hz, 50 Hz • 5 sec/min for 30 min; 50% of maximum output, 15Hz, once only • 25 min, twice weekly for 6 weeks, maximum tolerable intensity, 10 Hz 300us • Daily for 2 months, 230uT, 10 Hz, 10 us • Daily for 2 months, 10uT, 18.5 Hz • 20 min/day for 12 weeks, intensity not stated, 5-20 Hz, 1ms	**Details** Meta-analysis was performed using Review Manager software v.5.2 (Cochrane Collaboration, Oxford, UK). Random effects models were used to produce an across study risk ratio with a 95% confidence interval (CI). Statistical heterogeneity between studies was assessed using x2 test and I 2 statistic and the source of heterogeneity explored if present.	**Results** **Continence** Fujishiro, 2000 Number complete: active 4; sham 1 Number improved: active 23; sham 10 But 2005 Number improved: active 24; sham 5 But 2003 Number improved: active 18; sham 7 Number improved: Meta-analysed outcome 3 studies: Active 65/84; sham 22/69; RR 2.29 (1.60, 3.29)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: All adult patients with urinary incontinence (although only studies with women were identified) 2. Intervention: magnetic stimulation 3. Comparison: sham magnetic stimulation 4. Outcomes: proportion of patients who were continent at the end of study and treatment effect on QOL **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
continence rate compared to sham **Study dates** March 2014 **Source of funding** No funding was sought for this study		Sham group • Stimulation with inactive device (5 studies) • Sham stimulating coil 91 study) • Thin deflective aluminium plate inserted in the chair (1 study) • 20.4% of the maximum flux density of active stimulation (1 study)			Protocol is registered on Prospero. 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail such as to how UI should be diagnosed, gender, age, definition of intervention and comparison 1.3 No - lacking some detail regarding the population and intervention 1.4 No information - no mention of restrictions however not much detail given regarding eligibility criteria 1.5 Probably yes - no restrictions on language or publication format. Restriction on date but this is justified **Domain 2: Identification and selection of studies: Low** 2.1 Yes - Medline, EMBASE, CINAHL, and the Cochrane

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Collaboration's Database of Systematic Reviews were searched 2.2 Probably yes - manual search of congress abstracts presented at the International Continence Society, American Urological Association Annual Meeting and European Association of Urology from 2000 to 2014 2.3 Probably yes - full search strategy is included in supplementary material 2.4 No - restrictions for publication format and language 2.5 Probably yes - Two independent review authors screened titles/abstracts. Full-text articles of potentially relevant studies were independently assessed to confirm eligibility. No information regarding whether this was checked.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: High 3.1 Probably no - Two independent authors extracted data using a standard extraction template. Any discrepancies were documented and resolved through discussion. No details given on cross checking, and no details provided about the data extraction form used and whether it was piloted or not. 3.2 Yes - full included studies tables are included 3.3 No information 3.4 Yes - Risk of bias was assessed using the Jadad score and the cochrane risk of bias assessment tool 3.5 Probably yes - studies were evaluated independently for their quality. No further details. **Domain 4: Synthesis and findings: High**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.1 Yes - all included studies report outcomes that contribute to the review 4.2 Probably no - protocol outlines strategy for data synthesis - narrative reporting of results and summary statistics for each study. Funnel plots were planned, and no subgroup analysis was planned. Review reports that meta-analysis was performed which is a deviation from the protocol without explanation 4.3 Probably no - Meta-analysis was performed using random effects model regardless of heterogeneity. 4.4 Probably no - heterogeneity was assessed but unclear whether causes were explored. Forest plot is only presented for one outcome which does not show heterogeneity 4.5 Probably no - no sensitivity analyses or funnel plots to explore/demonstrate robustness 4.6 No - quality of studies were analysed using a valid

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					tool (cochrane risk of bias assessment tool), most were judged at low or unclear risk of bias. No sensitivity analyses were carried out to explore impact of quality **Phase 3: Judging risk of bias: High** A. No - the does not discuss issues relating to selection of studies or synthesis of findings B. Probably no - included studies are directly relevant to the question, but doesn't discuss whether the data is generalisable/applicable to the population of interest C. Yes - outcomes are reported for all studies including both significant and non significant findings
Full citation Moroni, R. M., Magnani, P. S., Haddad, J. M., Castro Rde, A., Brito, L. G., Conservative Treatment of Stress Urinary Incontinence: A	**Sample size** 37 studies N=964 women **Characteristics** **Inclusion criteria** • Randomised controlled trials	**Interventions** • PFMT versus no treatment (2 studies) • Group PFMT versus individual PFMT (2 studies) • Intravaginal electrical stimulation versus control (2 studies)	**Details** Through meta-analyses, the authors pooled measures of single outcomes reported by different studies that addressed similar comparisons between conservative treatment methods.	**Results** **Incontinence specific Quality of Life** PFMT versus control 2 studies, PFMT n=34, control n=33, SMD -1.24 (-1.77, -0.71) King's Health Questionnaire (KHQ) and IIQ-7	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Review with Meta-analysis of Randomized Controlled Trials, Revista Brasileira de Ginecologia e ObstetriciaRev, 38, 97-111, 2016 **Ref Id** 1174617 **Country/ies where the study was carried out** Brazil **Study type** Systematic review **Aim of the study** to pool randomised trials which compared multiple forms of conservative treatment (alone or in association) betw een each other, with control groups or surgical	• adult women, aged 18 years or older, with a clinical diagnosis of SUI (complaint, and/or an observation during examination of urinary leakage due to effort or straining), with absence of neurological injuries or diseases • any forms of conservative treatment for SUI, compared against each other, either alone or in combination with one another **Exclusion criteria** • Other study designs (such as cohorts, case-controls, quasi-randomised trials) • women with urgency urinary incontinence or mixed urinary incontinence • treatments or devices unavailable in Brazil	• Superficial electrical stimulation versus control (2 studies) • Vaginal cones versus control (2 studies) • PFMT versus vaginal cones (2 studies) • Electrical stimulation versus vaginal cones (2 studies) Other comparisons reported but not relevant for this review.	Pooled data were expressed graphically through forest-plots, in which an increase in the measure of an outcome is shown to the right of the central line, and such an increase may be beneficial (such as an increase in a certain quality of life scale score) or harmful (such as an increase in the number of episodes of incontinence). The authors chose to pool the studies in which the interventions were actually comparable and in which the study groups were also comparable before the interventions. Statistical heterogeneity was evaluated, expressed by the I2 value for each meta-analysis; heterogeneity was considered elevated when higher than 50%. In situations of elevated heterogeneity, the individual studies were reevaluated to assure that the interventions	<u>Group PFMT versus individual PFMT</u> 2 studies, Group n=45, Individual n=45, MD 7.96 (-2.69, 18.60) King's Health Questionnaire (KHQ) <u>Intravaginal electrical stimulation vs control</u> 2 studies, IES n=42, control n=39, SMD -1.44 (-1.94, -0.95) KHQ and I-QoL scales <u>Superficial electrical stimulation versus control</u> 2 studies, SES n=22, control n=22, MD -50.51 (-66.77, -3425) KHQ scale <u>Vaginal cones versus control</u> 2 studies, vaginal cones n=39, control n=39, MD -28.51 (-38.89, -18.41) KHQ and the I-QoL scales <u>PFMT versus vaginal cones</u> 2 studies, PFMT n=29, vaginal cones n=39, MD -0.56 (-8.40, 7.28) Scales not reported <u>Intravaginal electrical stimulation versus vaginal cones</u> 2 studies, IES n=51, vaginal cones n=45, MD 9.31 (2.77, 15.86) I-QoL scale	1. Patients: adult women, aged 18 years or older, with a clinical diagnosis of SUI (complaint, and/or an observation during examination of urinary leakage due to effort or straining), with absence of neurological injuries or diseases. Urodynamic diagnosis of SUI was not considered necessary for inclusion 2. Intervention: any forms of conservative treatment for SUI 3. Comparison: conservative treatments were compared against each other either alone or in combination 4. Outcomes: incontinence-related quality of life; objective measure of incontinence, quantified in grams through pad-tests; number of incontinence episodes, measured through bladder diaries; Subjective improvement; general quality of life; adverse events

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
treatments, emphasising treatment options that are available in Brazil due to the lack of guidelines for these practitioners **Study dates** Date of search May 10 2015 **Source of funding**			and populations were comparable. If they were indeed similar, a random effects meta-analyses was chosen.		**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Yes - there is a protocol of this systematic review on Prospero. Objectives are clearly stated. 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail 1.3 No - important details are missing regarding the intervention and comparison - no definition of conservative treatment 1.4 Yes - restrictions seem appropriate (UUI or MUI) and sufficient justification is given 1.5 Probably yes - there were no restrictions on language or year of publication. No information regarding publication format

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 2: Identification and selection of studies: Low 2.1 Probably yes - Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, and LILACS were searched. Embase was not searched 2.2 No information 2.3 Probably yes - search terms are include with how they were combined however it is unclear if these are complete 2.4 Probably yes - no restrictions for language 2.5 Probably yes - Two study authors performed the initial screening independently, by reading titles and abstracts and locating potentially eligible entries. Then, the same two authors obtained and independently assessed the full text of each study. Any disagreements between the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					two authors were resolved by consulting a third author **Domain 3: Data collection and study appraisal: High** 3.1 Yes - Two authors performed data extraction independently by using a data extraction form developed and pilot-tested by the authors 3.2 Yes - Included studies tables are included which have all necessary details and information 3.3 Probably no - the mean difference was calculated for continuous outcomes, and RR for binary outcomes. SMD was used for multiple scales. No information on how results data that were not reported in the format required for synthesis were obtained - although states in the protocol that authors will be contacted, but unclear if this did happen. Discussion states that studies that did not report their outcomes in a way that could be used to perform meta analyses,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					were reported in a descriptive way 3.4 Probably no - Risk of bias was assessed using the Jadad which does not have a measure of allocation concealment 3.5 Probably yes - Two authors independently assessed the methodological quality of the studies. The two authors resolved disagreements through discussion or by consulting a third author **Domain 4: Synthesis and findings: High** 4.1 Probably yes - number of studies is PRISMA matches number of studies reporting outcomes 4.2 Yes - protocol states that meta-analyses was planned for studies with similar comparisons 4.3 Probably yes - Meta-analysis for similar comparisons is appropriate.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Appropriate weighting is used and random model used when there is unexplained heterogeneity 4.4 Probably yes - heterogeneity was assessed and a random model was used when I2 was too high. No subgroup analyses were used to explore heterogeneity 4.5 Probably no - states that funnel plots would be generated in protocol but these aren't in main report or supplementary materials 4.6 Probably yes - only studies with a Jadad score of 3 or more were included **Phase 3: Judging risk of bias: High** A. No - not all limitations are discussed B. Probably no - included studies are directly relevant to the question, but doesn't discuss whether the data is generalisable or relevant

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					C. Yes - outcomes are reported for all studies including both significant and non significant findings
Full citation Nie, X. F., Ouyang, Y. Q., Wang, L., Redding, S. R., A meta-analysis of pelvic floor muscle training for the treatment of urinary incontinence, International Journal of Gynaecology & ObstetricsInt J Gynaecol Obstet, 138, 250-255, 2017 **Ref Id** 939138 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 12 studies N=763 women **Characteristics** Three studies did not clarify the type of UI; three studies included both SUI and MUI; and six studies included only SUI. Eight studies confirmed the type of UI with urodynamic examination. Two studies confirmed the eligibility of the participants by asking them two specific UI related questions. Two studies confirmed the type of UI using the International Consultation on Incontinence Questionnair.e Short-Form (ICIQ-SF) tool. Mean age in the included studies ranged from 46 to 76.	**Interventions** • PFMT versus no treatment (12 studies) No further details provided	**Details** The data were analyzed using RevMan version 5.3 (Cochrane, London, UK) to generate a pooled effect size and 95% confidence interval (CI). Heterogeneity across the studies was examined using the I2 statistic.14 When statistically significant heterogeneity was found (P<0.05 and I2>50%), a random-effects model was used to provide the most conservative estimate. If statistically significant heterogeneity was still found when using the random-effects model, the reasons for such heterogeneity were identified and investigated, and a subgroup analysis undertaken	**Results** **PFMT versus no treatment** IIQ-7 2 studies, 154 participants, SMD 2.20 (-4.12, -0.27) ICIQ 1 study, 48 participants, SMD -1.81 (-3.24, -0.38) UDI-6 2 studies, 154 participants, MD -7.5 (-10.41, -4.58) Quality of life (general quality of life scale, and Incontinence quality of life questionnaire) 2 studies, 105 participants, SMD 1.67 (0.41, 2.94)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women aged 18 years or older with symptoms of stress urinary incontinence, with or without urgency urinary incontinence; non- pregnant and no reports of pelvic organ prolapse, low back pain, spinal or pelvic fracture, urinary tract infection, vaginal infection, history of pelvic surgery, history of pelvic floor muscle training (PFMT), surgery, or other treatments for urinary incontinence. 2. Intervention: PFMT alone or with pamphlet guidance

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To assess the effects of pelvic floor muscle training (PFMT) among women with UI **Study dates** August 15, 2016 **Source of funding**	**Inclusion criteria** • Design: Full-text articles of randomized controlled trials or quasi-experimental design studies • Participants: Women aged 18 years or older with symptoms of stress urinary incontinence, with or without urgency urinary incontinence; non-pregnant and no reports of pelvic organ prolapse, low back pain, spinal or pelvic fracture, urinary tract infection, vaginal infection, history of pelvic surgery, history of pelvic floor muscle training (PFMT), surgery, or other treatments for urinary incontinence. • Intervention: Use of PFMT alone or with pamphlet guidance. • Control group: No treatment or receiving only pamphlet guidance without supervision.				3. Comparison: No treatment or receiving only pamphlet guidance without supervision 4. Outcomes: Effects of urinary incontinence measured using the Incontinence Impact Questionnaire- 7, International Consultation on Incontinence Questionnaire, or Urogenital Distress Inventory- 6; frequency of urinary incontinence; stress pad test; quality of life; strength and pressure of the pelvic floor muscles. **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - the objectives are clearly stated, and PICO is provided. There is no mention of a protocol and a protocol couldn't be located by searching the cochrane library

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Outcome measures: Effects of urinary incontinence measured using the Incontinence Impact Questionnaire-7, International Consultation on Incontinence Questionnaire, or Urogenital Distress Inventory-6; frequency of urinary incontinence; stress pad test; quality of life; strength and pressure of the pelvic floor muscles **Exclusion criteria** • Intervention that included PFMT combined with electric and biofeedback treatment, medication, or vaginal ball therapy • Review articles and meta-analysis				1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Probably no - the criteria are well defined but lacking details about the intervention and how SUI should be diagnosed 1.4 Probably no - there are some restrictions and these are not justified 1.5 Probably no - language restriction **Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - The Cochrane Library, PubMed, and Web of Science. Neither Medline or Embase were searched 2.2 Yes - Relevant references cited in full papers were also searched. 2.3 Probably yes - search terms are described

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					including how they were combined 2.4 No - restrictions for publication format and language with no justification 2.5 Probably yes - Titles and abstracts of the identified reports were reviewed for relevance to the defined objectives of the present study by two authors with discrepancies resolved by discussion. **Domain 3: Data collection and study appraisal: High** 3.1 Probably yes - A standardised data extraction form was used, unclear if this was piloted. Data was extracted by one author and cross checked by a second. 3.2 Yes - full included studies tables are included in supplementary material 3.3 Probably no - Data required to generate a

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					pooled effect size and 95% CI. No further details 3.4 Probably yes- Risk of bias was assessed according to the 2011 Cochrane guidelines. Unclear how many authors were involved in this stage 3.5 No information **Domain 4: Synthesis and findings: High** 4.1 Yes - number of studies included matches number of studies with results 4.2 No information 4.3 Probably yes - meta-analysis was done where appropriate. Fixed model was used where there was no heterogeneity and a random effects model was used where there was heterogeneity. Subgrouping was appropriate and appropriate weighting is used.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.4 Yes - a random effects model was used where there was heterogeneity. If there was still heterogeneity, this was investigated with subgroup analysis. 4.5 No information 4.6 Yes - all studies were judged to be high quality **Phase 3: Judging risk of bias: High** A. Probably no- the discussion talks about the limitations of English language only studies, and the issue of heterogeneity. But no discussion of robustness or lack of protocol B. Probably yes - included studies are directly relevant to the question, and discusses how the studies conducted in high income regions may limit the applicability C. Yes - outcomes are reported for all studies

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Oblasser, C., Christie, J., McCourt, C., Vaginal cones or balls to improve pelvic floor muscle performance and urinary continence in women post partum: A quantitative systematic review, Midwifery, 31, 1017-25, 2015 **Ref Id** 541172 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To compare the effectiveness of vaginal cones or balls for improvement of	**Sample size** 1 study N=230 women **Characteristics** Women with symptoms of incontinence three months post partum **Inclusion criteria** Types of studies • Randomised and quasi-randomised controlled trials with individual or cluster randomisation a nd parallel design Types of participants • Women up to one year after childbirth at the time of beginning the intervention, of any parity, mode of birth and birth injuries, with or without urinary incontinence Types of intervention • Vaginal use of cones or balls. ○ cone or ball use of any frequency and duration, and of any method (combined	**Interventions** The 1 included study had several intervention groups of which the following 2 comparisons were reported: • Vaginal cones versus PFMT (1 study) • Vaginal cones versus control (standard postpartum care) (1 study) Enforced exercise regimen with physiotherapist with one training session and three follow-up visits at three, six, and nine months post partum; factorial design with three subgroups (PFME, cones, and both). The set of cones used consisted of nine cones of identical shape and volume but of increasing weight from 20 to 100 g. Each participant, starting with the heaviest weight she could retain without voluntary holding, was instructed to keep the cone in her vagina for 15 minutes twice a day. Once she was	**Details** Relative risks (RR) with 95% confidence intervals (CI) were calculated for dichotomous data, and differences in means (MD) with standard deviations (SD) for continuous data. As only one study was included, a data synthesis by meta-analysis was not possible and a narrative review was undertaken. However, a secondary analysis of raw data enabled to directly address the question of this systematic review.	**Results** Self-reported urinary incontinence (yes/no) (12 months) Cone group: 10/21 Control group: 69/91 Exercise group: 9/19 Cone group versus control group RR 0.63 (0.40-0.998) Cone group versus exercise group RR 1.01 (0.52-1.93) Self-reported u rinary incontinence (yes/no) (24-44 months) Cone group: 12/19 Control group: 20/37 Exercise group: 10.20 Cone group versus control group RR 1.27 (0.83-1.94) Cone group versus exercise group RR 1.37 (0.80-2.33)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women up to one year after childbirth at the time of beginning the intervention, of any parity, mode of birth and birth injuries, with or without urinary incontinence 2. Intervention: Vaginal use of cones or balls. 3. Comparison: physiological restitution (no device or treatment) or any form of pelvic floor muscle training, for example physiotherapy individually or in group, or pelvic floor muscle exercises at home 4. Outcomes: pelvic floor muscle performance, urinary (in)continence, determined, perineal descent or POP,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
pelvic floor muscle performance and urinary continence in the post partum period to no treatment, placebo, sham treatment or active controls; to gather information on effect on perineal descent or pelvic organ prolapse, adverse effects and economical aspects **Study dates** The searches took take place between 26 February and 28 September 2014 **Source of funding** Funded by a City University London Scholarship	with exercises or not), ○ cones or balls of any form, size, weight or brand, ○ with any method of instruction (advised by any health practitioner or self-taught by information material) Types of comparison • Comparison could be made with physiological restitution (no device or treatment) or any form of pelvic floor muscle training, for example physiotherapy individually or in group, or pelvic floor muscle exercises at home Types of outcome • Outcomes should be measured immediately after the intervention, or be longer-term follow-up data • Primary outcomes ○ pelvic floor muscle performance (for example strength, endurance), determined using a valid and reliable measure	successful on two consecutive occasions she proceeded to the next heaviest cone. Control group: standard postpartum pelvic floor care/muscle exercises: daily instruction by physiotherapist on pelvic floor muscle exercises in small groups (approximately six women) from the second postnatal day, or an audiotape at weekends, during hospital stay			adverse effects, health economics **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Protocol is registered on Prospero. Minor modifications were made to the protocol, details and justifications are provided 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail such as to how UI should be diagnosed, age of participants 1.3 Probably no - lacking some details regarding the population 1.4 Probably no - some restrictions regarding

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	○ urinary (in)continence, determined using a valid and reliable measure • Secondary outcomes ○ Perineal descent or POP as assessed by clinical methods ○ Adverse effects as determined by each included study ○ Health economics There were no language, publication period or publication status restrictions. **Exclusion criteria** • Pregnant women, women with anal incontinence or major genitourinary/pelvic morbidity were excluded				population, no justification provided 1.5 Probably yes - no restrictions on language or publication format **Domain 2: Identification and selection of studies: Low** 2.1 Yes - The following databases were searched: Cochrane Central Register of Controlled Trials (CENTRAL), PubMed, Embase, Maternity and Infant Care Database, CINAHL, PEDro, POPLINE, AMED, Index Medicus for the South-East Asian Region (IMSEAR). For grey literature, Conference Proceedings Citation Index and ProQuest Dissertations & Theses Full Text were searched. For citation searching, SCOPUS, Web of Science and 'cited by' were searched. For ongoing studies, ICTRP was searched. 2.2 Yes - References of similar reviews and trial

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					reports identified for data extraction were screened to identify further relevant studies 2.3 Yes - full search strategy for Pubmed is included in the review 2.4 Yes - There were no language, publication period or publication status restrictions 2.5 No information - titles and abstracts of identified records were screened, followed by full text. Two reviewers checked eligibility. No further information provided **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Data was extracted using a piloted extraction form. Data were extracted by the lead reviewer and cross-checked by the second reviewer.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					3.2 Yes - full included studies tables are included 3.3 Probably yes - Relative risks with 95% confidence intervals were calculated for dichotomous data, and differences in means with standard deviations for continuous data. Authors were contacted if there was any missing data, however unclear if this also applies to data not reported in the desired format 3.4 Yes - Risk of bias was assessed using the Cochrane risk of bias assessment tool 3.5 Probably yes - Assessments made by reviewers were compared and disagreements were resolved by consensus. **Domain 4: Synthesis and findings: Low?** 4.1 Yes - only 1 study was included and results for this study were reported in detail

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.2 Yes - meta-analysis was planned however as only 1 study was included this was not possible 4.3 Probably yes - Narrative analysis was carried out and a secondary analysis of raw data - this is appropriate given only 1 study was included 4.4 Probably yes - only 1 study so no heterogeneity 4.5 Probably yes- sensitivity analysis with a best/worse case scenario (single imputation) for urinary incontinence was performed to help determine the robustness of the results. 4.6 The study was judged to be high risk for 3 of the domains **Phase 3: Judging risk of bias: High** A. No - the does not discuss issues relating to selection of studies

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					B. Probably no - doesn't discuss whether the data is generalisable/applicable to the population of interest C. Yes - Both significant and non significant results of the study are reported
Full citation Peng, L., Zeng, X., Shen, H., Luo, D. Y., Magnetic stimulation for female patients with stress urinary incontinence, a meta-analysis of studies with short-term follow-up, Medicine, 98, e15572, 2019 **Ref Id** 1196953 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 4 studies N=232 women **Characteristics** Inclusion criteria in the four studies was: • ≥1 episodes of leaks recorded in a 3-day voiding diary, 2 gm. or more urine loss on a 1-hour pad test, no disorders possibly causing any LUTs • ≥1 episodes of urine loss recorded in a 3-day voiding diary, 2g or more urine loss in a 1-h pad test or a positive standardized stress test • Women with urodynamic SUI refractory to PFMT for more than 12 weeks	**Interventions** • Magnetic stimulation versus sham (4 studies) Intensity in the four studies was 50% (1 study), 60% of maximum (1 study), and maximum (2 studies). Location was S3 roots (1 study), S2-S4 roots (1 study) and pelvic floor (2 studies). Frequency was 15Hz, 5s/min (1 study), 15Hz, 3s/m (1 study), 50Hz in 5-s on/5-s off cycles (1 study), and 50Hz in an 8-s on, 4-s off, 2 sessions/week. Duration was 30 minutes (1 study), 15 minutes (1 study), and 20 minutes (2 studies)	**Details** Review Manager 5.3 (Cochrane Collaboration, Oxford, UK) was used to perform all calculations and data manipulations. Heterogeneity was evaluated by I2 tests, with significance set at P<0.05. I2 values of 25%, 50%, and 75% corresponded to low, medium, and high levels of heterogeneity, respectively. The fixed-effect method was used for studies without significant heterogeneity, and random-effect method was used with I2 values ≥50%	**Results** <u>Quality of life scores</u> 3 studies, MS group n=59, sham group n=53, MD 0.42 (0.02, 0.82) <u>ICIQ scores</u> 3 studies, MS group n=101, sham group n=84, MD -4.60 (-5.02, -4.19)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with SUI 2. Intervention: magnetic stimulation 3.Comparison: sham MS 4. Outcomes: urine loss on pad test, number of leaks, change in urodynamic parameters, improvement rate, QoL scores, ICIQ, KHQ scores, UTI, pain, discomfort, new depression,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To determine the efficacy of magnetic stimulation (MS) in female patients with stress urinary incontinence (SUI) by performing a meta-analysis on peer-reviewed randomised controlled trails **Study dates** July 2018 **Source of funding** This study was supported by the National Natural Science Fund of China and 1.3.5 project for disciplines of excellence, West China Hospital, Sichuan University	and who did not want to undergo surgery • Female aged ≥21 years old, demonstrated urine leak on coughing, had ICIQ-UI SF score of ≥6 points **Inclusion criteria** • Patients were diagnosed with SUI • Magnetic stimulation or sham therapy were used for SUI patients • Some outcome-reporting parameters were recorded in study • Where there were duplications in congress abstracts or published journals, the data were rechecked to verify equivalence, and the most up-to-date or complete studies were eligible • the primary outcomes of interest were considered as urine loss on pad test per day, number of leaks in a 3-day voiding diary, changes in urodynamic parameters,				influence on social life/personal relationships **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - the objectives are clearly stated, but there was no mention of a protocol. 1.2 Probably no - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail about population (definition of SUI, age of women, diagnosis of SUI) and intervention/comparison (definitions of MS and sham MS) 1.3 No - lack of detail about various aspects of the criteria for example population and intervention 1.4 Probably no - there are some restrictions on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	improvement rate, QoL scores, International Consultation on Incontinence Questionnaire (ICIQ) scores and KH scores (incontinence impact). UTI, pain, discomfort, new depression, influence on social life and personal relationship were regarded as the secondary endpoints to evaluate safety **Exclusion criteria** • The study type was a letter, review, comment, or case report • There was a lack of a comparative placebo-controlled group and quantitative data • Patients were diagnosed with mixed SUI or urgency urinary incontinence and undergoing several different treatments				population and these are not justified 1.5 No information **Domain 2: Identification and selection of studies: High** 2.1 Probably no - PubMed, Embase and Cochrane library were searched. Medline was not searched 2.2 Yes - relevant conference proceedings and literature references of the EAU, IUGA and ICS were manually searched 2.3 Probably yes - search strategies are included the review although unclear if the complete strategy is reported 2.4 No information 2.5 Probably no - 'evaluating the papers was conducted independently by two

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					authors', no more information provided **Domain 3: Data collection and study appraisal: High** 3.1 No information 3.2 Probably yes - included studies tables are included although missing some information such as age 3.3 No information 3.4 Yes - Risk of bias was assessed using the Cochrane Collaboration Reviewers Handbook 3.5 Unclear - quality assessment was performed by two authors - no further details **Domain 4: Synthesis and findings: High** 4.1 Probably yes - all included studies contribute to the meta-analysis, however according to the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					flow diagram, 6 studies should have been included in the qualitative analysis however no information on these 6 studies is provided 4.2 No information 4.3 Yes - Meta-analysis is appropriate given the homogeneity of comparisons and populations. Weighting is appropriate and models used are appropriate. 4.4 Probably no - if there was significant heterogeneity, a random effects model would have been used however there was no heterogeneity in any of the forest plots. However discussion states that one study was removed from the forest plot because it added heterogeneity, without considering the reasons for this or using prespecified sensitivity analyses 4.5 Probably yes - funnel plots were produced which showed no publication bias. 4.6 No - one study was judged to be high risk. There was no sensitivity analysis to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					explore the effect of removing this study **Phase 3: Judging risk of bias: High** A. Probably no - some limited discussion of the issues identified B. Probably no - included studies are relevant to the question, but doesn't discuss whether the data is generalisable/any limitations of the studies in terms of applicability C. Yes - outcomes are reported for all studies
Full citation Stewart, F., Berghmans, B., Bø, K., Glazener, C. M. A., Electrical stimulation with non-implanted devices for stress urinary incontinence in women, Cochrane Database of	**Sample size** 35 studies N=3781 women The sample sizes ranged from 14 to 200 women (mean N = 67, median N = 56) **Characteristics**	**Interventions** • Electrical stimulation versus no active treatment (8 studies) • Electrical stimulation versus sham treatment (6 studies) • Electrical stimulation versus PFMT (9 studies) • Electrical stimulation versus vaginal cones (7 studies)	**Details** For dichotomous data, the risk ratio (RR) with a 95% confidence interval (CI) was calculated. For continuous data, the mean difference (MD) with a 95% CI was calculated. The standardised mean difference (SMD) was calculated to combine trials that	**Results** **Electrical stimulation versus no active treatment** Subjective cure 2 studies, 101 participants, RR 2.31 [1.06, 5.02] Subjective cure or improvement 5 studies, 347 participants, RR 1.73 [1.41, 2.11] Quality of life 4 studies, 250 participants, SMD -0.72 [-0.99, -0.45] Adverse events	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: adult women (18 years or older, or according

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Reviews, 2017 **Ref Id** 939215 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To assess the effects of electrical stimulation with non-implanted devices, alone or in combination with other treatment, for managing stress urinary incontinence or stress-predominant mixed urinary incontinence in women	Almost all trials included only women with stress urinary incontinence 9 trials included women with other kinds of incontinence: • 3 trials included some women with stress urinary incontinence alone and other with stress predominant MUI • 4 trials did not separate data according to type of incontinence, or excluded women with UUI • 2 trials did not define the type of incontinence One trial was restricted to women who had been referred for continence surgery. Two studies restricted inclusion based on age; over 60 years and over 40 years. The mean age in the included trials ranged from 41 to 69 years. Fourteen trials did not report age	• Electrical stimulation + PFMT versus PFMT (10 studies) Excluded comparisons: • Electrical stimulation versus PFMT and vaginal cones (2 studies) The included trials reported a range of different kinds of ES; most were intravaginal ES interventions, while others used surface electrodes. The intervention regimens were characterised by their wide diversity in terms of current, current intensity, pulse shape and duration, frequency (Hz), duty cycle, electrodes, and duration of treatment and its supervision. Inmost cases trialists failed to report at least one of these parameters. Fifteen trials compared ES plus another treatment to the other treatment alone	measure the same outcome but using different methods such as different quality of life instruments.	3 studies, 103 participants, RR 5.96 [0.30, 118.70] **Electrical stimulation versus sham treatment** Subjective cure 3 studies, 158 participants, RR 2.21 [0.38, 12.73] Subjective cure or improvement 5 studies, 236 participants, RR 2.03 [1.02, 4.07] Adverse effects 4 studies, 233 participants RR 2.01 [0.52, 7.67] **Electrical stimulation versus PFMT** Subjective cure 4 studies, 143 participants, RR 0.51 [0.16, 1.63] Subjective cure or improvement 7 studies, 244 participants, RR 0.85 [0.70, 1.03] Adverse effects 3 studies, 121 participants, RR 5.0 [0.25, 99.16] **Electrical stimulation versus vaginal cones** Subjective cure 3 studies, 157 participants, RR 1.04 [0.70, 1.54] Subjective cure or improvement 5 studies, 331 participants, RR 1.09 [0.97, 1.21]	to study authors' definitions of adult) with SUI or stress predominant MUI on the basis of symptoms, signs or urodynamic diagnosis. 2. Intervention: any method of delivering electrical stimulation with non-implanted devices 3. Comparison: no active treatment, placebo or sham treatment as well as drug therapy, surgery or any other intervention intended to decrease SUI, including conservative treatment (such as complementary therapies like acupuncture, pelvic floor muscle training (PFMT) and vaginal cones). Studies comparing different methods of ES were also included 4. Outcomes: cure and/or improvement, incontinence specific QoL, satisfaction with treatment, need for further treatment, QoL, quantification of symptoms, adverse effects, economic data, clinicians observations, PFM function, any other outcomes judged to be important

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates The date of the search was 10 February 2016 **Source of funding** National Institute for Health Research, UK	**Inclusion criteria** Types of studies • Parallel or cross-over RCTs, quasi-RCTs and cluster-randomised trials Types of participants • Adult women (18 years or older, or according to study authors' definitions of adult) with SUI or stress predominant MUI on the basis of symptoms, signs or urodynamic diagnosis. • Trials of participants with MUI, UUI and SUI were included only if the data for women with SUI were presented separately. • Trials in women with MUI were included if the condition was SUI-predominant Types of interventions • Any method of delivering electrical stimulation with non-implanted devices	• ES plus PFMT (16 studies) • ES plus behavioural training (1 study) • ES plus surgery (1 study) Six trials compared different types of ES to each other. One trial control group received a motivational phone call once a month for 6 months. One trial control group received 'any other therapy at the discretion of the investigator'. These were treated as no active treatment.		Quality of life 2 studies, 96 participants, MD 1.59 [-3.72, 6.90] **Electrical stimulation versus PFMT and vaginal cones** Subjective cure 2 studies, 123 participants, RR 1.45 [0.96, 2.20] Subjective cure or improvement 2 studies, 123 participants, RR 1.53 [1.08, 2.18] **Electrical stimulation plus PFMT versus PFMT** Subjective cure 3 studies, 99 participants, RR 0.76 [0.38, 1.52] Subjective cure or improvement 6 studies, 308 participants, RR 1.10 [0.95, 1.28] Quality of life 4 studies, 193 participants, SMD -0.35 [-0.64, -0.05]	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Specific mention of protocol in methods section 1.2 Yes - the eligibility criteria is appropriate to answer the review question 1.3 Yes - the criteria are well defined and unambiguous 1.4 Probably yes - there are restrictions based on population and interventions, and these are not all justified, but do seem appropriate 1.5 Yes - No restrictions on language and publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• These devices could be placed in the vagina or anus or on a skin surface • Eligible comparators were no active treatment, placebo or sham treatment as well as drug therapy, surgery or any other intervention intended to decrease SUI, including conservative treatment (such as complementary therapies like acupuncture, pelvic floor muscle training (PFMT) and vaginal cones • Studies comparing different ES methods were also included • There were no restrictions by type of device, stimulation parameters, duration of treatment, route of administration, or other factors Type of outcomes Primary outcomes • Cure • Cure or improvement				**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - trials were identified from the Cochrane Incontinence Group Specialised Trials Register, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, MEDLINE in-process, MEDLINE Epub Ahead of Print, ClinicalTrials.gov, WHO ICTRP. EMBASE was not searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Yes - Two review authors independently screened the trials identified by the literature search, resolving any disagreements by discussion or by referring

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Incontinence specific QoL Secondary outcomes • Satisfaction with treatment • Need for further treatment • QoL measures of general health status • Quantification of symptoms • Adverse effects • Economic data Tertiary outcomes • Clinicians observations • Pelvic floor muscle function, strength, or ability to contract pelvic floor muscles • Any other outcomes judged to be important when performing the review **Exclusion criteria** • studies in women with urgency-predominant MUI, UUI only, or incontinence associated with a neurologic condition or frailty • studies in men and women that did not				to a third party. **Domain 3: Data collection and study appraisal: Low** 3.1 Yes - Two review authors extracted data independently, resolving any disagreements by discussion or by referring to a third party. A standard data extraction form was used to extract data on study characteristics 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For dichotomous data, the risk ratio with a 95% CI was calculated from the data. For continuous data, the mean difference with a 95% CI was used. The SMD was used to combine trials that measure the same outcome but using different methods 3.4 Yes - The risk of bias for the included studies was assessed using the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	report data separately by sex and studies including only men or children • trials of magnetic stimulation and electro-acupuncture • the comparator interventions, alone or as a supplement to ES, were different in the intervention and control arms				Cochrane Risk of Bias Assessment Tool 3.5 Yes - Two review authors independently carried out risk of bias assessments and resolved any disagreements by consulting a third author. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate. Meta-analyses were carried out only for trials with similar interventions. Where there was heterogeneity, pre-specified subgroup analysis was performed. 4.4 Yes - Where there was significant heterogeneity (for example I^2 higher than 50%),

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					the authors computed pooled estimates of the treatment effect for each outcome using a random-effects model. Subgroup analysis was also planned if possible to investigate the heterogeneity. These sensitivity analyses were not presented in the results with the forest plots but discussed narratively 4.5 Probably no - there were not enough studies for each comparison to perform a funnel plot. Sensitivity analyses were performed exclude studies with different methods of inclusion, or at high risk of bias but only where there was heterogeneity. 4.6 Probably yes - risk of bias assessed thoroughly. The authors intended to perform sensitivity analysis comparing trials at low risk of selection bias to those at high risk but there were insufficient numbers of studies to do so.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Phase 3: Judging risk of bias: Low A. Yes - No limitations identified B. Yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies whether significant or not
Full citation Woodley, Stephanie J., Lawrenson, Peter, Boyle, Rhianon, Cody, June D., Mørkved, Siv, Kernohan, Ashleigh, Hay-Smith, E. Jean C., Pelvic floor muscle training for preventing and treating urinary and faecal incontinence in antenatal and postnatal women, Cochrane Database of	**Sample size** 46 studies N = not reported **Characteristics** Study characteristics • 8 were primary or secondary prevention trials (that is none of the women had incontinence symptoms at the start of training) • 9 were treatment trials (that is all women had incontinence symptoms at the start of training). • 29 were mixed prevention or treatment trials as some women did, and others did not, have incontinence	**Interventions** • Antenatal PFMT versus control (no PFMT, usual care or unspecified control) for treatment • Antenatal PFMT versus control for prevention or treatment • Postnatal PFMT versus control for treatment • Postnatal PFMT versus control for prevention or treatment Intervention characteristics:	**Details** The Mantel-Haenszel method with a fixed-effect model approach was used in the meta-analyses in this review, unless statistically significant heterogeneity (Chi² test, P < 0.10) in the comparison suggested a more conservative random-effect model was indicated	**Results** **Antenatal pelvic floor muscle training (PFMT) versus control for treatment of incontinence** <u>Incontinence-specific quality of life (ICIQ-SF, Scale from: 0 to 10 (higher worse))</u> PFMT versus usual care: 1 study, 41 participants, MD -3.5 (-6.13, -0.87) <u>Quality of life and health status measures - not meta-analysed</u> PFMT versus usual care: 1 study, IIQ • PFMT: Impact on social relations , on emotional health 11,	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: antenatal (pregnant) or postnatal women (that is. women immediately following delivery or women with persistent urinary or faecal incontinence symptoms up to three months after their most recent delivery).

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Reviews, 2020, 2020 **Ref Id** 1284323 **Country/ies where the study was carried out** New Zealand **Study type** Systematic review **Aim of the study** To determine the effectiveness of pelvic floor muscle training (PFMT) in the prevention or treatment of urinary and faecal incontinence in pregnant or postnatal women. **Study dates** The date of the last search was August 2019	symptoms at the start of training Participants characteristics Age • 6 studies did not report age • Three trials reported an age range, with women aged between their early 20s to early 40s • In two trials, about 50% to 60% of the women were aged 20 to 29 years • In two trials, median age was about 28 years and in one trial the median age was 36 years • In the remaining 31 studies, the mean age was in the early 20s for 14 trials, and early 30's for 10 trials **Inclusion criteria** Types of studies • Randomised (including cluster and cross-over) controlled trials and quasi-randomised studies Types of participants	• 14 trials clearly provided exercise parameters that favoured strength training; short duration contractions of maximal or near maximal effort and a relatively small number of repetitions • 9 trials described PFMT programmes that were characteristic of strength training but did not mention loading (effort) • There was insufficient detail in the other 23 trials to classify them as providing strength or endurance training • 7 trials provided some information about PFMT but could not be categorised 16 trials did not specify any details of the PFMT received by intervention group		on recreational activities 10, and on physical activities 4, n=65 at 12 months postpartum • Control group: Impact on social relations 5, on emotional health 14, on recreational activities 10, and on physical activities 7, n=99 at 12 months postpartum **Antenatal pelvic floor muscle training (PFMT) versus control for (mixed) prevention or treatment of incontinence** <u>Incontinence-specific quality of life late pregnancy</u> PFMT versus usual care: 1 study, 224 participants, MD -0.20 (-1.21, 0.81) <u>Incontinence-specific quality of life early postnatal period (0-3 months)</u> PFMT versus usual care: 1 study, 211 participants, MD -0.60 (-1.45, 0.25) <u>Faecal incontinence-specific quality of life in early post-natal period (CRAIQ-7; 7 items; higher worse)</u>	Women could be with or without urinary, faecal, or both urinary and faecal incontinence symptoms at recruitment 2. Intervention: a PFMT programme to improve the function of the PFM, the external anal sphincter or both. All types of PFMT were considered, including variations in the purpose and timing of PFMT (for example PFMT for strengthening, PFMT for urgency suppression), ways of teaching PFMT, types of contractions (fast or sustained) and number of contractions. 3. Comparison: usual antenatal and postnatal care, placebo treatment or no treatment 4. Outcomes: Self-reported urinary or faecal incontinence, incontinence-specific quality of life, women's observations, quantification of symptoms, QoL, health economics, adverse effects, other outcomes (labour and delivery outcome, sexual

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding National Institute for Health Research, UK and the University of Otago, New Zealand	• Trials that recruited antenatal (pregnant) or postnatal women (immediately following delivery or women with persistent urinary or faecal incontinence symptoms up to three months after their most recent delivery) • Women could be with or without urinary, faecal, or both urinary and faecal incontinence symptoms at recruitment Types of intervention and control group • One arm of all eligible trials included a PFMT programme to improve the function of the PFM, the external anal sphincter or both • PFMT was a programme of repeated voluntary PFM contractions • All types of PFMT were considered, including variations in the purpose and timing of PFMT (for example PFMT for			PFMT versus usual care: 1 study, 74 participants, MD -2.60 (-7.84, 2.64) <u>Urinary incontinence-specific quality of life late postnatal period (>6-12 months) (ICIQ-SF, Scale from: 0 to 10 (higher worse))</u> PFMT versus usual care: 1 study, 190 participants, MD -0.20 (-1.20, 0.80) <u>Quality of life and health status measures - not meta-analysed</u> PFMT versus no PFMT 1 study, UDI-6 • PFMT: Mean 3.44, SD 3.26, n= 150 in late pregnancy, Mean 0.81, SD 1.36, n=150 at 0-3 months postpartum; Mean 0.35, SD 0.84, n=150 at > 3-6 months postpartum • Control group: Mean 4.66, SD 3.32, n=150 in late pregnancy; Mean 1.54, SD 1.59, n=150 at 0-3 months postpartum; Mean 0.86, SD 1.14, n=150 at > 3-6 months postpartum 1 study, IIQ7 • PFMT: Mean 3.77, SD 6.01, n=150 in late pregnancy; Mean 1.73, SD 3.57, n=150 at 0-3 months postpartum; Mean 0.77,	function, POP, non-specified outcomes judged to be important) **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided, and a protocol is mentioned in the 'differences between protocol and review' section 1.2 Yes - eligibility criteria are appropriate and detailed 1.3 Yes - criteria is detailed and unambiguous. 1.4 Probably no - there are some restrictions on the intervention only with no justification 1.5 Yes - there were no restrictions in terms of language or publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	strengthening, PFMT for urgency suppression), ways of teaching PFMT, types of contractions (fast or sustained) and number of contractions • Acceptable control interventions were usual antenatal and postnatal care, placebo treatment or no treatment • Studies in which the control group had or might have, received PFMT advice providing the PFMT arm was more intensive in some way than the control arm were included • Trials in which PFMT was combined with other physical therapy modalities such as biofeedback, electrical stimulation or multimodal exercise programmes were included Types of outcomes Primary outcomes • Self-reported urinary or faecal incontinence • Incontinence-specific quality of life			SD2.07, n=150 at > 3-6months postpartum • Control group: Mean 5.28, SD 5.16, n=150 in late pregnancy; Mean 5.28, SD 5.61, n=150 at 0-3 months postpartum; Mean 1.56, SD 2.20, n=150 at > 3-6 months postpartum PFMT versus usual care 1 study, Female Pelvic Floor Questionnaire (FPFQ) bladder score • PFMT: Mean 1.7, SD 1.3, n=112 in late pregnancy; Mean 0.8, SD 0.9, n=105 at 0-3 months postpartum; Mean 0.9, SD 1.1, n=94 at > 6-12 months postpartum • Control group Mean 2.0, SD 1.4, n=111 in late pregnancy; Mean 0.9, SD 1.0, n=107 at 0-3 months postpartum; Mean 1.0, SD 1.1, n=97 at > 6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire (FPFQ) bowel score • PFMT: Mean 1.3, SD 1.1, n=112 in late pregnancy; Mean 1.2, SD 1.2, n=104 at 0-3 months postpartum; Mean 1.0, SD 1.0, n=94 at > 6-12 months postpartum	**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - the Cochrane Incontinence Specialised Register, was searched which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, MEDLINE InProcess, MEDLINE Epub Ahead of Print, CINAHL, ClinicalTrials.gov, World Health Organization International Clinical Trials Registry Platform (WHO ICTRP) and UK Clinical Research Network Portfolio 2.2 Yes - hand searching of journals and conference proceedings was carried out, as well as checking reference lists of relevant articles 2.3 Yes - full search strategy reported in appendices

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	Secondary outcomes • Women's observations for example severity of incontinence • Quantification of symptoms for example number of urinary or faecal incontinence episodes • Clinician's measures for example loss of urine under stress test • Other quality of life and health status measures • Health economics • Adverse effects for example discomfort or pain associated with PFMT • Other outcomes for example labour and delivery outcome (for example type of delivery, perineal trauma, episiotomy, length of second stage) for women who did antenatal PFMT; sexual function, pelvic organ prolapse, non-prespecified outcomes that were judged important when performing the review.			• Control group: Mean 1.4, SD 1.1, n=112 in late pregnancy; Mean 1.4, SD 1.2, n=107 at 0-3 months postpartum; Mean 1.1, SD 1.0, n=97 >6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire (FPFQ) score • PFMT: Mean 0.7, SD 1.2, n=112 in late pregnancy; Mean 0.3, SD 1.1, n=104 at 0-3 months postpartum; Mean 0.4, SD 1.2, n=95 at > 6-12 months postpartum • Control group: Mean 0.7, SD 1.4, n=112 in late pregnancy; Mean 0.5, SD 1.3, n=107 at 0-3 months postpartum; Mean 0.4, SD 1.0, n=97 at > 6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire sex score (0-10; 10 worse) • PFMT: Mean 2.7, SD 1.8, n=79 in late pregnancy; Mean 3.1, SD 2.1, n=73 at 0-3 months postpartum; Mean 2.4, SD 1.8, n=86 at > 6-12 months postpartum • Control group: Mean 3.1, SD 2.1, n=68 in late pregnancy; Mean 3.5, SD 2.2, n=77 at 0-3 months postpartum; Mean 2.7, SD	2.4 Yes - no restrictions on language or publication format 2.5 Probably yes - Two review authors assessed potentially eligible studies and resolved disagreements by discussion or a third author. Does not explicitly say that this was done independently, and doesn't explicitly talk about the title and abstract screening versus the full text screening **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Two review authors independently undertook data extraction, which was cross-checked by a third review author. Any disagreements were resolved by discussion 3.2 Yes - full included studies tables with all important characteristics at the end of the report

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	Exclusion criteria • Other forms of controlled clinical trials • Trials in which PFMT was combined with another stand-alone therapy such as bladder training or drug therapy (for example anticholinergic drug) were excluded • Trials of electrical stimulation (without PFMT) were excluded			2.0, n=83 at > 6-12 months postpartum 1 study, Contilife score (0-10; 10 better) • PFMT: Mean 9.3, SD 1.1, n=108 in late pregnancy; Mean 9.6, SD 0.8, n=102 at 0-3 months postpartum; Mean 9.5, SD 1.2, n=91 at > 6-12 months postpartum • Control group: Mean 9.2, SD 1.3, n=109 in late pregnancy; Mean 9.5, SD 0.8, n=101 at 0-3 months postpartum; Mean 9.5, SD 1.0, n=89 at > 6-12 months postpartum 1 study, Sexually active • PFMT: 83 of 112 at end of pregnancy; 74 of 104 at 0-3 months postpartum; 89 of 95 at > 6-12 months postpartum • Control group: 70 of 112 at end of pregnancy; 79 of 106 at 0-3 months postpartum; 91 of 97 at > 6-12 months postpartum 1 study, EuroQoL-5D (0-100; 100 better) • PFMT: Mean 76.4, SD 20.4, n=111 at end of pregnancy; Mean 82.8, SD 18.2, n=105 at 0-3 months postpartum; Mean 86.8, SD 13.1, n=94	3.3 Probably yes - The primary unit of analysis was per women randomised. Missing data not imputed as an ITT approach was used. No description of how data was handled if it wasn't reported in the correct way 3.4 Yes- quality assessed using Cochrane's risk of bias tool 3.5 Yes - Two review authors independently evaluated study quality. Any disagreements were resolved by discussion. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies in the PRISMA diagram matches number of studies that there are outcomes for 4.2 Probably yes - methods are rigourously described and a protocol is mentioned. The differences between protocol and review does not

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				at > 6-12 months postpartum • Control group: Mean 77.9, SD 16.3, n=112 at end of pregnancy; Mean 80.4, SD 17.0, n=107 at 0-3 months postpartum; Mean 82.9, SD 14.8, n=97 at > 6-12 months postpartum 1 study, BFLUTs questionnaire: a negative effect on exercise in response to question "does incontinence affect physical activity?" • PFMT: 47 of 585 at 6 months postpartum • Control group: 41 of 584 at 6 months postpartum • RR 1.14 (95%CI 0.76 to 1.71) 1 study, State Trait Anxiety Inventory (STAI) (20-80; 50-64 high; 65-80 very high) • PFMT: Trait anxiety 18 of 85; State anxiety 16 of 85 • Control group: Trait anxiety 20 of 76; State anxiety 14 of 76 • Trait anxiety, RR 0.80 (95% CI 0.46 to 1.40); State anxiety, RR 1.02 (95% CI 0.53 to 1.95) 1 study, sexual satisfaction at 6 years post delivery • PFMT: 34 of 94	suggest any differences in analyses 4.3 Probably yes - meta-analysis was appropriate for the RCT studies included. Where there was unexplained heterogeneity, a random effects model was used 4.4 Probably yes - heterogeneity was assessed in three ways: visual inspection of data plots, Chi2 test for heterogeneity and the I2 statistic. If there was heterogeneity, a random effects model was used. Subgroup analysis was also carried out according to the control comparison. 4.5 No information - no mention of no funnel plots. No mention of sensitivity analyses in regard to robustness 4.6 Probably no - risk of bias was assessed using a recommended tool. Sensitivity analysis with respect to trial quality was planned, however there were insufficient trials and

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• Control group: 17 of 94 • RR 2.00 (1.20 to 3.32) 1 study, Psychological General Well-being Index (PGWBI) (0-110; 110 better) • PFMT: Total score at end of pregnancy: Mean 79.5 (95% CI 78.5 to 80.6), n=389 • Control group: Total score at end of pregnancy: Mean 78.5 (95% CI 77.5 to 79.6), n=361 <u>Patient satisfaction - not meta-analysed</u> PFMT versus unspecified control 1 study, VAS patient satisfaction • PFMT: mean 7.6 • Control: no data **Postnatal pelvic floor muscle training (PFMT) versus control for treatment of incontinence** <u>Incontinence-specific quality of life</u> PFMT versus usual care: 1 study, 18 participants, MD -1.66 [-3.51, 0.19]	too many other potential causes of heterogeneity to make this useful **Phase 3: Judging risk of bias: Low** A. Yes - no concerns identified in phase 2 B. Yes - included studies are directly relevant to the question. There is a section of the discussion called overall completeness and applicability of evidence which considers relevance of the evidence C. Yes - results are discussed based on the primary analysis and includes both significant and non significant results - no particular results were over emphasised

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				<u>Severity of incontinence - not meta-analysed</u> PFMT versus usual care 1 study, Incontinence score (0-20, 20 worse), ICIQ-FLUTS • PFMT: Median 4.0, range 0 to 15, n=40 at 9 months postpartum • Control group: Median 4, range 0 to 12, n=42 at 9 months postpartum 1 study, Voiding score (0-20, 20 worse), ICIQ-FLUTS • PFMT: Median 1.0, range 0 to 5, n=40 at 9 months postpartum • Control group: Median 0.0, range 0 to 8, n=42 at 9 months postpartum 1 study, Urinary symptoms, BFLUTS • PFMT: Mean 40.56, SD 5.36, n=9 at between 8-14 weeks postpartum • Control group: Mean 46.89, SD 3.62, n=9 at between 8-14 weeks postpartum <u>Quality of life and health status measures - not meta-analysed</u> 1 study, Change in Urogenital Distress Inventory Score (maximum score 57)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT: A: Median change 4, IQR 1 to 10, n=23 after 9 weeks; B: Median change 7, IRQ range 3 to 8, n=20 after 9 weeks • Control: Median change 0, IQR range -2.3 to 6.5, n=19 after 9 weeks 1 study, Change in Incontinence Impact Questionnaire (maximum score 90) • PFMT: A: Median change 10, IQR range 2 to 16, n=23 after 9 weeks; B: Median change 13, IQR range 6 to 25, n=20 after 9 weeks • Control: Median change 0.5, IQR range -6.5 to 5.0, n=19 after 9 weeks of control condition 1 study, HADS anxiety score • PFMT: Mean 6.1, 95% CI 5.6 to 6.5, n=238 at 12 months • Control: Mean 6.8, 95% CI 6.3 to 7.3, n=219 at 12 months postpartum **Postnatal pelvic floor muscle training (PFMT) versus control for (mixed) prevention or treatment of incontinence**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Severity of incontinence - not meta-analysed PFMT veresus usual care 1 study, Urinary condition score, not specified, 3 months • PFMT: Mean 2.2, SD0.2, n=106 • Control group: Mean 2.8, SD0.4, n=86 1 study, Urinary condition score, not specified, 3 months • PFMT: Mean 2.0, SD0.4, n=106 • Control group: Mean 2.5, SD 0.4, n=86 1 study, stress UI, Criteria from International Continence Society, 0-5 (lower score better; 6 months postpartum) • PFMT: Mean 2.84, SD 0.43, n=75 • Control: Mean 2.50, SD 0.41, n=73 1 study, stress UI, Criteria from International Continence Society, 0-5 (lower score better; 12 months postpartum) • PFMT: Mean 1.16, SD 0.38, n=75 • Control: Mean 2.20, SD 0.39, n=73	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				<u>Quality of life and health status measures - not meta-analysed</u> PFMT versus no PFMT 1 study, sexual function (reduced vaginal response at 10 months post partum) • PFMT: 5 of 51 • Control group: 13 of 56 PFMT versus usual care 1 study, Faecal Incontinence Specific Quality of Life (Rockwood Faecal Incontinence Quality of Life Scale (low better,no total score, 4 domain scores) • difference between groups: Lifestyle p =0.29, coping/behaviour p=0.27, depression/self perception p=089, embarrassment p=0.51 1 study, general wellbeing (5 point Likhert scale) • PFMT: 11 feeling not very well or not at all well, n=816 at 3 months postpartum • Control: 18 feeling not very well or not at all well, n=793 at 3 months postpartum 1 study, sexual function (attempted sexual intercourse within 3 months of delivery)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT: 714 of 819 • Control: 681 of 792 1 study, sexual function (Dyspareunia at 3 months postpartum) • PFMT: 167 of 819 • Control: 154 of 792 <u>Pelvic organ prolapse symptoms - not meta-analysed</u> 1 study, ICIQ-Vag, bulging inside vagina (yes, no) • PFMT: 8 of 87 at 6 months postpartum • Control: 22 of 88 at 6 months postpartum • Mean difference 0.37 (95% CI 0.17 to 0.78) 1 study, ICIQ-Vag, bulging outside vagina (yes, no) • PFMT: 5 of 87 at 6 months postpartum • Control: 6 of 88 at 6 months postpartum • Mean difference 0.84 (95% CI 0.27 to 2.66) 1 study, POP-Q, stage 1 or 2 • PFMT: 61 of 87 at 6 months postpartum Control: 64 of 88 at 6 months postpartum • Mean difference 0.88 (95% CI 0.46 to 1.70)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence

Table 6: Evidence tables for additional randomised trials

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Al Belushi, Z. I., Al Kiyumi, M. H., Al-Mazrui, A. A., Jaju, S., Alrawahi, A. H., Al Mahrezi, A. M., Effects of home-based pelvic floor muscle training on decreasing symptoms of stress urinary incontinence and improving the quality of life of urban adult Omani women: A randomized controlled single-blind study, Neurourology & UrodynamicsNeurourol Urodyn, 39, 1557-1566, 2020	**Sample size** N=73 **Characteristics** Age (mean, SD), years: Intervention group 35.69 ± 7.08; control group 34.30 ± 7.60 BMI (mean, SD): Intervention group 30.11 ± 6.99; control group 27.96 ± 4.95 ICIQ sum score (mean, SD): Intervention group 8.11 ± 4.05; control group 8.00 ± 4.24	**Interventions** **PFMT (n=36)**: Participants were educated individually using audio-visual aids about the anatomy of PFM's, continence mechanisms, and the importance of PFMT in the management of UI problems. They were also trained about the daily schedule of performing the PFMT which involved endurance and speed training. The endurance training (tonic contractions) of the PFM's consists of slow velocity close to maximum contractions for 3 to 10 seconds (according to the initial pelvic floor assessment) followed by relaxation for the same duration. For example, if the initial pelvic floor	**Details** A validated Arabic version of the ICIQ-SF. Subjects were asked to fill this questionnaire at baseline and again at 12 weeks. ICIQ-SF consists of four main items: frequency of UI, amount of leakage, the overall impact of UI, and a self-diagnostic item. It is scored from 0 to 21 with higher scores indicating worsening severity. ICIQ sum score (at baseline and postintervention) was categorized initially to mild UI (score, 1-5),	**Results** **Improvement in the ICIQ sum score (n, %)** PFMT group: 17/36 (47.2%) Control group: 2/37 (5.4%)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, a computer generated random number table was used 1.2 Probably yes, states that an independent investigator prepared 74 envelopes with assignments 1.3 No, there were no significant differences between groups in baseline values Low risk 2.1 Yes, participants were aware of their assignment due to the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Ref Id 1290361 **Country/ies where the study was carried out** Oman **Study type** RCT **Aim of the study** To determine the effectiveness of home-based pelvic floor muscle training (PFMT) on decreasing the severity of symptoms and improving the quality of life (QOL) among Omani women with stress urinary incontinence (SUI) **Study dates** 5 August to 7 November 2018 **Source of funding**	**Inclusion criteria** Omani women who were diagnosed with SUI only (from a concurrent phase-I study which was a cross-sectional study to determine the prevalence of UI in Oman), aged between 20 and 50 years, nonpregnant, able to read and write, and were attending the selected three PHCs for any reason **Exclusion criteria** Women in the postnatal period (delivery within the past 6 months), immobility, those attending emergency services, and those with pelvic organ prolapse grades III and IV during the initial assessment by an experienced woman health's physiotherapist (according to the classification of International Continence Society).	assessment shows a time of sustained contraction of 5 seconds, the subject was instructed to have slow contractions for 5 seconds for the first week, and then to increase it to 6 seconds in the next week and so on with the aim of reaching 10 seconds. Thus, the sustained period of contraction was increased by 1 second per week to a maximum of 10 seconds. Speed training (phasic contractions) involved fast contractions of moderate strength for 2 seconds followed by relaxation for 2 seconds. The aim was to have five home sessions of both slow and fast contractions per day at supine, sitting, and standing positions. Each session consisted of 10 slow and 10 fast contractions. Correct PFM contractions were confirmed by vaginal examination during the assessment period by a trained physiotherapist. The participants were well instructed to contract PFM's only and avoid flexing the abdominal or thigh muscles.	moderate (score, 6-12), and severe (score, ≥13). Then, the change in the ICIQ was categorized into four levels of improvement (worsening, no improvement, 1-severity point improvement [including improvement from severe to moderate and moderate to mild], and 2-severity point improvement). As the numbers in some categories related to the improvement levels of various outcomes were small, the “worsening” level was merged with the “no improvement” one, and the “1-point” and “2-point improvement” levels were also merged. The improvement in various outcomes was assessed by calculating the difference from the baseline in each		nature of the intervention 2.2. Yes, those delivering the intervention were aware of the participants' assignment due to the nature of the intervention 2.3 No information, does not state if there were any deviations from the protocol 2.6 Yes, intent to treat analysis was used Some concerns 3.1 Yes, nearly all participants had data Low risk 4.1 No, the outcome was measured using a validated questionnaire 4.2 No, the questionnaire could not have differed between groups 4.3 Yes, as the questionnaire was self report 4.4 Probably no, as the control group received an active control intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
This study was supported by Sultan Qaboos University (Deanship of Research Fund).		**Control group (n=37)**: The participants in the control group were invited to a single lecture which they attended as a group (the number of participants in the group could vary between 2 and 5 subjects) on the earliest possible day at the same centre of their enrolment. They were given a 15-minute lecture using audio-visual aids on the anatomy of PFM's, continence mechanisms, and the importance of doing PFMT to alleviate problems related to UI. The scientific content of the group lecture was similar to the individualized lecture given to each participant in the intervention group before training. The participants in the control group were not trained or given weekly reminders over the telephone. At the end of the study, all women in the control group received instructions on PFMT by the PI, and those with a score of zero in the modified Oxford grading system (MOGS) were referred to a specialized physiotherapy centre for further management. A follow-up	group, adjusting for the baseline level.		5.1 No, there is no published protocol to assess pre-specified intentions 5.2 No information, analysis intentions are not available 5.3 No information, analysis intentions are not available Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		appointment at 12 weeks was offered upon request to women in the control group			
Full citation Araujo, C. C., Marques, A. A., Juliato, C. R. T., The Adherence of Home Pelvic Floor Muscles Training Using a Mobile Device Application for Women With Urinary Incontinence: A Randomized Controlled Trial, Female Pelvic Medicine & Reconstructive SurgeryFemale pelvic med, 26, 697-703, 2020 **Ref Id** 1290295 **Country/ies where the study was carried out** Brazil **Study type** RCT	**Sample size** N=33 **Characteristics** Age, mean (SD): App group 47.2 (10.6); control group 53.3 (13.2) years Race, n (%): Caucasian - app group 13 (81.2), control group 14 (87.5); Other - app group 3 (18.7), control group 2 (12.5) BMI, mean (SD): App group 27.9 (4.2); control group 28.5 (5.5) QUID, mean (SD): • Total score: App group 14.3 (8.3); control group 15.6 (7.4) • SUI: App group 9.3 (4.6); control group 8.7 (4.6)	**Interventions** **App based PFMT** n=17**:** To guide home exercise, women received the mobile app Diário Saúde, which was specially developed. The app was based on the visual component of sEMG as a guide for PFMT, without a vaginal probe but with better screen resolution and an alarm that reminds the used perform the exercises twice a day. At home, the women were asked to repeat the exercises by following a dynamic sequence of images on the app screen these images presented a correlation with the exercise that was being requested. For example, an 8-second contraction would be represented by a larger graphic area, different from phasic short contractions (smaller spikes), comprising 152 seconds of animation. Music was synchronized with the contractions during the exercise and the volume changes when the exercises begin or finish. Furthermore,	**Details** Adherence was considered the primary endpoint and was evaluated by a researcher, who accessed the number of protocol repetitions (hold/relaxation/phasic contraction). One repetition is definedas completion of all the sequence (8 times hold/relaxation/phasic contraction). An incomplete protocol was not considered a repetition. Women were asked to attribute a score, from 0 to 10, regarding their commitment to exercises where 0 means “no exercise at all” and 10 means “maximal adherence” (self-reported adherence).	**Results** **Self reported adherence - Score attribute by women from 0 to 10, regarding their commitment to exercises (mean, SD)** 1 month • App group: 9.5 ± 0.7 • Control group: 8.3 ± 1.5 2 months • App group: 9.9 ± 0.2 • Control group: 9 ± 1.3 3 months • App group: 9.9 ± 0.2 • Control group: 8.67 ± 1.3 **QUID total score, mean (SD)** 1 month • App group: 10.4 ± 9.4 • Control group: 9.2 ± 6.9 2 months • App group: 8.7 ± 9.25 • Control group: 4.5 ± 7.1 3 months	**Limitations** Cochrane risk of bias tool (v2) 1.1 Yes, said to be computer generated 1.2 Probably yes, states that sequence was kept in sealed opaque envelopes 1.3 No, no significant differences between groups at baseline Low risk 2.1 Yes, participants were aware of their group assignment 2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 Probably no, there was some non-adherence, but this is not likely due to the trial context 2.6 Probably no, per protocol analysis was used which excluded participants who were lost to follow up

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To evaluate the impact of the Diário Saúde app on patient adherence to home PFMT exercises at 3 months in women undergoing conservative treatment for SUI **Study dates** October 2016 to June 2017 **Source of funding** Postgraduate scholarship from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior	• OAB: App group 5 (4.7); control group 6.9 (5.0) ICIQ-UI SF score, mean (SD): App group 16.3 (4.0); control group 15.9 (4.7) ICIQ-VS score, mean (SD): • Vaginal symptoms: App group 11.8 (8.8); control group 13.7 (8.4) • Sexual function: App group 12.0 (20.4); control group 8.6 (16.2) • Quality of life: App group 5.0 (4.6); control group 5.9 (4.1) **Inclusion criteria** Women with self-reported SUI symptoms were included. The SUI diagnosis was based on a demonstration of urinary leakage on straining or coughing. In those who presented with mixed urinary incontinence,	when the woman finishes the exercise, she reports her perception of improvement on that day. Information would be saved in the app and is available for be remote accessed by the researcher. To observe adherence in the app group, the researcher accessed the app to determine how often the protocol program was activated. **Written PFMT** n=16**:** The women in this group received printed instructions for home PFMT. The static image of muscular contraction presented in the paper was similar to that obtained through a sEMG screen. The women filled in a diary paper offering information about adherence during home exercise. Both groups had the same exercise protocol. Each completed protocol comprises 8-second hold/8-second relaxation followed by 3 phasic contractions, repeated 8 times, with a total of 32 contractions and 152 seconds. The physiotherapist recommended that the	The secondary end points were changes in vaginal symptoms, quality of life, urinary and stress urinary symptoms obtained through questionnaires scores, PFM examination (power, endurance, number of repetitions and fast contractions), and cure rates.	• App group: 7.5 ± 9.0 • Control group: 3.9 ± 3.6 **ICIQ-UI SF score, mean (SD)** 1 month • App group: 12.9 ± 4.6 • Control group: 12.4 ± 6.7 2 months • App group: 10.9 ± 6.9 • Control group: 11.3 ± 5.0 3 months • App group: 9.1 ± 6.6 • Control group: 9.7 ± 6.6 **ICIQ-VS score, mean (SD)** **Vaginal symptoms** 1 month • App group: 9.7 ± 8.5 • Control group: 10.9 ± 8.1 2 months • App group: 6.2 ± 7.9 • Control group: 7.0 ± 3.9 3 months • App group: 6.8 ± 8.2 • Control group: 6.0 ± 4.9	2.7 Probably yes, although there were no participants missing at 1 month follow up, but 20% missing at 2 months, and 36% at 3 months High risk 3.1 No, although no participants missing at 1 month follow up, over 5% missing at both 2 and 3 months 3.2 No, no evidence that the results were not biased by missing data 3.3. Probably yes, although reasons for drop out are documented, some are vague for example 'not available' and some are related to the outcome for example 'reported no symptoms'. 3.4 Probably yes, differences between the groups in terms of the proportion of missing data (29% vs 44%) High risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	the predominant type was SUI, based on the self-reported symptoms, using Questionnaire for Urinary Incontinence Diagnosis (QUID) **Exclusion criteria** The exclusion criteria were neurologic impairment that affects comprehension, symptoms suggestive of neurogenic bladder (a dribbling stream when urinating, inability to fully empty the bladder, straining during urination, loss of bladder control, and difficulty determining when the bladder is full), alterations in PFM contraction (hyperactivity or complete inability to contract) after initial vaginal palpation, previous PFMT, pelvic organ prolapse (greater than stage I by Pelvic Organ Prolapse Quantification), urinary infections	patient did the completed protocol 2 times a day (sitting, lying down, or standing) for 3 months. The app group was instructed to do the exercises when the app sends a visual alarm. The control group was instructed to do the exercise twice at any time of the day.		**Sexual function** 1 month • App group: 11.4 ± 14.2 • Control group: 12.9 ± 23.2 2 months • App group: 6.4 ± 19.3 • Control group: 17.8 ± 18.7 3 months • App group: 8.2 ± 20.3 • Control group: 2.7 ± 5.5 **Quality of life** 1 month • App group: 4.4 ± 4.3 • Control group: 3.9 ± 4.2 2 months • App group: 1.8 ± 3.2 • Control group: 3.1 ± 3.7 3 months • App group: 5.6 ± 4.3 • Control group: 1.3 ± 2.9 **Adherence - number of protocol repetition (mean, SD)** 1 month • App group: 52.9 ± 5.5 • Control group: 43.7 ± 11.1	4.1 No, validated questionnaires were used 4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 Probably no, there is a published protocol, however the this does not include intentions for analysis 5.2 No, the protocol does include outcome measures which are reported in the paper 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: High risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	symptoms, and previous pelvic floor surgeries.			2 months • App group: 49.8 ± 8.1 • Control group: 33.6 ± 10.7 3 months • App group: 43.8 ± 8.7 • Control group: 17.7 ± 6.3	
Full citation Dumoulin, C., Morin, M., Danieli, C., Cacciari, L., Mayrand, M. H., Tousignant, M., Abrahamowicz, M., Urinary, Incontinence, Aging Study, Group, Group-Based vs Individual Pelvic Floor Muscle Training to Treat Urinary Incontinence in Older Women: A Randomized Clinical Trial, JAMA Internal Medicine, 180, 1284-1293, 2020 **Ref Id** 1290393	**Sample size** N=362 **Characteristics** Age, mean (SD), year: Individual PFMT 67.9 (5.9); group PFMT 68.0 (5.7) BMI, mean (SD) Individual PFMT 27.2 (4.6); group PFMT 27.0 (4.5) Type of incontinence (no, %): • Stress: Individual 27 (15); Group 35 (20) • Mixed: Individual 157 (85); Group 143 (80)	**Interventions** women in both treatment arms received a 12-week PFMT program under the direction of an experienced pelvic floor physiotherapist, either in individual or group sessions. For both interventions, each weekly session lasted 1 hour and included a 15-minute educational period and a 45-minute exercise component. The exercise targeted PFM strength, power, endurance, coordination, and integration into daily living activities, such as coughing. The 12-week training protocol comprised three 4-week phases with the gradual addition of increasingly difficult exercises in terms of	**Details** Both per protocol and ITT were used at 1 year, per protocol was used at 12 weeks.	**Results** **Perceived benefit on PGI-I, number (%)** 12 weeks • Individual (n=171): 164 (96) • Group (n=166): 160 (96) 1 year • Individual (n=163): 138 (85) • Group (n=153): 132 (86) 1 year (ITT) • Individual (n=171): 146 (85) • Group (n=166): 144 (87) **Satisfaction, number (%)** 12 weeks	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated randomisation was used 1.2 Probably yes, states that assignments were sealed 1.3 No, no statistically significant differences between the groups Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Canada **Study type** RCT **Aim of the study** To assess the efficacy of group-based PFMT relative to individual PFMT for urinary incontinence in older women. **Study dates** July 1, 2012, to June 2, 2018. **Source of funding** Not reported	Duration of symptoms, mean (SD), years: Individual 10.3 (10.6); Group 9.2 (9) **Inclusion criteria** Eligible participants were women aged 60 years or older with symptoms of stress or mixed urinary incontinence who reported at least 3 episodes of involuntary urine loss per week during the preceding 3 months. Stress and mixed urinary incontinence were confirmed using the validated Questionnaire for Incontinence Diagnosis **Exclusion criteria** Exclusion criteria were body mass index (BMI) 35 or greater (calculated as weight in kilograms divided by height in meters squared), reduced mobility (requiring a	duration, number of repetitions, and position. Women in both study arms were expected to perform PFM exercises at home, 5 days per week during the 12-week physiotherapy program, and subsequently 3 days per week for 9 months. **Individual PFMT (n=184):** participants in the individual PFMT arm used intravaginal electromyographic biofeedback during each treatment session for 10 to 15 minutes **Group PFMT (n=178):** In addition to the standard protocol, participants in the group-based PFMT arm who reported having difficulty with the PFM exercises were offered short private sessions with the physiotherapist to ensure understanding and correct performance of a PFM contraction		• Individual (n=171): 160 (94) • Group (n=165): 150 (91) 1 year • Individual (n=164): 148 (90) • Group (n=153): 148 (91) 1 year (ITT) • Individual (n=171): 154 (90) • Group (n=165): 150 (91)	2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, states that an ITT analysis was used, but there are participants missing from the ITT analysis 2.7 Probably yes, 43/362 participants not included in follow up High risk 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, reasons for missing data are given and are mostly not related to the intervention/outcomes (1 in the individual

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	mobility aid), chronic constipation,16 important pelvic organ prolapse (Pelvic Organ Prolapse Quantification System >stage 2), physiotherapy treatment or surgery for urinary incontinence or pelvic organ prolapse in the past year, use of medications for urinary incontinence or affecting skeletal muscles, change in hormonal replacement therapy in the past 6months, any leakage of stool or mucus, active urinary or vaginal infection in the past 3 months, or any comorbidities or risk factors interfering with the study				group disliked the treatment) Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as both groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published 5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Figueiredo, V. B., Nascimento, S. L., Martinez, R. F. L., Lima, C. T. S., Ferreira, C. H. J., Driusso, P., Effects of individual pelvic floor muscle training vs individual training progressing to group training vs group training alone in women with stress urinary incontinence: A randomized clinical trial, Neurourology and Urodynamics, 2020 **Ref Id** 1272946 **Country/ies where the study was carried out** Brazil **Study type** RCT **Aim of the study** To assess the effects of individual pelvic	**Sample size** N=90 (30 women withdrew from PFMT before completing all sessions and were replaced with new participants) **Characteristics** Mean age (SD), years: 53 (12.5) (IT: 50.3 ± 11.9; GT: 57.8 ± 9.5; and IPGT: 50.8 ± 14.4) Type of UI: • SUI 44.4% (Individual 10 (33.3%); group 10 (33.3%); individual then group 20 (66.7)) • MUI 55.6% (Individual 20 (66.7%); group 20 (66.7%); individual then group 10 (33.3%)) BMI • Healthy: Individual 9 (30%); group 6 (20%); individual then group 11 (36.7%)	**Interventions** Initially, all participants received standardized guidance about the anatomy and function of the PFM and how to perform a properly contraction. The women participated in 12 sessions lasting 30 minutes each, once a week, with direct supervision by a physical therapist. The physiotherapists at both centers received the same training. For all groups, the same PFMT protocol developed for this study was used, with progression parameters based on the principles of exercise physiology. Both sustained and fast PFM contractions were performed with progression parameters of the sustained contractions (number of series, repetitions, sustain, and resting time) and fast contraction (number of repetitions). The training was performed with participants lying down, sitting, and standing. Each participant was instructed to perform the same exercise protocol as they performed with the physical therapist, at home,	**Details** Participants were assessed before the PFMT intervention (pretreatment) and reassessed just after 12 weeks of intervention (posttreatment), 3 and 6 months after the end of the intervention. The primary outcome was UI severity, assessed using the KHQ. Its score ranges from 0 to 100 and increases with greater severity. A clinically significant change in this questionnaire is five points. Adherence to PFMT was assessed using an exercise diary designed to monitor how many days of the week they did PFMT (including days of unsupervised training). However, there was poor adherence to keeping the diary (31/90 did not return the exercise diary at	**Results** **Severity of UI (assessed with the KHQ)** Pre-treatment • Individual PFMT (n=30): 34.8 ± 19.2 • Group PFMT (n=30): 33.5 ± 23.2 • Mixed PFMT (n=30): 38.6 ± 25.5 Post-treatment • Individual PFMT: 24.9 ± 19.9 • Group PFMT: 23.5 ± 20.1 • Mixed PFMT: 22.7 ± 23.4 3 months follow up • Individual PFMT (n=30): 18.7 ± 20.7 • Group PFMT (n=30): 22.7 ± 18.7 • Mixed PFMT (n=30): 20.4 ± 23.3 6 months follow up	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a random number generator website was used 1.2 Probably yes, mentions that randomisation was carried out by an independent investigator who was not involved in study recruitment or the intervention 1.3 Yes, there were differences in the number of overweight participants in the three groups (I-PFMT 40%; G-PFMT 30%; IG-PFMT 10%), the number of women with <9 year education (60%; 43.3%; 33.3%), the number of women with 4-8 pregnancies (13.3%; 36.7%; 3.3%), the number of postmenopausal women (43.3%; 80%; 56.7%), and the type of UI. Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
floor muscle (PFM) training vs individual training (IT) progressing to group training (GT) vs group-only training in women with stress urinary incontinence. **Study dates** Not reported **Source of funding** Foundation for Support in Scientific and Technological Development of Ceará	• Overweight: Individual 12 (40%); group 9 (30%); individual then group 3 (10%) • Obese: 9 (30%); 15 (50%); 16 (53.3%) Prolapse • Individual 7 (23.3%); 10 (30%); 5 (16.7%) **Inclusion criteria** The study included women over 18 years of age who had not undergone physical therapy treatment for PFM dysfunction in the last year and with a clinical complaint of urinary loss due to exertion, which was investigated using two modified questions of the King's Health Questionnaire (KHQ). **Exclusion criteria** The exclusion criteria were: diagnosis of urgency incontinence, neuromuscular disease, other diseases (asthma,	every day, over the 12 weeks of supervised training, and to continue to train after the 12 supervised intervention sessions. **Individual PFMT (n=30):** participants received all 12 sessions individually **Group PFMT (n=30):** participants received all 12 sessions in a group **Individual progressing to group PFMT (n=30):** participants received the first four training sessions individually and then progressed to eight group training sessions	assessment 3, and 28/90 did not return the diary at assessment 4).	• Individual PFMT (n=30): 16.2 ± 20.2 • Group PFMT (n=30): 23.8 ± 19.2 • Mixed PFMT (n=30): 24.2 ± 24.4	2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, apart from the 30 participants who dropped out and were subsequently replaced, deviations from the protocol are not described. Adherence couldn't be assessed due to the number of women not returning their exercise diaries 2.6 Probably not, the authors excluded and replaced participants who did not complete all sessions, so an intent to treat analysis was not carried out 2.7 Probably yes, 30 participants were excluded from analysis and replaced High risk

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	tumours, and heart failure), absence of PFM contraction (grade 0) verified by the modified Oxford scale, urinary tract infection, difficulty in understanding study procedures, presence of severe prolapse (visible prolapse in the vaginal opening), uncontrolled hypertension, and pregnancy				3.1 Probably no, excluded 30 participants who did not complete all PFMT sessions 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 No information, as all groups received PFMT, and no information on which groups the participants who had dropped out actually belonged to 3.4 No information High risk 4.1 No, the KHQ is a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as all groups received the same active intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					5.1 Yes, a protocol was published for this study 5.2 No, outcome was assessed using only one measure, which is fully reported 5.3 No, no evidence of multiple analyses Low risk Overall rating: High risk of bias
Full citation Fitz, F. F., Gimenez, M. M., de Azevedo Ferreira, L., Matias, M. M. P., Bortolini, M. A. T., Castro, R. A., Pelvic floor muscle training for female stress urinary incontinence: a randomised control trial comparing home and outpatient training, International Urogynecology Journal, 31, 989-998, 2020 **Ref Id** 1290438	**Sample size** N=69 **Characteristics** Age (mean, SD), years: Combination group 57.5 (11.9); home PFMT group 56 (10.3) BMI (mean, SD), kg/m2: Combination group 31.0 (7.3); home PFMT group 33.3 (5.9) I-QoL-ALB (mean, SD): Combination group 108.8 (37.7); home PFMT group 109.0 (40.9) I-QoL-PS (mean, SD): Combination group 149.5 (40.5); home	**Interventions** **Outpatient PFMT n=34:** During the 3 months, the patients performed 24 outpatient sessions of PFMT under the guidance of a physiotherapist (twice a week) and additional home PFM exercises. The outpatient PFMT group performed exercises in supine (first month), sitting (second month) and standing (third month) positions. Under the physical therapist's supervision and encouragement, the participant conducted one set of PFM exercises. **Home PFMT n=35 :** During the 3 months, the patients performed PFMT at	**Details** Quality of life was assessed using the Incontinence Quality-of-Life Questionnaire (I-QoL). The I-QoL questionnaire is composed of 22 questions evaluating the limitations on human behaviour, the psychosocial impact, and the social embarrassment associated with urinary incontinence. The responses are scored between 1 and 5 points, and those are summed and converted into a percentage. A better quality of life is	**Results** **I-QoL - Avoidance and limiting behaviour (at 3 months)** • Outpatient (n=28): 140.3 (24.9) • Home (n=28): 139.2 (37.2) **I-QoL - Psychosocial impacts (at 3 months)** • Outpatient (n=28): 171 .6 (33.7) • Home (n=28): 179.4 (37.6) **I-QoL - Social embarrassment (at 3 months)** • Outpatient (n=28): 59. 8 (22.9) • Home (n=28): 69.8 (30.7)	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated random number table was used 1.2 Probably yes, states that the allocation sequence was concealed in sealed and opaque envelopes 1.3 Probably yes, there is a difference in the I-QoL SE at baseline, although according to the paper this is not statistically significant Some concerns 2.1 Yes, participants were aware which

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Brazil **Study type** RCT **Aim of the study** To compare the efficacy of performing PFMT in an outpatient clinic and at home in Brazilian incontinent women, and to verify if home PFMT may be an alternative to those not able to attend the outpatient sessions. **Study dates** Not reported **Source of funding** Not reported	PFMT group 140.5 (44.5) I-QoL-SE (mean, SD): Combination group 42.2 (32.2); home PFMT group 56.0 (40.1) **Inclusion criteria** Patients presenting with SUI and/or mixed urinary incontinence with predominant SUI symptoms and ≥ 2 g of leakage measured by pad test and who had the capability of contracting the PFM properly **Exclusion criteria** Younger than 18 years of age, had chronic degenerative diseases, pelvic organ prolapse greater than stage I by the POP-Q, neurological or psychiatric diseases, the inability to contract the PFM, or had participated in previous pelvic floor re-education programs, and/or had undergone previous pelvic floor surgeries	home with three outpatient sessions of PFMT under the guidance of a physiotherapist. In the home PFMT group, the patients returned to the clinic once a month to receive a new routine and diary of PFMT exercises to perform at home. During the PFMT, the physiotherapist investigator instructed the patients by verbal command to maintain the PFM contraction, and the participants were encouraged to conduct one set of the PFM exercises under supervision. The PFMT protocol was described in accordance with the Consensus on Exercise Reporting Template. This includes items such as type of exercise, dosage, intensity, frequency, supervision, progression and individualisation, which are necessary for specific interventions of the exercise. It is recommended that, as a minimum, the seven-domain CERT should be used to guide the reporting of exercise	associated with a higher percentage. The number of completed exercise sets was obtained using an exercise diary and it was recorded as the mean of the exercise sets per month performed during the 3-month therapy for both groups. The protocol includes the performance of three sets per day/7 days a week. The patients who performed the exercises less than 3 days a week/3 sets a day were excluded. The patients had to perform at least 36 sets of exercises per month to be considered in the analyses. In a 30-day month we expected the performance of a total of 82 sets of exercises per month as 100% adherence in the outpatient PFMT group (excluding the eight	**Patient satisfaction (ITT analysis)** • Outpatient: 24/34 (70.6%) • Home: 18/35 (51.4%) **Adherence** 1st month • Outpatient: 76.4 (8.8) • Home: 64.8 (18.5) 2nd month • Outpatient: 74.6 (11.1) • Home: 62.5 (22.4) 3rd month • Outpatient: 75.6 (9.4) • Home: 68.7 (19.8)	group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, apart from adherence, although this is unlikely due to the trial context 2.6 Probably no, an intent to treat analysis was used for one outcome, and per protocol analysis was used for the rest, excluding participants who dropped out 2.7 Probably yes, more than 5% of participants not included in follow up High risk 3.1 No, over 5% missing from each group

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		programs and be accompanied by supplementary online material, such as diagrams or photograph. Both groups were encouraged to perform three sets of ten repetitions daily during the 3 months. One set consisted of 10 maximum voluntary contractions held for 6–10 s (6 s during the 1st month, 8 s during the 2nd month, 10 s during the 3rd month) with double-time rest between each contraction, followed by three to five fast contractions in a row (three contractions during the 1st month, four contractions during the 2nd month, five contractions during the 3rd month). The exercises were performed in supine (1st month), sitting (2nd month), and standing (3rd month) positions. The patients in both groups were evaluated for progression of the training on a monthly basis and received the exercise diary	sets per month performed during the outpatient sessions). In the home PFMT group, 100% adherence was achieved when a total of 89 sets of exercises per month were performed (excluding one set performed per month during the outpatient session). The frequency of the outpatient sessions was monitored by the physiotherapist and it was expressed as the percentage of the total sessions after 3 months of supervised treatment. We considered 100% adherence when the patients attended 24 sessions in the outpatient PFMT group and three sessions in the home PFMT groups. All patients were instructed to report absences from the outpatient sessions, after which		3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, states reasons for drop out which are not related to the treatment/outcomes Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as all groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
			a new date was scheduled. The satisfaction and willingness to have another treatment was measured by a simple question asking the patients if they were “satisfied” with regard to their condition (urinary incontinence) and the treatment, or “dissatisfied” if the patient desired a different treatment other than the initial one. ITT analysis was performed for patient satisfaction only		5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias
Full citation Gungor Ugurlucan, F., Onal, M., Aslan, E., Ayyildiz Erkan, H., Kizilkaya Beji, N., Yalcin, O., Comparison of the effects of electrical stimulation and posterior tibial nerve stimulation in the treatment of	**Sample size** N=59 **Characteristics** Mean age (SD): ES group 53.78 (10.5); PTNS group 51.18 (11.1) Mean BMI (SD): ES group 31.2 (5.8);	**Interventions** **Electrical stimulation (n=38):** Endomed-M 433 (Delf Instruments Physical Medicine B.V.) electrical stimulator and stimulating electrodes were used. The electrode was inserted into the vagina. The vaginal plug was cylinder-shaped with ringed-shaped electrodes. Pulses of 10–50 Hz square waves at a 300- μs or 1-ms	**Details** Health related quality of life was assessed using the validated Turkish version of the King's Health Questionnaire	**Results** **King's Health Questionnaire - total score (0-900?; high is poor outcome)** Baseline: ES (n=35): 469.78 (222.4) PTNS (n=17): 467.98 (189.1) After treatment: ES (n=35): 328.18 (195.1)	**Limitations** Cochrane risk of bias (Version 2.0) Domain 1: Randomisation: Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
overactive bladder syndrome, Gynecologic & Obstetric InvestigationGynecol Obstet Invest, 75, 46-52, 2013 **Ref Id** 1196618 **Country/ies where the study was carried out** Turkey **Study type** RCT **Aim of the study** To evaluate the efficacy of PTNS compared with ES among women with OAB **Study dates** Not reported **Source of funding** This study was supported by the	PTNS group 32.7 (6.8) Number with urge incontinence: ES group 33 (94.3%); PTNS group 17 (100%) **Inclusion criteria** Inclusion criteria were having the symptoms of OAB and urodynamic observation of detrusor overactivity **Exclusion criteria** Exclusion criteria were pregnancy, cardiac disorders or presence of cardiac pacemaker, hemorrhagic diathesis, neurological disorders, vesicoureteral reflux, menorrhagia, urinary tract infection or vaginitis, grade 3 or more pelvic organ prolapse, and presence of an intrauterine device.	pulse duration and a maximal output current of 24–60 mA were used for 20 min for 6–8 weeks, three times per week. A frequency of 5–10 Hz was used for urge incontinence, and stimulation up to the maximal tolerable level was given. **Posterior tibial nerve stimulation (n=21):** PTNS was performed as suggested by Cooperberg and Stoller. The Urgent PC Neuromodulation System was used for stimulation with a 34-gauge needle inserted about 3–4 cm cephalad to the medial malleolus, between the posterior margin of the tibia and soleus muscle. Correct position was confirmed by flexion of the great toe or fanning of the toes and a tingling sensation. Voltage pulse intensity was adjusted so that the patient did not have any pain sensation. A fixed pulse width of 200 and a frequency of 20 Hz were used. The treatment was performed weekly in 30-min sessions for 12 weeks.		PTNS (n=17): 394.98 (214.7)	1.1: Probably yes, participants were randomly allocated to treatments using computer based system 1.2: No information, allocation concealment not mentioned 1.3: No, no significant differences between groups at baseline Domain 2: Deviations from intended interventions: Some concerns 2.1: Yes, participants not blinded - also the duration of the intervention and number of sessions received different between the groups 2.2: Yes, carers and people delivering the interventions not blinded 2.3: No information whether there were any deviations from

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Research Fund of Istanbul University					the intended intervention Domain 3: Missing outcome data: Low risk 3.1: Probably no, 9.2% in PFMT group and 8.1% in control group dropped out 3.2: Probably no, no evidence that the results were not biased by missing outcome data 3.3: Probably no, missingness of the outcome was not dependent on its true value Domain 4: Measurement of the outcome: Some concerns 4.1: Probably no, outcomes clearly defined, but missing some information

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					regarding scoring. Unclear how questionnaire was administered 4.2: Probably no, outcomes unlikely to differ between treatment arms 4.3: Probably yes, outcomes were self-report and participants were not blinded 4.4: Probably no, both groups received treatment therefore expectations are likely to be similar between groups Domain 5: Selection of the reported result: Some concerns 5.1: No, no pre-panned analysis or protocol available 5.2: No, descriptive data presented 5.3: No, data presented as expected

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 6: Overall judgment of bias: Some concerns
Full citation Hagen, S., Elders, A., Stratton, S., Sergenson, N., Bugge, C., Dean, S., Hay-Smith, J., Kilonzo, M., Dimitrova, M., Abdel-Fattah, M., Agur, W., Booth, J., Glazener, C., Guerrero, K., McDonald, A., Norrie, J., Williams, L. R., McClurg, D., Effectiveness of pelvic floor muscle training with and without electromyographic biofeedback for urinary incontinence in women: multicentre randomised controlled trial, BMJBmj, 371, m3719, 2020a **Ref Id** 1290356	**Sample size** N=600 **Characteristics** Mean (SD) age (years): PFMT + BF group 48.2 (11.6); PFMT group 47.3 (11.4) Mean (SD) body mass index: PFMT + BF group 28.6 (5.9); PFMT group 28.3 (6.2) Type of incontinence (n, %): • Stress: PFMT + BF group 116 (38.7); PFMT group 116 (38.7) • Mixed (stress more troublesome): PFMT + BF group 108 (36.0); PFMT group 109 (36.2) • Mixed (stress and urgency equally troublesome): PFMT + BF group 42	**Interventions** Participants in both groups were offered six face-to face appointments (weeks 0, 1, 3, 6, 10, and 15; 60 minutes for the first appointment and 30 minutes for subsequent appointments) with a therapist (an experienced physiotherapist, nurse, or other continence clinician) who had received training in intervention delivery. **PFMT + Biofeedback (n=300):** electromyographic biofeedback was integrated with PFMT during the appointments. In addition, participants were given the same biofeedback device as used during appointments for their home use with a prescribed programme, along with information on operating, cleaning, and output interpretation. The devices stored usage information and the participants recorded the use of the biofeedback device in their exercise diaries. PFMT as described below.	**Details** The primary outcome was severity of urinary incontinence (ICIQ-UI SF) at 24 months. The ICIQUI SF score ranges from 0 to 21 and is the weighted sum of three items addressing urinary incontinence frequency (“how often do you leak urine?” 0=never to 5=all the time), leakage quantity (“how much urine do you usually leak?” 0=none to 6=a large amount), and interference with everyday life (0=not at all to 10=a great deal). Higher scores reflect greater severity. Relevant secondary outcomes were cure (never or none responses to ICIQ-UI SF frequency or quantity items) and improvement in	**Results** **Adherence (mean number of appointments attended, 0-6)** • PFMT + BF group: 4.2 (1.9) • PFMT group: 4 (2.1) **ICIQ-UI SF** 6 months • PFMT + BF group (n=221): 9.0 (5.0) • PFMT group (n=221): 8.8 (4.5) 12 months • PFMT + BF group (n=249): 9.1 (4.9) • PFMT group (n=252): 8.7 (5.0) 24 months • PFMT + BF group (n=225): 8.2 (5.1) • PFMT group (n=235): 8.5 (4.9) **Cure (Negative response to both “how often do you leak urine?” and “how much urine do you usually leak?”; n, %)**	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, web based randomisation was used 1.2 Probably yes, states that a centralised centre carried out randomisation 1.3 No, no significant differences between groups in terms of baseline characteristics Low risk 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 Probably no, no information regarding deviations from the intended protocol, there was some non-adherence

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out UK **Study type** RCT **Aim of the study** To assess whether PFMT plus electromyographic biofeedback in the clinic and at home would be more effective than PFMT alone for reducing the severity of incontinence in women with stress or mixed urinary incontinence. **Study dates** Participant recruitment took place between February 2014 and July 2016 **Source of funding** This trial was funded by the National Institute for Health Research (NIHR), Health Technology	(14.0); PFMT group 42 (14.0) • Mixed (urgency more troublesome): PFMT + BF group 34 (11.3); PFMT group 33 (11.2) ICIQ-UI SF severity: • Mild or moderate (<13): PFMT + BF group 140 (48.1); PFMT group 149 (50.7) • Severe (≥13): PFMT + BF group 151 (51.9); PFMT group 145 (49.3) Mean (SD) POP-SS: PFMT + BF group 6.4 (5.7); PFMT group 6.7 (5.6) **Inclusion criteria** Women aged 18 years or older and newly presenting with clinically diagnosed stress or mixed urinary incontinence and urine leakage as the primary problem were potentially eligible for inclusion	**PFMT alone (n=300):** The therapist assessed the pelvic floor muscles, taught the correct technique for exercise, prescribed an individualised PFMT programme to be followed at home (aiming for three sets of exercises daily, recorded in an exercise diary), and used behaviour change techniques embedded in the protocols to encourage adherence. Bladder and bowel management information and lifestyle advice were provided as necessary.	urinary incontinence (reduction in ICIQ-UI SF score of ≥3 points), the Patient Global Impression of Improvement, measuring participants' perceptions of their urine leakage (1=very much better to 7=very much worse), the International Consultation on Incontinence Questionnaire-female lower urinary tract symptoms (12 items, three subscales: filling (0-15), voiding (012), and incontinence (0-20), higher scores worse),12 the International Consultation on Incontinence Questionnaire-lower urinary tract symptoms quality of life (19 items, total ranging from 19 to 76, higher scores worse), the EuroQol-5 dimension-3 level (EQ5D-3L) questionnaire (range	6 months • PFMT + BF group: 12/221 (5.4) • PFMT group: 13/223 (5.8) 12 months • PFMT + BF group: 16/250 (6.4) • PFMT group: 22/253 (8.7) 24 months • PFMT + BF group: 18/229 (7.9) • PFMT group: 20/238 (8.4) **Improvement (Reduction in International Consultation on Incontinence Questionnaire-urinary incontinence short form of ≥3 points from baseline; n, %)** 6 months • PFMT + BF group: 129/221 (58.4) • PFMT group: 133/221 (60.2) 12 months • PFMT + BF group: 148/249 (59.4) • PFMT group: 163/252 (64.7)	but this is unlikely due to the trial context 2.6 Yes, an intent to treat analysis was performed Some concerns 3.1 No, over 5% were did not respond to follow up questionnaire at both time points 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups Low risk 4.1 No, a validated questionnaire was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an active intervention Low risk 5.1 Yes, there is a published protocol,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Assessment programme (project No 11/71/03	**Exclusion criteria** Participants who had urgency urinary incontinence alone, a prolapse greater than stage II on examination (>1cm below the hymen on straining), were unable to contract pelvic floor muscles on digital examination when requested, had received formal instruction on PFMT in the preceding year (this was originally three years but was changed on 1 June 2015), were pregnant or had given birth in the past six months (this was originally one year but was changed on 1 June 2015), were receiving treatment for pelvic cancer, had neurological disease, could not provide informed consent because of cognitive impairment, were allergic or sensitive to nickel (this was added on 1 June 2015), or		−0.594 to 1) and EQ-5D visual analogue scale (range 0 to 100, higher scores better) [results for EQ5D not in paper or supplementary material], the pelvic organ prolapse symptom score (POP-SS; seven items, total ranging from 0 to 28, higher scores worse), an early non-validated version of the International Consultation on Incontinence Questionnaire-bowel short form (six items: difficulty emptying, urgency, leakage, frequency of defecation, stool consistency, and interference with everyday life, each scored individually), adherence to the home programme (PFMT with or without biofeedback as appropriate) recorded by the therapist at each appointment (programme	24 months • PFMT + BF group: 135/225 (60.0) • PFMT group: 147/235 (62.6) **"Very much better" or "much better" (Patient Global Impression of Improvement instrument; n, %)** 6 months • PFMT + BF group: 96/219 (43.8) • PFMT group: 85/221 (38.5) 12 months • PFMT + BF group: 101/249 (40.6) • PFMT group: 92/250 (36.8) 24 months • PFMT + BF group: 93/227 (41.0) • PFMT group: 90/236 (38.1) **ICIQ-FL Incontinence score (range 0-20); mean, SD** Baseline • PFMT + BF group (n=290): 9.8 (3.6) • PFMT group (n=294): 9.3 (3.4)	which contains prespecified analyses 5.2 No, all outcomes were reported 5.3 No, outcomes correspond to prespecified analyses Low risk Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	were participating in other urinary incontinence research		followed, yes or no), and, if missing, ascertained from participant exercise diaries and biofeedback unit data, and adherence to PFMT longer term self-reported in follow-up questionnaires.	6 months • PFMT + BF group (n=182): 7.1 (4.0) • PFMT group (n=178): 6.6 (3.8) 12 months • PFMT + BF group (n=188): 7.1 (3.9) • PFMT group (n=182): 6.6 (4.1) 24 months • PFMT + BF group (n=164): 7.0 (4.3) • PFMT group (n=169): 6.5 (4.0) **Filling score (range 0-15); mean, SD** Baseline • PFMT + BF group (n=289): 5.0 (2.8) • PFMT group (n=297): 4.8 (2.6) 6 months • PFMT + BF group (n=183): 3.7 (2.7) • PFMT group (n=176): 3.4 (2.3) 12 months • PFMT + BF group (n=187): 3.8 (2.7) • PFMT group (n=186): 3.6 (2.4) 24 months • PFMT + BF group (n=167): 3.4 (2.6)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT group (n=168): 3.5 (2.3) **Voiding score (range 0-12), mean SD** Baseline • PFMT + BF group (n=292): 2.0 (2.0) • PFMT group (n=294): 2.0 (2.1) 6 months • PFMT + BF group (n=182): 1.6 (1.8) • PFMT group (n=179): 1.4 (1.8) 12 months • PFMT + BF group (n=188): 1.5 (1.9) • PFMT group (n=186): 1.5 (1.8) 24 months • PFMT + BF group (n=165): 1.6 (1.8) • PFMT group (n=169): 1.6 (1.8) **ICI Q-LUTSqol (Overall (range 19-76); mean, SD)** Baseline • PFMT + BF group (n=292): 43.5 (12.3) • PFMT group (n=297): 42.3 (12.1) 6 months	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT + BF group (n=183): 36.2 (13.2) • PFMT group (n=176): 35.7 (11.9) 12 months • PFMT + BF group (n=189): 35.7 (13.3) • PFMT group (n=184): 34.7 (12.1) 24 months • PFMT + BF group (n=164): 34.3 (12.4) • PFMT group (n=169): 34.3 (12.5)	
Full citation Hagen, Suzanne, Bugge, Carol, Dean, Sarah G., Elders, Andrew, Hay-Smith, Jean, Kilonzo, Mary, McClurg, Doreen, Abdel-Fattah, Mohamed, Agur, Wael, Andreis, Federico, Booth, Joanne, Dimitrova, Maria, Gillespie, Nicola, Glazener, Cathryn, Grant, Aileen, Guerrero, Karen L., Henderson, Lorna, Kovandzic, Marija, McDonald,	**Sample size** See Hagen 2020a **Characteristics** See Hagen 2020a **Inclusion criteria** See Hagen 2020a **Exclusion criteria** See Hagen 2020a	**Interventions** See Hagen 2020a	**Details** See Hagen 2020a	**Results** **ICI Q-LUTSqol bother (Overall; mean, SD)** Baseline • PFMT + BF group (n=288): 7.4 (2.6) • PFMT group (n=288): 7.6 (2.5) 6 months • PFMT + BF group (n=183): 4.3 (3.1) • PFMT group (n=177): 4.3 (2.8) 12 months • PFMT + BF group (n=189): 4.0 (3.1) • PFMT group (n=184): 3.9 (3.0)	**Limitations** See Hagen 2020

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Alison, Norrie, John, Sergenson, Nicole, Stratton, Susan, Taylor, Anne, Williams, Louise R., Basic versus biofeedback-mediated intensive pelvic floor muscle training for women with urinary incontinence: the OPAL RCT, Health technology assessment (Winchester, England), 24, 1-144, 2020b **Ref Id** 1305144 **Country/ies where the study was carried out** See Hagen 2020 **Study type** See Hagen 2020 **Aim of the study** See Hagen 2020 **Study dates**				24 months • PFMT + BF group (n=163): 3.8 (3.1) • PFMT group (n=169): 3.7 (2.9) **Adherence (adherence during clinic appointment - any adherence in clinic; n (%))** PFMT + BF group (n=290): 231 (79.7) PFMT group (n=292): 231 (79.1)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
See Hagen 2020 **Source of funding** See Hagen 2020					
Full citation Hwang, U. J., Kwon, O. Y., Lee, M. S., Effects of surface electrical stimulation during sitting on pelvic floor muscle function and sexual function in women with stress urinary incontinence, Obstetrics & Gynecology ScienceObstet, 63, 370-378, 2020a **Ref Id** 1290364 **Country/ies where the study was carried out** Korea **Study type** RCT	**Sample size** N=34 **Characteristics** Age (mean, SD), years: ES group 42.3 (9.1); control group 41.1 (7.2) BMI (mean, SD), kg/m2: ES group 22.6 (2.8); control group 22.8 (3.5) Duration of symptoms (mean, SD), years: ES group 5.7 (3.6); control group 7.8 (6.0) **Inclusion criteria** • SUI diagnosed by a urogynecologist • Leakage episode occurring more than once per week • Body mass index <30 kg/m2 • Age between 30 and 60 years	**Interventions** **Electrical stimulation (n=17):** The EasyK7 is a SESdS device that stimulates the PFM and surrounding structures using 3 surface electrodes in contact with the perivaginal and sacral regions. Surface electrodes were positioned near each participant's anus and sacrum to stimulate both the perivaginal and sacral regions, with the subject sitting on the EasyK7 device. Subjects were asked to sit on the device to ensure that both electrodes made contact with the perivaginal and sacral regions. The amplitude used for stimulation was set to a comfortable level for each subject. The EasyK7 delivered biphasic and asymmetric impulses of 25 Hz at pulses of 11 seconds, with an 11-second rest period between pulses. The mean intensities used were	**Details** Female sexual function was measured using the Korean version of the pelvic organ prolapse–urinary incontinence sexual function questionnaire (PISQ). The PISQ is a 31-item questionnaire with the responses based on a 5-point Likert scale. The total PISQ-31, physical domain, behavioural/emotive domain, and partner-related domain scores range from 0 to 125, 0 to 40, 0 to 61, and 0 to 24, respectively. In all domains, higher scores indicate better sexual function.	**Results** **PISQ - Behavioural/emotive score** Pre-intervention • Intervention group: 26.94±13.43 • Control group: 26.56±11.78 Post intervention • Intervention group: 33.25±15.45 • Control group: 23.56±10.37 **PISQ - Physical score** Pre-intervention • Intervention group: 30.06±4.54 • Control group: 34.81±3.29 Post intervention • Intervention group: 34.56±2.97 • Control group: 35.13±4.10 **PISQ - Partner related score** Pre-intervention	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a randomisation website was used 1.2 No information, allocation concealment is not mentioned 1.3 Probably no, the control group participants duration of symptoms was longer (7.8 vs 5.7 years), but this was not statistically significant Some concerns 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To investigate the effects of surface electrical stimulation during sitting (SESdS) on PFM function and sexual function in women **Study dates** September 2018 and December 2018 **Source of funding** The authors received financial and administrative support from the Yonsei University Research Fund	• Non-smoker • Not addicted to alcohol or drugs • Successfully completed the medical screening questionnaire **Exclusion criteria** • Urogenital prolapse grade III or higher Cardiac pacemaker • Device implanted in the pelvis or hip joint Pregnant/planning to get pregnant • Pelvic or abdominal surgery within the last 6 months • Aversion to SESdS • Concomitant treatment for SUI during the trial period • Neurological or psychiatric disease Urinary tract infection	19.37±6.29 mA (range, 2.5–30 mA). Each EasyK7 session was 15 minutes long. The subjects in the SESdS group were provided with an EasyK7 device and shown how to use and maintain the device correctly. These subjects were instructed to use the device for a single 15-minute session per day for 5–6 days per week, for a total of 8 weeks. In addition, the subjects were permitted to increase the EasyK7 stimulation amplitude within tolerable limits. **Control group (n=17):** Control group subjects walked for more than 20 minutes in lieu of EasyK7 treatments. At the end of the 8-week intervention period, control group participants were provided with an EasyK7 device as a reward to all subjects for participating in the study.		• Intervention group: 18.69±2.36 • Control group: 18.25±2.08 Post intervention • Intervention group: 20.13±1.71 • Control group: 18.13±2.19 **PISQ - Total score** Pre-intervention • Intervention group: 75.69±16.42 • Control group: 79.63±14.29 Post intervention • Intervention group: 87.69±16.76 • Control group: 76.81±12.10	participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, the authors excluded participants who were lost to follow up 2.7 Probably no, only on participant missing from each group Some concerns 3.1 Probably no, 5.88% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, reasons for both participants dropping out were unrelated to condition/outcome Low risk 4.1 No, the PSIQ is a validated questionnaire 4.2 No, the measurement could not have differed between groups

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably yes, as the control group did not receive an active intervention and so may not expect any improvements 4.5 Probably yes, as the control group did not receive an active intervention High risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 Probably yes, the published protocol includes several outcome measures which are not reported in the paper 5.3 No information, an analysis plan is not published High risk Overall rating: High risk of bias
Full citation Hwang, U. J., Lee, M. S., Jung, S. H., Ahn,	**Sample size** See Hwang 2020a	**Interventions** See Hwang 2020a	**Details** Subjective symptoms were determined via	**Results** **UDI-6** Baseline	**Limitations** Cochrane Risk of Bias Tool (version 2)

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
S. H., Kwon, O. Y., Which pelvic floor muscle functions are associated with improved subjective and objective symptoms after 8 weeks of surface electrical stimulation in women with stress urinary incontinence?, European Journal of Obstetrics, Gynecology, & Reproductive BiologyEur J Obstet Gynecol Reprod Biol, 247, 16-21, 2020b **Ref Id** 1290527 **Country/ies where the study was carried out** South Korea **Study type** RCT **Aim of the study** To determine the effects of SES in the seated position on PFM functions and	**Characteristics** See Hwang 2020a **Inclusion criteria** See Hwang 2020a **Exclusion criteria** See Hwang 2020a		completion of the urogenital distress inventory-6 (UDI-6).	• ES group: 40.28 (12.26) • Control group: 38.89 (19.99) 8 weeks • ES group: 30.55 (11.18) • Control group: 39.55 (17.35)	1.1 Yes, a randomisation website was used 1.2 No information, allocation concealment is not mentioned 1.3 Probably no, there is a difference duration of symptoms at baseline, although according to the paper this is not statistically significant Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, further, adherence was assessed but not reported

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
subjective and objective symptoms, and to identify predictors of improved subjective and objective symptoms after 8 weeks of SES training via secondary analysis of females with SUI. **Study dates** August to December 2018 **Source of funding** The authors received financial and administrative support from the Yonsei University Research Fund					2.6 Probably no, per protocol analysis was used, excluding participants who dropped out 2.7 Probably no, only one participant missing per group Some concerns 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, states reasons for drop out which are not related to the treatment/outcomes Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably yes, as the control group did

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					not receive an active intervention 4.5 Probably yes Some concerns 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 Probably yes, the protocol includes additional outcomes that are not reported 5.3 No information, an analysis plan is not published High risk Overall rating: High risk of bias
Full citation Jha, S., Walters, S. J., Bortolami, O., Dixon, S., Alshreef, A., Impact of pelvic floor muscle training on sexual function of women with urinary incontinence and a comparison of electrical stimulation versus standard treatment (IPSU trial): a randomised	**Sample size** N=114 women **Characteristics** Women referred to secondary care, within the hospital or community, with urinary incontinence who, following clinical assessment or urodynamic studies, are deemed to require PFMT. No significant demographic	**Interventions** **PFMT plus electrical stimulation n=57** was the intervention. The technique for PFMT was as recommended by NICE. This comprised at least eight contractions performed three times a day. This was supervised by the Women's Health Physiotherapy team and included three members. They were all trained in the provision of PFMT and were members of	**Details** Assessments were made at baseline (prior to commencing PFMT), and approximately 6 months randomisation. The primary outcome was the self-reported Prolapse and Incontinence Sexual function Questionnaire (PISQ-31)	**Results** PISQ score range: 1 to 125, higher score indicates better sexual functioning. Before and after change (both treatments combined): PISQ total score mean change +5.9 (95% CI +2.9 to +8.9), p<0.001 showing small but statistically significant improvement. Comparing control to intervention adjusted	**Limitations** Cochrane risk of bias tool (v2) 1. Randomisation (Low): Allocation was through block randomisation (with a variable block size an integer multiple of two) stratified by menopausal status (Pre or post menopausal). The

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
controlled trial, Physiotherapy (United Kingdom), 104, 91-97, 2018 **Ref Id** 827281 **Country/ies where the study was carried out** UK **Study type** Randomised controlled trial - Single centre two arm parallel group **Aim of the study** To evaluate the clinical and cost-effectiveness of electric stimulation plus standard pelvic floor muscle training compared to standard pelvic floor muscle training alone in women with urinary incontinence and sexual dysfunction **Study dates**	differences between the two groups. **Inclusion criteria** Sexually active, over the age of 18 yrs and with urinaryincontinence attending for PFMT. Women scoring greater than 25% on the urinary domainof the sexual function dimension, and/or greater than 33%for the degree of bother for the same symptom. **Exclusion criteria** • Women with prolapse as their predominant problem. • Women who have had any previous incontinence surgery. • Women who have a Grade 3 or above muscle strength as measured using the modified Oxford Scale on vaginal examination. • Women with vaginal discharge or UTI.	the Association of Chartered Physiotherapists in Women's Health (ACPWH). **PFMT n=57** (Pelvic floor muscle training) was the control and	physical function dimension, at six months post randomisation. Secondary outcomes included the other dimensions of PISQ-31(Behavioral Emotive dimension and Partner-Related dimension scores); SF-36 domain scores; EQ-5D score; ePAQ urinary & sexual domain scores, adverse events resource use, and cost-effectiveness.	mean difference: PISQ total score +1.1 (95% CI -5.9 to +8.2), p=0.748. Not statistically significant difference. Significant improvement when comparing before and after any treatment, but no significant difference between intervention and control.	study statistician generated a randomisation schedule using the STATA software. Nottingham University Clinical Trials Research Unit (CTRU) Set-up and hosted a web based randomisation system, for a two arm trial with 114 participants, stratified by menopausal status. 2. Deviation from intervention (Low): No deviations mentioned 3. Missing outcome data (Some concerns): 50 out of 114 did not have valid follow-up outcome data (44% attrition).Multiple imputation was used to impute missing data on the primary outcome. Data was imputed using chained equations, (regression) with 20 imputations using base-line, follow-

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Participants were recruited between 01.12.2012 and 30.11.2015 and followed up at 4 to 6 weekly intervals. **Source of funding** National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme	• Women fitted with an implanted pacemaker. • Women fitted with a copper coil IUD • Women who were pregnant. • Women with undiagnosed pelvic pain. • Women with a known sensitivity to the electrodes or the electrode gel. • Women with inflammation or infection of the vulva and vagina. • Women who had experienced recent haemorrhage or haematoma. • Women with Atrophic vaginitis. • Any other medical condition or abnormality (e.g. malignancy or complication) that in the opinion of the investigator would impact upon the safety or efficacy of the study treatment or any study assessments. • The patient was already enrolled in				up, menopausal status, time from randomisation, body mass index, diastolic blood pressure, SF36 physical score, SF-36 mental score, and baseline oxford scale. 4. Outcome measurement (Low): clinicians blinded during final visit 5. Selective reporting (Low): No selective reporting mentioned 6. Overall bias (Low/Some concerns/High): Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	another interventional trial. • Non-English speaking women or with a specific language problem.				
Full citation Karaman, E., Kaplan, S., Kolusari, A., The effect of neuromuscular electrical stimulation therapy on stress urinary incontinence recurrence: a randomized prospective study, Eastern Journal of Medicine, 25, 506-512, 2020 **Ref Id** 1290343 **Country/ies where the study was carried out** Turkey **Study type** RCT	**Sample size** N=48 **Characteristics** Age, years (mean ± SD): Combination group 42.3±7.1; Kegel group 41.8±8.6 BMI, mean ± SD: Combination group 22.4±3.2; Kegel group 23.5±2.6 Type of urinary incontinence, n/% • Stress UI: Combination group 17/20; Kegel group 85% 24/28, 85.7% • Mixed UI: Combination group 3/20; Kegel group 15% 4/28, 14.3% **Inclusion criteria** The patients who had diagnosis of predominantly stress	**Interventions** **PFMT (Kegel exercises) + functional neuromuscular electrical stimulation n=20 :** Innovo device was used for external electrical neuromuscular stimulation. Each patient was asked to sit on a comfortable table and eight external electrodes with a combined stimulating surface region of 1526 cm2 and a current density of 0.03 mA/cm2 , which were applied to the buttocks, outer hips, and the anterior and posterior proximal thighs for a 30- min treatment protocol for two times per week lasting for 4 weeks. Subjects were encouraged to change their neutral standing position during the 30-min stimulation by changing the pelvic inclination angle slightly and internally/externally rotating the hips. These positional changes altered the current	**Details** The Quality of life (QOL) of patients were assessed by the Wagner's QOL scale at the end of therapy with Turkish version. The patients were asked to fill this questionnaire, answers were pointed as 0, 1, 2, 3 and the total score was noted. The score were accepted as followings: 0= no 1-28: mild, 29-56: moderate, 57-84 severe leakage or psychiatric deterioration	**Results** **Quality of life (mean and SD), post-intervention** Baseline not reported • Combination group 7.3±6.2 • Kegel group 18.4±6.52 **The number of UI recurrence, n/%** • Combination group 2/20, 10% • Kegel group 5/28, 17.8%	**Limitations** Cochrane risk of bias tool (v2) 1.1 No information, said to be randomised but method of randomisation not reported 1.2 No information, sequence allocation not reported 1.3 No, no significant differences between groups at baseline Some concerns 2.1 Yes, participants were aware of their group assignment 2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 No information, no mention of deviations from the protocol 2.6 Probably yes, no participants were

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To evaluate the effect of functional electrical stimulation therapy with a novel innovative device on stress urinary incontinence recurrence and Quality of life of patients who underwent anti-incontinence surgery in the postoperative period. **Study dates** March 2019-June 2020 **Source of funding** This study was supported by the Van Yuzuncu Yil University, Department of Scientific Research Project (BAP) with the approval number of TSA-2019-7689	urinary incontinence and underwent anti-incontinence surgery either TVT or TOT operations were recruited. The diagnosis of urinary incontinence was made according to the physical examination including stress urinary leakage test, urinalysis and urodynamic findings before operation. **Exclusion criteria** The patients who had followings were excluded from study: patients who had chronic severe diseases, who have cardiac pacemakers, who are pregnant, who had neurological or psychiatric disorders, who had urinary tract infections.	way and patients were able to target the stimulus more anteriorly toward the bladder neck or more posteriorly toward the anal region. A symmetric biphasic pulse was implemented. Kegel exercise was carried out as described below. **PFMT (Kegel exercise) alone n=28 :** Kegel exercise at least three sets of 10 to 15 repetitions a day for one month during the study period			excluded from the analysis Some concerns 3.1 Yes, all data was available Low risk 4.1 No, validated questionnaires were used 4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 No information, no protocol 5.2 No information, an analysis plan is not reported 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Kucukkaya, B., Kahyaoglu Sut, H., Effectiveness of pelvic floor muscle and abdominal training in women with stress urinary incontinence, Psychology Health & MedicinePsychol Health Med, 1-8, 2020 **Ref Id** 1290355 **Country/ies where the study was carried out** Turkey **Study type** RCT **Aim of the study** The aim of this prospective randomized controlled study was to investigate the effectiveness of combined PFMT and	**Sample size** N=64 **Characteristics** Age (mean, SD), years: PFMT + abdominal exercises 39.0 (9.1); PFMT alone 38.2 (10.0) BMI (mean, SD), kg/m2: PFMT + abdominal exercises 27.8 (5.8); PFMT alone 28.5 (6.9) **Inclusion criteria** Those from the age of 18 to 49 years, those meeting the diagnosis of women with type 0 or I SUI, and those willing to participate in the stud **Exclusion criteria** Not reported	**Interventions** **PFMT + abdominal exercises** (n=32): no further details **PFMT alone** (n=32): no further details Both groups were taught their exercises at the clinic, and the patients then performed the exercises individually in their daily lives (at home, work, etc.) with no supervision. They were provided with a brochure that included a detailed explanation of the applicable exercise programs and healthy lifestyle behaviours. The intervention was 8 weeks.	**Details** Completion of the UDI-6 and IIQ-7 were performed at the 0th, 4th, and 8th (end of intervention) weeks.	**Results** **IIQ (mean, SD)** Baseline • PFMT + abdominal: 58.2 (32.0) • PFMT alone: 51.3 (32.6) End of intervention (8 weeks) • PFMT + abdominal: 0.6 (2.7) • PFMT alone: 5.1 (7.1) **UDI-6 (mean, SD)** Baseline • PFMT + abdominal: 60.9 (28.5) • PFMT alone: 54.7 (28.1) End of intervention (8 weeks) • PFMT + abdominal: 1.3 (4.3) • PFMT alone: 8.6 (10.9)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 No information, just states that they were randomly allocated 1.2 No information, allocation concealment is not mentioned 1.3 No, no significant differences between groups Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably yes, an intent to treat analysis was performed including all participants Some concerns 3.1 Yes, there was no loss to follow up

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
AT in reproductive age women with SUI. **Study dates** Between September 2016 and March 2017 **Source of funding** This study was supported as a research project by Trakya University Research Foundation					Low risk 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk 5.1 No information, a study protocol is reported but there is no analysis plan 5.2 Probably no, the study protocol lists outcomes which are reported in the paper 5.3 No information Some concerns Overall judgement: Some concerns
Full citation Liang, Y., Li, X., Wang, J., Liu, Y., Yang, Yang, Dong, M., Effect of Pelvic Floor Muscle Training on Improving Prolapse-related	**Sample size** N=97 **Characteristics** Age (mean, SD), years: PFMT+A 61.6 (7.69); Advice 63.3 (9.41)	**Interventions** **PFMT + Lifestyle advice (n=49)**: Participants received 4 PFMT appointments with physiotherapists with each instruction lasting for 20 to 30 minutes. During the first 3 appointments, the	**Details** Outcomes were measured at baseline, discharge, 40 days after surgery and 60 days after surgery.	**Results** **For all timepoints, PFMT+advice group n=47; Advice alone group n=43** **POPDI-6 (mean, SD; final score)**	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a random number generator was used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Symptoms After Surgery, Journal for Nurse Practitioners, 15, 600-605, 2019 **Ref Id** 1273418 **Country/ies where the study was carried out** China **Study type** RCT **Aim of the study** To explore the effect of PFMT on the improvement of pelvic floor symptoms after POP surgery to better guide the work of nurse practitioners. **Study dates** Between October 2015 and October 2017 **Source of funding** Not reported	BMI (mean, SD), kg/m2: PFMT+A 27.43 (3.91); Advice 29.52 (5.71) **Inclusion criteria** Women of any age who were going to receive prolapsed surgery **Exclusion criteria** Women who were pregnant; had current treatment for another (uro)gynecologic disorder, malignancy of pelvic organs, impaired mobility, severe or terminal illness, cognitive impairment, or an insufficient command of the Chinese language; or were unwilling to participate in this research	physiotherapists would teach and confirm that all of the participants could do the right contraction by putting a finger at the 5 or 7 o'clock position of their virginal openings. Then, physiotherapists would instruct the patients to take a standing or sitting position and perform slow contraction and slow relaxation. The goal is to contract for 10 seconds and relax for 10 seconds to increase the support strength of the patient's pelvic floor muscle. At the same time, rapid contraction and relaxation can be performed, namely, contraction for 1 second and relaxation for 1 second, to increase the instant strength of the pelvic floor muscles and to enhance the ability of patients to control urination. Participants were instructed to exercise for 15 to 30 minutes every time 2 to 3 times a day or 100 to 150 times a day at any time. To guarantee the compliance of PFMT, participants were asked to exercise as instructed by physiotherapists under the supervision of their nurses in charge during their hospital		Baseline • PFMT + Advice: 34.00 ± 26.00 • Advice: 35.17 ± 27.60 Discharge • PFMT + Advice: 9.7 ± 10.27 • Advice: 11.09 ± 10.21 40 days post surgery • PFMT + Advice: 3.73 ± 4.72 • Advice: 3.19 ± 5.28 60 days post surgery • PFMT + Advice: 1.61 ± 3.54 • Advice: 2.93 ± 4.50 **CRADI-8 (mean, SD; final score)** Baseline • PFMT + Advice: 11.32 ± 9.96 • Advice: 12.68 ± 16.00 Discharge • PFMT + Advice: 7.73 ± 14.66 • Advice: 10.18 ± 15.68 40 days post surgery • PFMT + Advice: 3.65 ± 6.78 • Advice: 4.82 ± 7.09 60 days post surgery • PFMT + Advice: 3.72 ± 6.07	1.2 Probably yes, states that the group allocation was stored separate from the clinic and concealed in an opaque numbered envelope 1.3 No, no significant differences at baseline Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, further, adherence was assessed but not reported (exercise logs were not collected) 2.6 Probably no, per protocol analysis was used, excluding

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		stay. Handwritten instructions and a notebook for keeping a log of exercise were provided at discharge. Participants also received lifestyle advice as below. **Lifestyle advice alone (n=48):** Participants were given routine lifestyle health guidance at admission, postoperative checkup, discharge, and 42 days after surgery, each time for 20 minutes, including the following aspects: explaining the causes of POP, common complications after POP, causes of complications after POP, and healthy lifestyle, including the avoidance of activities that would increase abdominal pressure, effective treatment about chronic cough and constipation, maintaining a healthy diet by eating more vegetables and fruits and drinking more water etc. At discharge, all participants were given a leaflet concerning lifestyle health guidelines.		• Advice: 4.29 ± 6.36 **UDI-6 (mean, SD; final score)** Baseline • PFMT + Advice: 31.84 ± 22.04 • Advice: 30.43 ± 22.06 Discharge • PFMT + Advice: 19.49 ± 15.64 • Advice: 16.20 ± 12.60 40 days post surgery • PFMT + Advice: 6.67 ± 6.96 • Advice: 11.59 ± 12.05 60 days post surgery • PFMT + Advice: 3.94 ± 7.96 • Advice: 9.60 ± 11.76 **PFDI-20 (mean, SD; final score)** Baseline • PFMT + Advice: 76.53 ± 36.75 • Advice: 78.29 ± 47.11 Discharge • PFMT + Advice: 36.93 ± 27.51 • Advice: 37.47 ± 30.58 40 days post surgery • PFMT + Advice: 14.05 ± 11.00	participants who dropped out 2.7 Probably yes, over 5% missing overall High risk 3.1 No, over 5% missing from the advice alone group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 No information, reasons for loss to follow up are unclear ('loss to follow up' and 'discontinuation due to motivation problems) 3.4 Probably yes, a greater proportion dropped out in the advice alone group (10.4%) compared to the PFMT and advice group (2%) High risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• Advice: 19.61 ± 17.31 60 days post surgery • PFMT + Advice: 9.27 ± 12.01 • Advice: 16.82 ± 17.88	assignment as it was self-report 4.4 Probably yes, as the control group did not receive an active intervention 4.5 Probably yes Some concerns 5.1 No information, there is no protocol 5.2 No information 5.3 No information Some concerns Overall rating: High risk of bias
Full citation Mallmann, S., Ferla, L., Rodrigues, M. P., Paiva, L. L., Sanches, P. R. S., Ferreira, C. F., Ramos, J. G. L., Comparison of parasacral transcutaneous electrical stimulation and transcutaneous posterior tibial nerve stimulation in women with overactive bladder syndrome: A randomized clinical	**Sample size** N=50 **Characteristics** Age (years), mean (SD): 61.48 (10.10) BMI (kg/cm2), mean (SD): 30.28 (5.39) Main complaint, n (n%) • UUI 9 (18.0) • MUI 41 (82.0) Depression/anxiety, n (n%) • Yes: 11 (22.0) • No: 39 (78.0)	**Interventions** **Parasacral transcutaneous electrical stimulation (PS):** The PS group used a portable electrical stimulator with a pair of adhesive Carcitrode electrodes (9 x 5 cm). The patients were instructed about the correct position of the electrodes on the bilteral sacral roots. **Transcutaneous posterior tibial nerve stimulation (PTN)**: The PTN group used a portable electrical stimulator and a neoprene anklet with Silver Spike Point	**Details** The following outcomes were evaluated pre-intervention and post-intervention: quality of life (KHQ), severity of incontinence [Incontinence Severity Index (ISI)] and the degree of discomfort caused by OAB symptoms [Overactive Bladder-Validated 8- question Awareness Tool (OAB-V8)].	**Results** **KHQ symptoms, mean (SD)** Pre-intervention • PS: 15.44 (4.12) • PTN: 15.67 (4.64) Post-intervention • PS: 11.24 (5.26) • PTN: 9.84 (5.83) **ISI, n (n%)** **Mild** Pre-intervention • PS: 2 (8.0) • PTN: 0 (0) Post-intervention	**Limitations** Cochrane risk of bias tool (v2) 1.1 Yes, said to be computer generated 1.2 No information, sequence allocation not reported 1.3 No, no significant differences between groups at baseline Low risk 2.1 Yes, participants were aware of their group assignment

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
trial, European Journal of Obstetrics, Gynecology, & Reproductive BiologyEur J Obstet Gynecol Reprod Biol, 250, 203-208, 2020 **Ref Id** 1290324 **Country/ies where the study was carried out** Brazil **Study type** RCT **Aim of the study** To compare the effects of both forms of transcutaneous electrical stimulation on quality of life and severity of symptoms in women diagnosed with OAB **Study dates** July 2017 to September 2018	**Inclusion criteria** Woman aged >18 years with OAB symptoms, with or without UUI or MUI, who agreed to participate were included in the study **Exclusion criteria** Exclusion criteria were the presence of vaginal or urinary infection, neurological pathologies, and inability to perform treatment or answer the evaluation questionnaires	electrodes in the medial region of the right ankle. Each anklet was adjusted individually according to the correct position of the posterior tibial nerve. The patients in the PTN group were instructed to apply a conductive gel to the skin in contact with the anklet. Both groups followed the same protocol at home for 6 weeks, with electrical stimulation applied three times per week. The electrical stimulation parameters were wavelength of 300 ms, frequency current of 20 Hz, and application time of 20 min. Patients were advised to set the intensity of stimulation to the maximum tolerable threshold. All patients were informed about behavioural therapy (intake of irritative liquids, vesical training, bladder inhibition reflex, restriction of liquid intake at night).	The OAB-V8 and all but one of the KHQ domains ('symptoms' domain) were reported as median and 95% CI and so could not be extracted. ISI was reported as number and %.	• PS: 3 (14.3) • PTN: 6 (24.0) **Moderate** Pre-intervention • PS: 4 (16.0) • PTN: 8 (32.0) Post-intervention • PS: 14 (66.7) • PTN: 11 (44.0) **Severe** Pre-intervention • PS: 11 (44.0) • PTN: 8 (32.0) Post-intervention • PS: 4 (19.0) • PTN: 8 (32.0) **Very severe** Pre-intervention • PS: 8 (32.0) • PTN: 9 (36.0) Post-intervention • PS: 0 (0) • PTN: 0 (0)	2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 No information, no mention of deviations from the protocol 2.6 Probably no, per protocol analysis was used which excluded participants who were lost to follow up 2.7 Probably yes, 16% were missing at follow up in one of the groups High risk 3.1 No, 16% were missing from group 1 3.2 No, no evidence that the results were not biased by missing data 3.3. Probably yes, reasons for drop out were not reported 3.4 Probably yes, differences between the groups in terms of the proportion of missing data (16% vs 0%) High risk 4.1 No, validated questionnaires were used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding No funding					4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 Probably no, there is a published protocol, however the this does not include intentions for analysis other than which outcomes will be measured 5.2 No, the protocol does include outcome measures which are reported in the paper 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: High risk
Full citation Mundet, L., Rofes, L., Ortega, O., Cabib, C., Clave, P., Kegel Exercises, Biofeedback, Electrostimulation,	**Sample size** N=180 **Characteristics** Mean age (SD): 61.09 ± 12.17 years Parity: 169 (96.6%)	**Interventions** **PFMT + Biofeedback (n=45):** In addition to PFMT, patients received six 45-minute BF sessions administered by a specialist nurse. BF training was	**Details** Primary endpoint was the change before and after treatments in the severity score (Cleveland score);	**Results** **Cleveland score (clinical severity)** Baseline • PFMT: 10.92 ± 4.14 • PFMT + BF: 12.08 ± 3.27	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
and Peripheral Neuromodulation Improve Clinical Symptoms of Fecal Incontinence and Affect Specific Physiological Targets: An Randomized Controlled Trial, Journal of neurogastroenterology and motilityJ Neurogastroenterol Motil, 28, 28, 2020 **Ref Id** 1290412 **Country/ies where the study was carried out** Spain **Study type** RCT **Aim of the study** The aim is to assess the clinical efficacy of these 4 treatments on community-dwelling women with FI and their impact on severity, QoL and anorectal physiology.	**Inclusion criteria** Patients attending the gastrointestinal physiology unit from February 2013 to March 2017 with a history of more than 6 months of FI symptoms were consecutively screened. **Exclusion criteria** Patients with mild FI (Cleveland < 4), under 18 years of age, and those unable to follow the treatment properly were excluded.	focused on the strengthening of the EAS muscle and the coordination of EAS contraction with rectal distention. Sensory training was not performed. Patients laid down looking at a monitor that mirrored the tracings of a manometric BF unit. The type of exercises was the same as PFMT. **PFMT + electrical stimulation (n=45):** In addition to PFMT, patients were instructed on the home use of an electric stimulation unit (Elpha 3000 Conti; Danmeter A/S, Odense, Denmark) with a “Periform+” endovaginal probe (Neen Healthcare, Dereham, UK). The stimulator was to be used for 30 minutes a day, 5 days a week, set at a frequency of 35 Hz, pulse-width of 300 microseconds with cycles of 0.5-second ramp-up, 5 seconds on, 0.5-second ramp-down, and 5 seconds off. Patients were told to increase intensity until reaching their tolerance threshold. A fourth group included PFMT + neuromodulation, however this was not	secondary outcomes included ICIQ, Fecal Incontinence Quality of Life (FIQL) score and EQ-5D	• PFMT + ES: 11.54 ± 3.70 Follow up • PFMT: 7.46 ± 4.42 • PFMT + BF: 7.08 ± 5.39 • PFMT + ES: 5.85 ± 4.71 **FIQL score** **Lifestyle** Baseline • PFMT: 3.02 ± 0.65 • PFMT + BF: 3.04 ± 0.78 • PFMT + ES: 3.14 ± 0.76 Follow up • PFMT: 3.38 ± 0.62 • PFMT + BF: 3.46 ± 0.69 • PFMT + ES: 3.53 ± 0.67 **Depression** Baseline • PFMT: 2.85 ± 0.75 • PFMT + BF: 2.76 ± 0.63 • PFMT + ES: 2.88 ± 0.76 Follow up • PFMT: 3.18 ± 0.67 • PFMT + BF: 3.20 ± 0.78	randomisation was used 1.2 No information, allocation concealment is not reported 1.3 No information, baseline information between groups is not reported Some concerns 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, a per protocol analysis was used excluding participants who dropped out 2.7 Probably yes, more than 5% of participants

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates Not reported **Source of funding** Part of this research was funded through 2 PERIS grants from the Catalonian Health Department (SLT002/16/00214 and SLT008/18/00168). CIBERehd is funded by Instituto de Salud Carlos III, Barcelona, Spain.		included as it was not included in the protocol **PFMT (n=45):** Patients were given oral and written instructions on how to perform K at home. They had to exercise for 10 minutes 3 times a day for a 3-month period. The exercises included maximal fast and sustained squeeze exercises		• PFMT + ES: 3.36 ± 0.62 **Coping** Baseline • PFMT: 2.20 ± 0.78 • PFMT + BF: 2.23 ± 0.78 • PFMT + ES: 2.22 ± 0.78 Follow up • PFMT: 2.78 ± 0.76 • PFMT + BF: 2.91 ± 0.57 • PFMT + ES: 2.99 ± 0.83 **Embarrassment** Baseline • PFMT: 2.42 ± 0.79 • PFMT + BF: 2.41 ± 0.76 • PFMT + ES: 2.41 ± 0.74 Follow up • PFMT: 3.12 ± 0.84 • PFMT + BF: 3.05 ± 0.78 • PFMT + ES: 3.20 ± 0.77 **EQ5D** Baseline • PFMT: 0.66 ± 0.23 • PFMT + BF: 0.59 ± 0.26	not included in follow up High risk 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably yes, states reasons for drop out which included treatment related ones i.e. discomfort, inability to self-administer treatments 3.4 Probably no, proportion of missing data is similar in each group Some concerns 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT + ES: 0.67 ± 0.22 Follow up • PFMT: 0.61 ± 0.26 • PFMT + BF: 0.68 ± 0.30 • PFMT + ES: 0.80 ± 0.22 **ICIQ-UI score** Baseline • PFMT: 11.50 ± 5.61 • PFMT + BF: 14.23 ± 5.64 • PFMT + ES: 9.12 ± 4.49 Follow up • PFMT (n=17): 8.30 ± 6.40 • PFMT + BF (n=13): 12.62 ± 6.33 • PFMT + ES (n=15): 6.41 ± 5.83	4.4 Probably no, as all groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published 5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias
Full citation Navarro-Brazalez, B., Prieto-Gomez, V., Prieto-Merino, D., Sanchez-Sanchez, B., McLean, L., Torres-Lacomba, M., Effectiveness of hypopressive exercises in women with pelvic floor	**Sample size** N=99 (including a third group that was not relevant to the protocol so was not included N=66 without this group) Number analysed (including baseline assessments) = PFMT group n=32;	**Interventions** **PFMT (n=33):** Through encouragement, feedback and resistance offered through vaginal palpation in the lithotomy position, participants performed PFM exercises based on components of the PERFECT scheme. At each session, participants were encouraged to achieve ten	**Details** Assessments took place at the end of the intervention (8 weeks); 3 months; 6 months and 12 months after the intervention end. Exercise adherence was evaluated by the physiotherapist, who	**Results** **PFDI-20 (mean, 95% CI; change score)** Post-intervention • PFMT: -30.55 (-40.70 to -20.39) • PFMT+HE: -24.41 (-34.72 to -14.09) 3 months • PFMT: -35.07 (-46.63 to -23.52)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, states that a computer randomisation scheme was used 1.2 Yes, states that allocation was not revealed until each participant had

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
dysfunction: a randomised controlled trial, Journal of clinical medicine, 9, 2020 **Ref Id** 1287106 **Country/ies where the study was carried out** Spain **Study type** RCT **Aim of the study** The aim of this study was to compare the effects of an eight-week hypopressive exercise program to those of an individualized pelvic floor muscle (PFM) training (PFMT) program, and to a combination of both immediately after treatment and at follow-up assessments at 3, 6 and 12 months later.	PFMT+HE group n=31 **Characteristics** Age (mean, SD), years: PFMT 48 (12); PFMT+HE 46 (8) BMI (mean, SD), kg/m2: PFMT 24.39 (4.77); PFMT+HE 26.21 (4.73) Pelvic floor dysfunction (n, %) • UI: PFMT 27 (84.4%); PFMT+HE 26 (83.9%) • AI: PFMT 13 (56.3%); PFMT+HE 9 (29.0%) • POP: PFMT 13 (40.6%); PFMT+HE 19 (61.3%) PFDI-20 (mean, SD): PFMT 71.71 (45.22); PFMT+HE 69.19 (51.62) POPDI (mean, SD): PFMT 18.49 (14.58);	maximal effort and rapid contractions lasting 1 s each, to maintain an isometric contraction up to 10 s, and to repeat this sequence ten times. Goals were adjusted according to participant progression at every session, and if the therapist considered it appropriate, manual resistance was applied to enhance PFM force. Internal palpation was performed using two fingers inside the vagina and feedback was given based on palpation at the midline, the left side and the right side, to teach women to train all of their PFMs. At any session, if a woman achieved a score < 3 on levator ani testing (LAT), intravaginal electrical stimulation (using biphasic pulses with frequency = 85 Hz, pulse width = 500 us and a train: rest period = 4:8, then using biphasic pulses with frequency = 30 Hz, pulse width = 500 us and a train: rest period of 15:10) was used for 15 min during the session to enhance PFM awareness and contraction. When pain was reported on palpation of the PFMs, local compression was applied to	asked participants at 6 and 12 months if they were doing their home exercises, and, if so, how many times per week. She also asked participants if they had incorporated the knack manoeuvre into their daily activities.	• PFMT+HE: -25.24 (-36.98 to -13.50) 6 months • PFMT: -39.49 (-49.86 to -29.11) • PFMT+HE: -24.71 (-35.25 to -14.17) 12 months • PFMT: -41.70 (-51.61 to -31.78) • PFMT+HE: -25.77 (-35.85 to -15.69) **POPDI (mean, 95% CI; change score)** Post-intervention • PFMT: -7.95 (-11.83 to -4.07) • PFMT+HE: -5.82 (-9.79 to -1.84) 3 months • PFMT: -8.24 (-12.84 to -3.63) • PFMT+HE: -4.75 (-9.46 to -0.03) 6 months • PFMT: -9.44 (-13.22 to -5.66) • PFMT+HE: -6.77 (-10.64 to -2.90) 12 months • PFMT: -13.11 (-16.94 to -9.29) • PFMT+HE: -6.10 (-10.02 to -2.18)	completed their baseline assessment 1.3 Yes, there were some significant differences between groups (e.g. number of participants with AI 56.3% vs 29%; POP 40.6% vs 61.3%; PFIQ-7 45.39 vs 35.48) Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably no, an intent to treat analysis was performed, but 3 participants were not included in this 2.7 No, less than 5% were missing overall Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates October 2013 to September 2017 **Source of funding** This research received no external funding.	PFMT+HE 22.45 (21.05) CRADI (mean, SD): PFMT 16.51 (18.26); PFMT+HE 14.22 (12.07) UDI (mean, SD): PFMT 36.72 (21.93); PFMT+HE 32.53 (25.22) PFIQ-7 V0 total (mean, SD): PFMT 45.39 (43.71); PFMT+HE 35.48 (28.57) POPIQ (mean, SD): PFMT 11.16 (16.96); PFMT+HE 9.37 (13.72) CRAIQ (mean SD): PFMT 11.31 (18.09); PFMT+HE 4.91 (8.65) UIQ (mean SD): PFMT 22.92 (19.52); PFMT+HE 21.20 (19.02) **Inclusion criteria** The inclusion criteria were self-reported signs or symptoms of stress or mixed UI,	painful points, and local stretching and eccentric PFM exercises were performed. Following these modalities, exercises were performed in the lithotomy position using a manometry probe, interfaced with an IBM compatible computer for biofeedback. The biofeedback system offered different screens to support concentric, isometric, and eccentric PFM exercises; the specific exercises and the timing were adjusted based on women's capacity and were progressed when appropriate. In women with low PFM contraction awareness (LAT < 3), and in women with large urogenital hiatus, the dynamometry probe, which could be opened to provide tactile feedback, was used instead of manometry. Women also progressed from manometry to dynamometry once they were capable of generating pressure while performing the exercises, as more resistance could be provided by opening the arms of the dynamometer. If women progressed		**CRADI (mean, 95% CI; change score)** Post-intervention • PFMT: -5.91 (-9.42 to -2.40) • PFMT+HE: -3.21 (-6.87 to 0.46) 3 months • PFMT: -7.54 (-11.58 to -3.49) • PFMT+HE: -5.50 (-9.73 to -1.28) 6 months • PFMT: -9.44 (-12.74 to -6.15) • PFMT+HE: -5.76 (-9.21 to -2.32) 12 months • PFMT: -8.17 (-11.66 to -4.67) • PFMT+HE: -4.21 (-7.86 to -0.56) **UDI (mean, 95% CI; change score)** Post-intervention • PFMT: -15.83 (-21.45 to -10.22) • PFMT+HE: -15.11 (-20.77 to -9.44) 3 months • PFMT: -21.06 (-26.44 to -15.69)	3.1 No, over 5% were lost to follow up in the PFMT+HE group 3.2 No, no evidence that the results were not biased by the missing data 3.3 No information, reasons for drop out are unclear 3.4 Probably no, the proportion of participants missing are the similar 3% vs 6% Some concerns 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk 5.1 No information, a study protocol is reported but there is no analysis plan 5.2 Probably no, the study protocol lists outcomes which are reported in the paper

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	AI, and/or gynaecologist diagnosis of stage 1 or 2 of POP, according to the POP-Quantification Scheme **Exclusion criteria** The exclusion criteria were: age less than 18 years or over 70 years, pregnancy, pregnancy within the six months prior to referral, underwent physiotherapy for PFD in the previous year, abdominal or pelvic surgery in the previous year, only presenting with symptoms of urge UI, urge faecal incontinence or vaginal pain, concurrent neurological or a psychiatric disease, any medical contraindication to performing therapeutic exercises, not able to attend treatments or follow-up assessments at 3, 6 and 12 months, or the inability to	enough, the last two biofeedback sessions were conducted in a more functional standing position. After each treatment session, women were instructed to perform one to three sets of 5 to 10 repetitions PFM exercises daily at home, in supine, sitting or standing position, based on their PERFECT evaluation, daily, between 1 and 3 times per day. **PFMT + Hypopressive exercise (n=33):** Women performed both PFMT and hypopressive exercise. Participants learned how to perform the “hypopressive manoeuvre”, which consisted of exhaling to their expiratory reserve volume, then holding their breath (apnea), and expanding their rib cage, to draw their abdominal wall inward and cranially without inhalation. Women were asked to sustain the apnea and rib-cage expansion for approximately 10 s before resuming their normal breathing. When the participants were capable of performing this manoeuvre		• PFMT+HE: -14.62 (-20.04 to -9.20) 6 months • PFMT: -20.30 (-25.82 to -14.77) • PFMT+HE: -12.99 (-18.56 to -7.42) 12 months • PFMT: -20.57 (-25.29 to -15.84) • PFMT+HE: -15.77 (-20.54 to -11.01) **PFIQ-7 (mean, 95% CI; change score)** Post-intervention • PFMT: -21.49 (-30.60 to -12.38) • PFMT+HE: -14.78 (-23.93 to -5.64) 3 months • PFMT: -26.14 (-34.83 to -17.45) • PFMT+HE: -12.21 (-20.93 to -3.48) 6 months • PFMT:-26.6 (-33.46 to -19.74) • PFMT+HE: -18.50 (-25.39 to -11.62) 12 months • PFMT: -26.69 (-33.79 to -19.58) • PFMT+HE: -14.41 (-21.55 to -7.28)	5.3 No information Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	understand and complete the study questionnaires	in supine, standing and sitting positions, they were then instructed on the series of “hypopressive postures”. These postures are described in standing, kneeling, four-point kneeling, sitting and supine positions, using a variety of upper and lower limb positions. While holding the hypopressive posture, the hypopressive manoeuvre was repeated three times, with a rest breath between repetitions; the entire sequence being referred to as a HE. Each HE was repeated three times with rest between exercises. Between 5 and 10 HEs were performed within each session based on the participant’s mastery of the exercises and readiness to progress through the 33 HEs described by Caufriez. The participants were consistently instructed during each exercise not to voluntarily contract their PFMs nor their abdominal muscles. After each intervention session, participants were asked to exercise at home, following the exercise prescriptions described for each group,		**POPIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -5.57 (-9.86 to -1.27) • PFMT+HE: -2.96 (-7.30 to 1.38) 3 months • PFMT: -7.92 (-11.94 to -3.90) • PFMT+HE: -2.03 (-6.09 to 2.04) 6 months • PFMT: -7.30 (-10.15 to -4.45) • PFMT+HE: -4.03 (-6.91 to -1.15) 12 months • PFMT: -6.88 (-9.68 to -4.09) • PFMT+HE: -2.02 (-4.84 to 0.81) **CRAIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -5.17 (-8.49 to 0-.86) • PFMT+HE: -3.05 (-6.39 to 0.30) 3 months • PFMT: -5.36 (-9.11 to -1.61)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		alternating between PFMT and HE between days. All groups were given an educational strategy, which consisted of instruction, using printed materials and 3-dimensional anatomical models, on the anatomy of the pelvic floor and the physiology of the pelvic organs. Women were advised to minimize their risk factors by not gaining weight or smoking, limiting caffeine intake, optimizing nutritional intake to limit constipation, and avoiding weightlifting and other high impact sports. They were also instructed on proper toileting habits to avoid straining the pelvic floor and were taught to use the knack manoeuvre before and during tasks that increase intra-abdominal pressure A third group of hypopressive exercise alone was not extracted.		• PFMT+HE: -0.14 (-3.93 to 3.65) 6 months • PFMT: -5.65 (-7.78 to -3.53) • PFMT+HE: -2.53 (-4.68 to -0.38) 12 months • PFMT: -6.01 (-8.05 to -3.97) • PFMT+HE: -1.04 (-3.10 to 1.02) **UIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -11.05 (-15.13 to -6.97) • PFMT+HE: -10.13 (-14.27 to -6.00) 3 months • PFMT: -13.45 (-17.19 to -9.70) • PFMT+HE: -11.18 (-14.97 to -7.39) 6 months • PFMT: -13.70 (-17.30 to -10.10) • PFMT+HE: -12.48 (-16.13 to -8.83) 12 months • PFMT: -13.40 (-17.61 to -9.19) • PFMT+HE: -10.55 (-14.81 to -6.28)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Adherence • PFMT: 23 (71.9%) • PFMT+HE: 21 (67.7%)	
Full citation Nyhus, M. O., Mathew, S., Salvesen, O., Salvesen, K. A., Stafne, S., Volloyhaug, I., Effect of preoperative pelvic floor muscle training on pelvic floor muscle contraction and symptomatic and anatomical pelvic organ prolapse after surgery: randomized controlled trial, Ultrasound in Obstetrics & GynecologyUltrasound Obstet Gynecol, 56, 28-36, 2020 **Ref Id** 1290350	**Sample size** N=159 (number analysed N=151) **Characteristics** Age (mean ± SD), years: PFMT group 60.1 ± 11.2; Control group 60.6 ± 10.9 Parity (mean ± SD): PFMT group 2.3 ± 0.8; Control group 2.6 ± 0.9 Body mass index (kg/m2) (mean ± SD): PFMT group 26.3 ± 4.4 25.7 ± 4.1 **Inclusion criteria**	**Interventions** **PFMT (n=75):** The intervention consisted of intensive PFMT in the period between inclusion and surgery. Women in the intervention group received an information leaflet and were encouraged to perform daily PFMT consisting of 8–12 contractions, each held for 6–8 s, three times a day. They received information on prevention and treatment of obstipation and proper emptying of the bladder and bowel. They were also instructed to perform PFM contraction in situations leading to increased intra-abdominal pressure (sneezing, lifting, coughing) and to avoid straining when defecating. Each woman in the intervention group had personal visits with a dedicated pelvic floor	**Details** All women were asked to answer 'yes' or 'no' to the question of whether they experienced a sensation of a bulge in the vagina. Women who responded 'yes' were asked to mark the degree of bother on a VAS ranging from 0 to 100 mm. A positive response at the post-operative visit was registered as symptomatic recurrence of POP	**Results** **Sensation of vaginal bulge (mean, 95% CI)** Day of surgery • PFMT group (n=72): 55.3 (49.0–61.5) • Control group (n=75): 56.5 (50.4–62.7) Post operative follow up • PFMT group (n=73): 7.4 • (3.5–11.3) • Control group (n=75): • 6.0 (2.1–9.8) **Improvement in POP symptoms as assessed by participant assessment of sensation of vaginal bulge (n, %)** • PFMT: 62/69 (89.9) • Control: 68/72 (94.4)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, web based randomisation was used 1.2 No information, allocation concealment was not discussed 1.3 No, no significant differences between groups in terms of baseline characteristics Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Norway **Study type** RCT **Aim of the study** To evaluate the effect of preoperative PFMT on PFM contraction, POP symptoms and anatomical POP 6 months after prolapse surgery, and to assess the overall changes in POP symptoms, pelvic organ descent and PFM contraction after surgery **Study dates** Not reported **Source of funding** This research was funded by the Liaison Committee, Helse-	Eligibility criteria were indication for POP surgery, defined as symptomatic POP Stage 2 or higher, age over 18 years, ability to provide consent and understanding of Norwegian or English language. Patients were included regardless of whether they had primary or recurrent POP **Exclusion criteria** Women with cognitive impairment were excluded	physiotherapist after 2 and 6 weeks, during which proper contraction of the PFM was assessed by vaginal palpation. Women were offered optional weekly PFMT in groups with the dedicated physiotherapist. **Control (n=76):** Women in the control group received no intervention during the wait for surgery. Post menopausal women in both groups started local oestrogen therapy if there was no contraindication (e.g. ongoing treatment with aromatase inhibitor for breast cancer)		**Recurrence of POP symptoms (participant assessment of sensation of vaginal bulge; n, %)** • PFMT: 13/71 (18.3) • Control: 16/73 (21.9)	2.3 Probably no, no information regarding deviations from the intended protocol, there was some non-adherence but this is unlikely due to the trial context 2.6 Yes, an intent to treat analysis was performed Some concerns 3.1 No, over 5% did not attend follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups (10% vs 3.8%) Low risk 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably yes, as the control group did not receive an intervention so may

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Midt (Samarbeidsorganet).					not expect any improvement 4.5 Probably yes High risk 5.1 No information, states that the study was registered but this information cannot be accessed, therefore no information on whether there is a protocol with pre-specified analysis plan 5.2 No information 5.3 No information Some concerns Overall judgement: High risk
Full citation Okayama, H., Ninomiya, S., Naito, K., Endo, Y., Morikawa, S., Effects of wearing supportive underwear versus pelvic floor muscle training or no treatment in women with symptoms of stress urinary incontinence: an assessor-blinded randomized control trial, International urogynecology	**Sample size** N=150 (including one group that did not match the protocol criteria and was not included, without this group N=100) **Characteristics** Median age (IQR, years): PFMT 45 (39-50); control 43.5 (38.3-50)	**Interventions** PFMT (n=50): No treatment (n=50): No intervention was administered to the no treatment group during the 12-week intervention period. A third group (n=50) was included but not extracted as it did not meet the protocol	**Details** The participants in the PFMT group were instructed to perform the PFMT according to a training CD with music, "3 min exercise before going out" (Takumi Vision Co., Kyoto, Japan), at home twice per day during the 12-week intervention period. This training CD was made in Japan for	**Results** **Improvement or cure** • PFMT (n=31): 23 (74.2) • Control (n=28): 7 (25) **Cure only** • PFMT (n=31): 17 (54.8) • Control (n=28): 5 (17.9) **UI episodes/week:** median (IQR)	**Limitations** Limitations Cochrane risk of bias (Version 2.0) Domain 1: Randomisation: Some concerns 1.1: Yes, participants were randomly allocated to treatments using

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
journal, 30, 1093-1099, 2019 **Ref Id** 1196703 **Country/ies where the study was carried out** Japan **Study type** RCT **Aim of the study** To determine the effects of wearing a shaper compared with PFMT at home using a training compact disc (CD) with music, or no treatment, in an assessor-blinded randomized control trial, on reducing UI symptoms. **Study dates** February to May 2012	BMI (IQR, years): PFMT 20.1 (19.2-22); control 21 (19.8-23.8) Type of UI (n, %): PFMT: SUI 19 (61.3), MUI 12 (38.7); control SUI 18 (64.3), MUI 10 (35.7) **Inclusion criteria** Parous women aged 30-59 years who experienced SUI symptoms at least once per week (defined using the Japanese version of the Incontinence Questionnaire-Short Form (ICIQ-SF)). In addition, women with mixed urinary incontinence (MUI) were also included because the shaper was effective in reducing UI symptoms among women with MUI in the previous pilot study **Exclusion criteria** The exclusion criteria were current	(participants wore shaper supportive underwear)	home practice of the PFMT with reference to a previous study. This training CD includes three versions of the song for use in the morning, daytime, and evening. Each song with rhythm and narration encourages the listener to perform voluntary pelvic floor muscle contractions for 26 times per 3 min. One training CD was sent to each participant in the PFMT group No intervention was administered to the no treatment group during the 12-week intervention period. A third group (n=50) was included but not extracted as it did not meet the protocol (participants wore shaper supportive	• 12th week PFMT 0.0(0.0-2.0) Control 1.5(1.0-3.0) **ICIQ-SF (IQR) score at 12th week** • 12th week PFMT 5.0(1.0-7.0) Control 6.0(4.3-10.0)	computer generated random assignment 1.2: No information, method of allocation concealment not reported 1.3: No, no significant differences between groups at baseline Domain 2: Deviations from intended interventions: Some concerns 2.1: Yes, participants not blinded 2.2: Yes, carers and people delivering the interventions not blinded, although outcome assessors were blinded to group assignment until analysis 2.3: No information whether there were any deviations from the intended intervention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Not reported	pregnancy, delivery within 3 months, previous and/or current treatments for UI, and waist size out of the specified range (waist measurement approximately 58–82 cm) for wearing the shaper.		underwear – see evidence review [N])		Domain 3: Missing outcome data: High risk 3.1: Probably yes, 38% in PFMT group and 44% in control group dropped out 3.2: Probably no, no evidence that the results were not biased by missing outcome data 3.3: Probably no, missingness of the outcome was not dependent on its true value Domain 4: Measurement of the outcome: Some concerns 4.1: Probably no, outcomes clearly defined, but some information on how they were assessed and by whom 4.2: Probably no, outcomes unlikely to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					differ between treatment arms 4.3: Probably yes, outcomes were self-report and participants were not blinded 4.4: Probably yes, no treatment group may not expect to see change in quality of life/symptom measures which may influence reporting 4.5: Probably no, no reason to suggest assessment was influenced by not being blinded Domain 5: Selection of the reported result: Some concerns 5.1: No, no pre-panned analysis or protocol available 5.2: No, descriptive data presented 5.3: No, data presented as expected

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 6: Overall judgment of bias: High concerns
Full citation Ptak, M., Ciecwiez, S., Brodowska, A., Szylinska, A., Starczewski, A., Rotter, I., The Effect of Selected Exercise Programs on the Quality of Life in Women with Grade 1 Stress Urinary Incontinence and Its Relationship with Various Body Mass Indices: A Randomized Trial, BioMed Research International, 2020, 1205281, 2020 **Ref Id** 1290351 **Country/ies where the study was carried out** Poland **Study type** RCT	**Sample size** N=150 **Characteristics** Mean age (SD), years: Combination group 53.1±5:5; PFMT alone group 53.0±5:7 BMI (%) • Group 0 ≥ 30 kg/m2: combination group 26.0%; PFMT alone group 25.0% • Group 1 < 30 kg/m2: combination group 74.0%; PFMT alone group 75.0% **Inclusion criteria** The inclusion criteria of the study were age 45–60, grade 1 SUI confirmed with *a cough test in a urodynamic study and in a gynaecological examination*, lack of urge incontinence, lack of any genitourinary surgeries or other	**Interventions** **PFMT + abdominal exercises (n=75):** pelvic floor muscle (PFM) exercises with a cocontraction of the transverse abdominal muscle (TrA), performed four times per week for a period of three months. Each session included three series of PFM exercises with 10 repetitions, with 60-70% of a maximal voluntary contraction (MVC) lasting for 6-8 seconds, followed by two series with 10 repetitions, with 30-60% of a MVC lasting for 1-2 seconds. The patients were asked to contract their PFMs while breathing out and to perform the Knack maneuver whenever they felt an urge to cough, sneeze, or laugh. The patients practiced together, in groups, under the direction of a qualified physiotherapist. **PFMT alone (n=75):** The training program for the PFMT alone group was essentially the same,	**Details** The primary outcome was the Polish version of the International Consultation on Incontinence Modular Questionnaire–Lower Urinary Tract Symptoms–Quality of Life (ICIQ LUTS QOL). The survey consisted of 19 questions, each scored on a 4-item scale, from 1 to 4, where “1” meant nothing at all, “2” little, “3” moderately, and “4” very much. Hence, the overall score could have ranged from 19 to 76. The raw scores were transformed according to Hebbar based on the King’s Health Questionnaire, a slightly older, extensive questionnaire for a QOL research.	**Results** **ICIQ LUTS QOL - overall (3 months)** • PFMT + abdominal exercises (n=70): 114.9 (85.9) • PFMT alone (n=70): 217.75 (90.9)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 No information, just states that they were randomly assigned 1.2 No information, allocation concealment was not discussed 1.3 No, no significant differences between groups in terms of baseline characteristics, but baseline QoL is not reported Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably no, an intent to treat analysis

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To analyse the influence gymnastics has on the quality of life (QOL) in women with grade 1 stress urinary incontinence **Study dates** **Source of funding**	illnesses (for example, hypertension, diabetes), *lack of oestrogen-dependent neoplasm or breast cancer and lack of pelvic organ prolapse* (*stage 0 in Pelvic Organ Prolapse Quantification*) *in a gynaecological examination* in medical histories, and a written informed consent to participate in the study **Exclusion criteria** Women younger than 45 and older than 60, with grades of SUI other than grade 1, with pelvic organ prolapse (*higher than stage 0 in Pelvic Organ Prolapse Quantification*), *with estrogen-dependent neoplasm and breast cancer*, after genitourinary surgeries, or those who had been prescribed any kind of medicine permanently, were excluded from the study, along with the	however, without the cocontraction of the TrA. Both groups were prescribed vaginal estrogens (estriol suppositories, 0.5 mg, twice a week).	A per protocol analysis method was used, excluding those who dropped out.		was performed, but 5 participants from each group were not included in this 2.7 Yes, more than 5% were missing in each group High risk 3.1 No, over 5% were lost to follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 No information, reasons for drop out are unclear (i.e. just states 'resigned') 3.4 Probably no, the proportion of participants missing is the same Some concerns 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	patients who had not expressed their written informed consent to participate				5.1 No information, no study protocol 5.2 No information 5.3 No information Some concerns Overall judgement: High risk
Full citation Teixeira Alve, A., Azevedo Garcia, P., Henriques Jacomo, R., Batista de Sousa, J., Borges Gullo Ramos Pereira, L., Barbaresco Gomide Mateus, L., Gomes de Oliveira Karnikoskwi, M., Effectiveness of transcutaneous tibial nerve stimulation at two different thresholds for overactive bladder symptoms in older women: a randomized controlled clinical trial, Maturitas, 135, 40-46, 2020 **Ref Id** 1232485	**Sample size** N=101 **Characteristics** Baseline characteristics were assessed excluding those who were lost to follow up (Group 1 n=33; group 2 n=30; group 3 n=25) Age (mean, SD), years: Group 1 67.52 (6.17); group 2 69.57 (6.36); control group 69.48 (7.83) BMI (kg/m2) (mean, SD): group 1 28.27 (4.47); group 2 28.86 (4.79); control group 27.72 (3.77) MUI (%): group 1 75.8; group 2 83.3; control groupICIQ-OAB 84.0	**Interventions** **TTNS sensitivity threshold (n=39) and TTNS motor threshold (n=33):** Patients allocated to groups 1 and 2 performed 8 sessions of TTNS for 30 min, twice a week. The intervention comprised an 8-session TTNS treatment program, each 30-minute treatment session performed twice weekly for a continuous period of four weeks. Two silicone surface electrodes measuring 5 × 3 cm were positioned according to the protocol of Amarenco et al.. The patients were positioned with the right leg extended and supported on a chair and the electrotherapy was always done on the right leg. An electrode was fixed and positioned 10 cm above the medial malleolus, medial to the tibia, and the other electrode was movable and positioned posterior to the	**Details** The symptoms of overactive bladder were evaluated by the ICIQ-OAB questionnaire, 0–16 overall score with greater values indicating increased symptom severity. Adherence is not defined.	**Results** **ICIQ-OAB** Baseline • Group 1: 8.39 (3.36) • Group 2: 8.70 (2.73) • Control group: 8.80 (3.25) Post-intervention • Group 1: 3.48 (2.45) • Group 2: 3.90 (2.82) • Control group: 8.60 (3.24) **Adherence** • Group 1: 84.61 % • Group 2: 90.90 % • Control group: 86.20%	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, online randomisation was used 1.2 Probably yes, states that investigators were blind to group allocation during the experiment and analysis 1.3 No, no significant differences between groups in terms of baseline characteristics Low risk 2.1 Yes, participants were aware of their assigned intervention, although were not told what other groups received 2.2. Yes, people delivering the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Brazil **Study type** RCT **Aim of the study** To compare the effectiveness of TTNS at two different current amplitude thresholds (sensory and motor) in overactive bladder symptoms in older women **Study dates** Between October 2013 and August 2014 **Source of funding** No funding	**Inclusion criteria** The priori inclusion criteria were female, age 60 years or older, and probable lower urinary tract dysfunction. Urinary tract dysfunction was exclusively investigated by the OAB-V8 (Overactive Bladder version 8) questionnaire **Exclusion criteria** The priori exclusion criteria were: urinary tract infection (identified by urine examination), history of OAB treatment and hormone replacement therapy in the last six months, previous surgery to treat urinary incontinence, basic neurological diseases (multiple sclerosis, Alzheimer's disease, Stoke and Parkinson disease), history of genitalurinary neoplasia, complaint of pain in the lower	medial malleolus, and could follow the path of the tibial nerve. The correct position of the electrodes was determined by the visualization of rhythmic flexions of the toes during stimulation with frequency of 1 Hz and pulse width of 200 μs. After fixation of the electrode, the intensity was decreased and the stimulation frequency was increased to 10 Hz. The amplitude of the current remained in the sensory limb throughout the session for group 1 (tingling sensation, but without any flexion of the toes, including hallux) and was maintained at the motor threshold in group 2 (visualization of flexion of the hallux, extend to the other toes, throughout the session). Physiotherapists were instructed to increase intensity whenever they observed that the movement of the toes had diminished or ceased. For the sensitivity threshold, the increase in intensity occurred sometimes because of current accommodation, but not enough to generate any movement in the hallux and / or other toes. The re-			intervention were aware of participant assignment 2.3 Probably not, no information regarding deviations from the intended protocol, apart from adherence which was reasonably high in the 3 groups (84%, 91% 86%) 2.6 Probably not, a per protocol analysis was used, excluding participants who were lost to follow up 2.7 Probably yes, greater than 5% were not included in analyses High risk 3.1 No, over 5% were missing due to being lost to follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups Low risk 4.1 No, a validated questionnaire was used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	belly during urination for more than six months, previous pelvic irradiation, use of cardiac pacemaker, metallic implants in the foot and ankle region right, inability to respond to questionnaires adequately and / or properly fill the bladder diary and genital prolapse above third degree Baden and Walker.	evaluation of the 2 groups occurred 5 weeks after the initial evaluation with the same evaluator **Control group (n=29):** No intervention, participants were reassessed 5 weeks after the initial evaluation			4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably yes, as the control group did not get an intervention and so may not expect any improvement 4.5 Probably yes. High risk 5.1 Probably no, there is a published protocol, however this does not have details regarding the intentions for analysis 5.2 Yes, protocol states that the OAB-V8 will be a primary outcome, but this is not included in the paper. The protocol also says that anxiety and depression will be assessed, but these are not reported 5.3 No information High risk Overall judgement: High risk of bias

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL 5 dimension quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life

Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence

Appendix E – Forest plots

Forest plots for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

No meta-analysis was conducted for this review question and so there are no forest plots.

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
PFMT versus no treatment (or inactive control) for POP	Hagen 2011	POP-Q stage not improved	2	RR 0.83 (0.71 to 0.96)	60.22%
	Ge 2020	Self-reported change in symptoms (better)	5	RR 2.90 (1.72 to 4.89)	76.6%
		Self-reported change in symptoms (same)	4	RR 0.7 (0.45 to 1.09)	87.9%
		Self-reported change in symptoms (worse)	4	RR 0.67 (0.22 to 2.03)	77.4%
		POP-SS	5	SMD -0.24 (-0.71 to 0.22)	88.7%
		POPDI-6	4	SMD -0.14 (-0.43 to 0.15)	76.9%
		CRADI-8	4	SMD -0.03 (-0.16 to 0.11)	40.2%
		UDI-6	4	SMD -0.17 (-0.43 to 0.1)	72.2%
PFMT versus no treatment (or inactive control) for SUI	Dumoulin 2018	Patient perceived cure after treatment	4	RR 8.38 (3.68 to 19.07)	0%
		Patient perceived cure or improvement after treatment	3	RR 6.33 (3.88 to 10.33)	43.18%
		Quality of life (King's Health Questionnaire/general health score)	3	MD 1.81 (-3.4 to 7.03)	0%
		Participant perceived satisfaction	2	RR 5.32 (2.63 to 10.74)	74.03%
	Imamura 2010	Cure rate	8	OR 5.41 (1.64 to 17.82)	68.3%
		Improvement rate	11	OR 11.75 (3.49 to 39.55)	85.5%
	Moroni 2016	Incontinence specific QoL	2	MD -1.24 (-1.77 to -0.71)	0%
PFMT versus no treatment (or inactive control) for UI (SUI or MUI/not	Dumoulin 2018	Patient perceived cure after treatment	3	RR 5.34 (2.78 to 10.26)	73.55%
		Patient perceived cure or improvement after treatment	2	RR 2.39 (1.64 to 3.47)	0%

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
reported/UI or OAB)	Nie 2017	IIQ7	2	SMD -2.20 (-4.12 to -0.27)	94%
		UDI	2	MD -7.5 (-10.41 to -4.58)	34%
		Quality of life (The General QoL Questionnaire; Incontinence Quality of Life Questionnaire)	2	SMD 1.67 (0.41 to 2.94)	87%
Magnetic stimulation versus placebo/sham for SUI	Peng 2019	Quality of life	3	MD 0.42 (0.02 to 0.82)	41%
Magnetic stimulation versus placebo/sham for UI	Lim 2015	Improved continence	3	RR 2.29 (1.60 to 3.29)	0%
Vaginal cones versus no treatment for SUI	Imamura 2010	Improvement rate	2	OR 5.43 (0.07 to 396.77	93.2%
	Herbinson 2013	No subjective improvement or cure	2	RR 0.72 (0.52 to 0.99)	89.5%
		No subjective cure	4	RR 0.84 (0.76 to 0.94)	79.82%
Electrical stimulation versus no treatment for SUI	Imamura 2010	Cure rate	6	OR 1.10 (0.41 to 2.94)	0%
		Improvement rate	7	OR 3.93 (1.43 to 10.8)	58.8%
		Incontinence specific QoL (Social Activity Index; IIQ)	2	SMD 0.19 (-0.65 to 1.03)	0%[1]
	Stewart 2017	Subjective cure	2	RR 2.31 (1.06 to 5.02)	0%
		Subjective cure or improvement	5	RR 1.73 (1.41 to 2.11)	83%
		Quality of life (KHQ; ICIQ)	6	SMD -0.72 (-0.99 to -0.46)	83%
	Moroni 2016	Incontinence-specific QoL - KHQ; IQoL (intravaginal stimulation)	2	SMD -1.44 (-1.94 to -0.95)	53%
		Incontinence-specific QoL - KHQ (superficial stimulation)	2	MD -50.1 (-66.77 to -34.25)	0%
Electrical stimulation versus sham for SUI	Stewart 20107	Subjective cure	3	RR 2.21 (0.38 to 12.73)	62%
		Subjective cure or improvement	5	RR 2.03 (1.02 to 4.07)	42%
PFMT versus electrical	Imamura 2010	Cure rate	5	OR 2.65 (0.82 to 8.6)	8.7%

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
stimulation for SUI		Improvement rate	6	OR 2.18 (0.76 to 6.28)	50.9%
	Stewart 2017	Subjective cure	4	RR 0.51 (0.16 to 1.63	71%
		Subjective cure or improvement	7	RR 0.85 (0.7 to 1.03)	60%
	Liang 2018	Life quality score	17	MD -6.96 (-10.2 to -3.72)	Not reported[2]
PFMT versus vaginal cones for SUI	Herbison 2013	No subjective improvement or cure	6	RR 1.03 (0.8 to 1.33)	24.72%
		No subjective cure	5	RR 0.99 (0.88 to 1.12)	57.65%
	Imamura 2010	Cure rate	3	OR 0.61 (0.09 to 3.95)	47.1%
		Improvement rate	5	OR 1.01 (0.52 to 1.95)	37.1%
		Incontinence specific QoL (Social Activity Index; KHQ)	2	SMD 0.32 (-0.08 to 0.73)	0%[1]
	Moroni 2016	Incontinence-specific QoL (KHQ; IQoL)	2	MD -0.56 (-8.4 to 7.28)	0%
	Liang 2018	Life quality score	17	MD 0.01 (-2.62 to 2.64)	Not reported[2]
PFMT + biofeedback versus electrical stimulation for SUI	Liang 2018	Life quality score	17	MD -7.12 (-11.08 to -3.16)	Not reported[2]
Electrical stimulation versus vaginal cones for SUI	Herbison 2013	No subjective cure or improvement after treatment	3	RR 0.8 (0.54 to 1.18)	28.93%
		No subjective cure or improvement after 6 months	3	RR 0.77 (0.59 to 1.01)	82.12%
	Imamura 2010	Cure rate	2	OR 1 (0.26 to 3.91)	0%
		Improvement rate	3	OR 1.3 (0.59 to 2.84)	0%
	Moroni 2016	Incontinence-specific QoL	2	MD 9.31 (2.77 to 15.86)	90%
	Stewart 2017	Subjective cure	3	RR 1.04 (0.7 to 1.54)	0%
		Subjective cure or improvement	5	RR 1.09 (0.97 to 1.21)	0%
		I-QoL	2	MD 1.59 (-3.72 to 6.9)	0%
	Liang 2018	Life quality score	17	MD 6.97 (3.74 to 10.21)	Not reported[2]
Vaginal cones versus PFMT + biofeedback for SUI	Liang 2018	Life quality score	17	MD 0.14 (-3.34 to 3.62)	Not reported[2]

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
PFMT (more) versus PFMT (less) for UI (SUI/MUI)	Hay-Smith 2011	Patients' perception of change - not cured (more vs less contact with health professionals: additional group supervision)	2	RR 0.89 (0.78 to 1.03)	0%
		Patients' perception of change - not improved (more vs less contact with health professionals: additional group supervision)	4	RR 0.29 (0.15 to 0.55)	4.59%
PFMT (more) versus PFMT (less) for SUI	Imamura 2010	Cure rate	3	OR 8.81 (2.33 to 33.27)	0%
		Improvement rate	3	OR 20.74 (3.58 to 120.25)	4.7%
		Incontinence specific quality of life (Social Activity Index; quality of life index)	2	SMD 1.07 (0.15 to 1.98)	93%[1]
PFMT (group) versus PFMT (individual) for SUI	Moroni 2016	Incontinence-specific QoL (KHQ)	2	MD 7.96 (-2.69 to 18.60)	0%
PFMT (group) vs PFMT (individual) for UI (SUI/MUI) – individual supervision only vs individual and group supervision	Hay-Smith 2011	Patients' perception of change in incontinence - not cured	2	RR 0.89 (0.78 to 1.03)	0%
		Patients' perception of change in incontinence - not improved	3	RR 0.16 (0.05 to 0.46)	9.46%
PFMT (direct) versus PFMT (indirect) for UI (SUI or MUI)	Hay-Smith 2011	Patients' perception of change in incontinence - not improved	2	RR 0.69 (0.47 to 1.02)	18.03%
PFMT (more intensive) vs PFMT (less intensive) for UI (SUI/MUI)	Hay-Smith 2011	Patients' perception of change in incontinence - not cured (high contrast)	3	RR 0.89 (0.8 to 0.98)	0%
		Patients' perception of	5	RR 1.06 (1 to 1.13)	0%

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
		change in incontinence - not cured (low contrast)			
		Patients' perception of change in incontinence - not improved (high contrast)	6	RR 0.37 (0.17 to 0.84)	61.2%
		Patients' perception of change in incontinence - not improved (low contrast)	7	RR 0.75 (0.59 to 0.95)	0%
PFMT + BF vs PFMT for SUI	Liang 2018	Life quality	17	MD -0.15 (-2.43 to 2.12)	Not reported[2]
	Imanura 2010	Cure rate	8	OR 1.88 (1.23 to 2.86)	0%
		Improvement rate	7	OR 1.83 (1.01 to 3.34)	18.6%
PFMT + BF vs PFMT for UI (UUI/MUI/SUI)	Herderschee 2011	Perception of change - not cured or improved (No difference in PFMT)	2	RR 0.87 (0.72 to 1.05)	0%
		Perception of change - not cured or improved (difference in PFMT)	5	RR 0.69 (0.58 to 0.83)	46.87%
		Perception of change - not cured (combined no difference in PFMT and difference in PFMT)	5	RR 0.92 (0.81 to 1.05)	6%
		Women's satisfaction with progress - not satisfied (combined no difference in PFMT and difference in PFMT)	3	RR 0.65 (0.49 to 0.9)	0%
PFMT + ES vs PFMT for SUI	Imanura 2010	Cure rate	4	OR 0.95 (0.49 to 1.85)	55.8%
		Improvement rate	3	OR 1.13 (0.49 to 2.58)	0%
	Stewart 2017	Subjective cure	3	RR 0.76 (0.38 to 1.52	36%
		Subjective cure or improvement	8	RR 1.10 (0.95 to 1.28)	19%
		Quality of life	4	SMD -0.35 (-0.64 to -0.05)	87%

Comparison	Systematic review	Outcome	N studies	Pooled value	I2
		Subjective assessment (VAS)	3	SMD -0.57 (-0.9 to -0.24)	45%
PFMT + intravaginal device vs PFMT for UI (SUI/MUI)	Hay-Smith 2011	Patients' perception of change - not cured	2	RR 1.07 (0.96 to 1.2)	0%
		Patients' perception of change - not improved	2	RR 0.86 (0.62 to 1.2)	0%

[1] Calculated in Review manager, not combined in review
[2] This was a network meta-analysis,

Appendix F – GRADE tables

GRADE tables for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

PFMT versus no treatment/usual care/treatment

Table 7: Clinical evidence profile for comparison: PFMT versus no treatment (or inactive control) for POP

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Hagen 2011 (SR of RCTs): Self-reported no improvement in prolapse												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious[1]	none	7/19 (36.8%)	16/21 (76.2%)	RR 0.48 (0.26 to 0.91)	396 fewer per 1000 (from 69 fewer to 564 fewer)	MODERATE	CRITICAL
Hagen 2011 (SR of RCTs): Prolapse symptom score (Better indicated by lower values)												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious[2]	none	17	20	-	MD 3.37 lower (6.23 to 0.51 lower)	MODERATE	CRITICAL
Hagen 2011 (SR of RCTs): Prolapse interference with everyday life (Better indicated by lower values)												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	19	21	-	MD 0.05 lower (0.67 lower to 0.57 higher)	HIGH	CRITICAL
Hagen 2011 (SR of RCTs): increased bother due to bowel emptying difficulty												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	very serious[6]	none	11/25 (44.0%)	7/15 (46.7%)	RR 0.94 (0.47 to 1.90)	28 fewer per 1000 (from 247 fewer to 420 more)	LOW	CRITICAL
Hagen 2011 (SR of RCTs): increased bother due to flatus leakage												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious[1]	none	16/34 (47.1%)	18/23 (78.3%)	RR 0.68 (0.46 to 0.99)	250 fewer per 1000 (from 423 fewer to 8 fewer)	MODERATE	CRITICAL
Hagen 2011 (SR of RCTs): increased bother due to loose faecal incontinence												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	5/14 (35.7%)	10/10 (100%)	RR 0.38 (0.20 to 0.76)	620 fewer per 1000 (from 800 fewer to 240 fewer)	HIGH	CRITICAL
Hagen 2011 (SR of RCTs): increased bother due to solid faecal incontinence												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	very serious imprecision[6]	none	1/3 (33.3%)	1/2 (50%)	RR 0.67 (0.08 to 5.54)	165 fewer per 1000 (from 460 fewer to 1000 more)	LOW	CRITICAL
Hagen 2011 (SR of RCTs): Ditrovie quality of life score (Better indicated by lower values)												
1	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	27	20	-	MD 0.95 lower (1.57 to 0.34 lower)	MODERATE	CRITICAL
Hagen 2011 (SR of RCTs): Satisfaction with treatment (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	27	20	-	MD 3.22 lower (3.79 to 2.65 lower)	MODERATE	IMPORTANT
Hagen 2011 (SR of RCTs): POP-Q stage not improved												
2	randomised trials	very serious[4]	serious[5]	no serious indirectness	serious[1]	none	53/69 (76.8%)	55/59 (93.2%)	RR 0.83 (0.71 to 0.96)	158 fewer per 1000 (from 37 fewer to 270 fewer)	VERY LOW	CRITICAL
Hagen 2011 (SR of RCTs): ICIQ (change score) (Better indicated by lower values)												
1	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	19	20	-	MD 1.79 lower (3.68 lower to 0.1 higher)	HIGH	CRITICAL
Hagen 2011 (SR of RCTs): Mean bladder symptom score (Better indicated by lower values)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
1	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	27	20	-	MD 9.22 lower (10.68 to 7.76 lower)	MODERATE	CRITICAL
Ge 2020 (SR of RCTs): Self-reported change in symptoms (better)												
5	randomised trials	serious[3]	very serious[7]	no serious indirectness	no serious imprecision	none	-	-	RR 2.90 (1.72 to 4.89)	-	VERY LOW	CRITICAL
Ge 2020 (SR of RCTs): Self-reported change in symptoms (same)												
4	randomised trials	serious[3]	very serious[7]	no serious indirectness	serious[1]	none	-	-	RR 0.7 (0.45 to 1.09)	-	VERY LOW	CRITICAL
Ge 2020 (SR of RCTs): Self-reported change in symptoms (worse)												
4	randomised trials	serious[3]	very serious[7]	no serious indirectness	very serious[6]	none	-	-	RR 0.67 (0.22 to 2.03)	-	VERY LOW	CRITICAL
Ge 2020 (SR of RCTs): POP-SS (Better indicated by lower values)												
5	randomised trials	serious[3]	very serious[7]	no serious indirectness	no serious imprecision	none	-	-	-	SMD 0.24 lower (0.71 lower to 0.22 higher)	VERY LOW	CRITICAL
Ge 2020 (SR of RCTs): POPDI-6 (Better indicated by lower values)												
4	randomised trials	serious[3]	very serious[7]	no serious indirectness	no serious imprecision	none	-	-	-	SMD 0.14 lower (0.43 lower to 0.15 higher)	VERY LOW	CRITICAL
Ge 2020 (SR of RCTs): CRADI-8 (Better indicated by lower values)												
4	randomised trials	serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	-	-	-	SMD 0.03 lower (0.16 lower to 0.11 higher)	MODERATE	CRITICAL
Ge 2020 (SR of RCTs): UDI-6 (Better indicated by lower values)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
4	randomised trials	serious[3]	serious[5]	no serious indirectness	no serious imprecision	none	0	-	-	SMD 0.17 lower (0.43 lower to 0.1 higher)	LOW	CRITICAL
RCT: Recurrence of POP symptoms (final score; 6 months)												
Nyhus 2020	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	very serious[6]	none	13/71 (18.3%)	16/73 (21.9%)	RR 0.84 (0.43 to 1.61)	35 fewer per 1000 (from 125 fewer to 134 more)	VERY LOW	CRITICAL
RCT: Sensation of vaginal bulge (final scores; vas 0-100; 6 months) (Better indicated by lower values)												
Nyhus 2020	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	73	75	-	MD 1.4 higher (4.02 lower to 6.82 higher)	LOW	CRITICAL
RCT: Improvement in POP symptoms (final score; 6 months)												
Nyhus 2020	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	62/69 (89.9%)	68/72 (94.4%)	RR 0.95 (0.86 to 1.05)	47 fewer per 1000 (from 132 fewer to 47 more)	LOW	CRITICAL
RCT: POPDI (final score; high score is poor outcome; 60 days post surgery) (Better indicated by lower values)												
Liang 2019	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	47	43	-	MD 1.32 lower (3 lower to 0.36 higher)	LOW	CRITICAL
RCT: CRADI-8 (final score; high score is poor outcome; 60 days post surgery) (Better indicated by lower values)												
Liang 2019	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	47	43	-	MD 0.57 lower (3.14 lower to 2 higher)	LOW	CRITICAL
RCT: UDI-6 (final score; high score is poor outcome; 60 days post surgery) (Better indicated by lower values)												
Liang 2019	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	47	43	-	MD 5.66 lower (9.85 to 1.47 lower)	LOW	CRITICAL
RCT: PFDI-20 (final score; high score is poor outcome; 60 days post surgery) (Better indicated by lower values)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Liang 2019	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	no serious imprecision	none	47	43	-	MD 7.55 lower (13.9 to 1.2 lower)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 95% CI crosses 1 MID (0.8, 1.25)
2 95% CI crosses 1 MID (0.5 x SD control, 1.45)
3 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
4 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
5 Serious heterogeneity unexplained by subgroup analysis
6 95% CI crosses 2 MIDs (0.8, 1.25)
7 Very serious heterogeneity unexplained by subgroup analysis

Table 8: Clinical evidence profile for comparison: PFMT versus no treatment (or inactive control) for SUI

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Dumoulin 2018 (SR of RCTs): Patient perceived cure after treatment (treatment duration 3 to 6 months)												
4	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision	none	46/82 (56.1%)	5/83 (6.0%)	RR 8.38 (3.68 to 19.07)	445 more per 1000 (from 161 more to 1000 more)	HIGH	CRITICAL
Dumoulin 2018 (SR of RCTs): Patient perceived cure or improvement after treatment (treatment duration 3 to 6 months)												
3	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	88/119 (73.9%)	14/123 (11.4%)	RR 6.33 (3.88 to 10.33)	607 more per 1000 (from 328 more to 1000 more)	MODERATE	CRITICAL
Dumoulin 2018 (SR of RCTs): Quality of life (King's Health Questionnaire/general health score) (Better indicated by lower values)												
3	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	80	65	-	MD 1.81 higher	MODERATE	CRITICAL

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
										(3.4 lower to 7.03 higher)		
Dumoulin 2018 (SR of RCTs): Participant perceived satisfaction												
2	randomised trials	serious[7]	no serious inconsistency	no serious indirectness	no serious imprecision	none	36/51 (70.6%)	7/54 (13.0%)	RR 5.32 (2.63 to 10.74)	560 more per 1000 (from 211 more to 1000 more)	MODERATE	IMPORTANT
Imamura 2010 (SR of RCTs): Cure rate												
8	randomised trials	very serious[1]	serious[3]	no serious indirectness	no serious imprecision	none	70/308 (22.7%)	20/297 (6.7%)	OR 5.41 (1.64 to 17.82)	214 more per 1000 (from 39 more to 495 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rate												
11	randomised trials	very serious[1]	very serious[4]	no serious indirectness	no serious imprecision	none	263/361 (72.9%)	128/337 (38%)	OR 11.75 (3.49 to 39.55)	498 more per 1000 (from 301 more to 581 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Quality of life (Social Activity Index) (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	25	30	-	MD 0.80 higher (0.08 to 1.52 higher)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Quality of life (Norwegian version of the Quality of Life Scale) (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[6]	none	25	30	-	MD 4.9 higher (0.8 lower to 10.60 higher)	VERY LOW	CRITICAL
Moroni 2016 (SR of RCTs): Incontinence specific QoL (Better indicated by lower values)												
2	randomised trials	very serious[1]	no serious inconsistency	Serious[2]	no serious imprecision	none	34	33	-	MD 1.24 lower (1.77 to 0.71 lower)	VERY LOW	CRITICAL
RCT: Improvement in ICIQ sum score (12 weeks)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Al-Belushi 2020	randomised trials	serious[7]	no serious inconsistency	serious[8]	no serious imprecision	none	17/36 (47.2%)	2/37 (5.4%)	RR 8.74 (2.17 to 35.13)	418 more per 1000 (from 63 more to 1000 more)	LOW	CRITICAL
RCT: Improved or cured (follow-up 12 weeks)												
Okayama 2019	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	23/31 (74.2%)	7/28 (25%)	RR 2.97 (1.51 to 5.82)	493 more per 1000 (from 127 more to 1000 more)	LOW	CRITICAL
RCT: Cured (follow-up 12 weeks)												
Okayama 2019	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	17/31 (54.8%)	5/28 (17.9%)	RR 3.07 (1.3 to 7.23)	370 more per 1000 (from 54 more to 1000 more)	LOW	CRITICAL
RCT: UI episodes/week (follow-up 12 weeks; Better indicated by lower values)												
Okayama 2019	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[9]	none	30	31	-	Median 1.5 lower Median (IQR): PFMT 0.0(0.0-2.0) Control 1.5(1.0-3.0)	VERY LOW	CRITICAL
ICIQ-SF score (follow-up 12 weeks; Better indicated by lower values)												
Okayama 2019	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[9]	none	30	31	-	Median 1.0 lower Median (IQR): PFMT 5.0(1.0-7.0) Control 6.0(4.3-10.0)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

2 Serious indirectness as comparison includes one study where the intervention is PFMT + BF rather than PFMT alone

3 Serious heterogeneity unexplained by subgroup analysis

4 Very serious heterogeneity unexplained by subgroup analysis

5 95% CI crosses 1 MID (0.5 x SD control, 0.84)
6 95% CI crosses 1 MID (0.5 x SD control, 6.025)
7 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
8 Serious indirectness as comparison group attended a lecture on PFMT rather than receiving no treatment
9 Subjective assessment

Table 9: Clinical evidence profile for comparison PFMT versus no treatment (or inactive control) for UI (SUI or MUI/not reported/UI or OAB)

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Dumoulin 2018 (SR of RCTs). Patient perceived cure after treatment (treatment duration 3 to 6 months)												
3	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	50/144 (34.7%)	9/146 (6.2%)	RR 5.34 (2.78 to 10.26)	268 more per 1000 (from 110 more to 571 more)	MODERATE	CRITICAL
Dumoulin 2018 (SR of RCTs). Patient perceived cure or improvement after treatment (treatment duration 3 to 6 months)												
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	58/86 (67.4%)	23/80 (28.7%)	RR 2.39 (1.64 to 3.47)	400 more per 1000 (from 184 more to 710 more)	MODERATE	CRITICAL
Dumoulin 2018 (SR of RCTs). Participant-perceived satisfaction												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	45/58 (77.6%)	14/50 (28.0%)	RR 2.77 (1.74 to 4.41)	496 more per 1000 (from 207 more to 955 more)	MODERATE	IMPORTANT
Nie 2017 (SR of RCTs): IIQ7 (Better indicated by lower values)												
2	randomised trials	serious[1]	very serious[2]	serious[4]	no serious imprecision	none	76	80	-	SMD 2.20 lower (4.12 to 0.27 lower)	VERY LOW	CRITICAL
Nie 2017 (SR of RCTs): ICIQ (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	serious[4]	no serious imprecision	none	24	24	-	SMD 1.05 lower (1.65 to 0.44 lower)	LOW	CRITICAL

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	No treatment	Relative (95% CI)	Absolute		
Nie 2017 (SR of RCTs): UDI (Better indicated by lower values)												
2	randomised trials	no serious risk of bias	no serious inconsistency	serious[4]	no serious imprecision	none	76	80	-	MD 7.5 lower (10.41 to 4.58 lower)	MODERATE	CRITICAL
Nie 2017 (SR of RCTs): Quality of life (The General QoL Questionnaire; Incontinence Quality of Life Questionnaire) (Better indicated by higher values												
2	randomised trials	no serious risk of bias	very serious[2]	serious[4]	no serious imprecision[3]	none	51	54	-	SMD 1.67 higher (0.41 to 2.94 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Very serious heterogeneity unexplained by subgroup analysis
3 Based on 0.5 x control group SD as two different measures were used therefore published MIDs based on a single measure could not be used
4 Serious indirectness due to unclear comparison. Inclusion criteria included PFMT alone or with pamphlet guidance vs no treatment or pamphlet guidance only but no further details given on specific comparison included

Table 10: Clinical evidence profile for comparison: PFMT (antenatal) vs no treatment for faecal/urinary incontinence

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	No treatment	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): UDI-6 late pregnancy (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 1.22 lower (1.96 to 0.48 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): UDI-6 at 0-3 months post-partum (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 0.73 lower (1.06 to 0.40 lower)	VERY LOW	CRITICAL

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	No treatment	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): UDI-6 at >3-6 months post-partum (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 0.51 lower (0.74 to 0.28 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): IIQ7 late pregnancy (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 1.51 lower (2.78 to 0.24 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): IIQ7 at 0-3 months post-partum (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 3.55 lower (4.61 to 2.49 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): IIQ7 at >3-6 months post-partum (for treatment or prevention) (range of scores: 0-100; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[2]	no serious imprecision	none	150	150	-	MD 0.79 lower (1.27 to 0.31 lower)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Serious indirectness due to comparison group ('No PFMT' which included regular antenatal care rather than no treatment)

Table 11: Clinical evidence profile for comparison: PFT (antenatal) versus usual care for faecal/urinary incontinence

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	Usual care	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): Incontinence-specific QoL (for treatment) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	20	21	-	MD 3.5 lower (6.13 to 0.87 lower)	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	Usual care	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): Incontinence-specific QoL late pregnancy (for treatment or prevention) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	112	112	-	MD 0.2 lower (1.21 lower to 0.81 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Incontinence-specific QoL early postnatal period (for treatment or prevention) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	104	107	-	MD 0.6 lower (1.45 lower to 0.25 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Incontinence-specific QoL late postnatal period (for treatment or prevention) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	93	97	-	MD 0.2 lower (1.2 lower to 0.8 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bladder score in late pregnancy (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	112	111	-	MD 0.3 lower (0.65 lower to 0.05 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bladder score at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	105	107	-	MD 0.1 lower (0.36 lower to 0.16 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bladder score at >6-12 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	94	97	-	MD 0.1 lower (0.41 to 0.12 lower)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bowel score in late pregnancy (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	112	112	-	MD 0.1 lower (0.39 to 0.19 lower)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bowel score at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	Usual care	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	104	107	-	MD 0.2 lower (0.52 lower to 0.12 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ bowel score at >6-12 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	94	97	-	MD 0.1 lower (0.38 lower to 0.18 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ prolapse score in late pregnancy (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	112	112	-	MD 0 higher (0.34 lower to 0.34 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ prolapse score at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	104	107	-	MD 0.2 lower (0.52 lower to 0.12 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): FPFQ prolapse score at >6-12 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	95	97	-	MD 0 higher (0.31 lower to 0.31 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Female Pelvic Floor Questionnaire sex score in late pregnancy (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	79	68	-	MD 0.9 lower (1.54 to 0.26 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): Female Pelvic Floor Questionnaire sex score at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	73	77	-	MD 0.4 lower (1.09 lower to 0.29 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Female Pelvic Floor Questionnaire sex score at >6-12 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by lower values)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	Usual care	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	86	83	-	MD 0.3 lower (0.87 lower to 0.27 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Contilife score in late pregnancy (for treatment or prevention) (range of scores: 0-10; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	108	109	-	MD 0.1 higher (1.54 to 0.26 lower)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): Contilife score at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-10; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	102	101	-	MD 0.1 higher (0.12 lower to 0.32 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Contilife score at >6-12 months (for treatment or prevention) (range of scores: 0-10; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	91	89	-	MD 0 higher (0.32 lower to 0.32 higher)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Sexually active in late pregnancy (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	83/112 (74.1%)	70/112 (62.5%)	RR 1.19 (0.99 to 1.42)	119 more per 1000 (from 6 fewer to 262 more)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): Sexually active at 0-3 months postpartum (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	74/104 (71.2%)	79/106 (74.5%)	RR 0.95 (0.81 to 1.13)	37 fewer per 1000 (from 142 fewer to 97 more)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Sexually active at >6-12 months (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	89/95 (93.7%)	91/97 (93.8%)	RR 1 (0.93 to 1.07)	0 fewer per 1000 (from 66 fewer to 66 more)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): EQ5D in late pregnancy (for treatment or prevention) (range of scores: 0-100; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	111	112	-	MD 1.5 lower (6.35 lower to 3.35 higher)	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (antenatal)	Usual care	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): EQ5D at 0-3 months postpartum (for treatment or prevention) (range of scores: 0-100; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	105	107	-	MD 2.4 higher (2.34 lower to 7.14 higher)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): EQ5D at >6-12 months (for treatment or prevention) (range of scores: 0-100; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	94	97	-	MD 3.9 higher (0.06 lower to 7.86 higher)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): BFLUTS questionnaire: a negative effect on exercise in response to question "does incontinence affect physical activity?"												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[7]	none	47/585 (8%)	41/584 (7%)	RR 1.14 (0.76 to 1.71)	10 more per 1000 (from 17 fewer to 50 more)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): STAI - trait anxiety (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[7]	none	18/85 (21.2%)	20/76 (26.3%)	RR 0.8 (0.46 to 1.40)	53 fewer per 1000 (from 142 fewer to 105 more)	VERY LOW	IMPORTANT
Woodley 2020 (SR of RCTs): STAI - state anxiety (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[7]	none	16/85 (18.8%)	14/76 (18.4%)	RR 1.02 (0.53 to 1.95)	4 more per 1000 (from 87 fewer to 175 more)	VERY LOW	IMPORTANT
Woodley 2020 (SR of RCTs): Sexual satisfaction at 6 years post-delivery (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	34/94 (36.2%)	17/94 (18.1%)	RR 2 (1.2 to 3.32)	181 more per 1000 (from 36 more to 420 more)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): Psychological General Well-being Index (for treatment or prevention) (range of scores: 0-110; Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	389	361	-	MD 0.71 higher (0.6 lower to 2.01 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.5 x SD control, 2.8)

3 95% CI crosses 1 MID (0.5 x SD control, 1.05)
4 95% CI crosses 1 MID (0.5 x SD control, 0.65)
5 95% CI crosses 1 MID (0.8, 1.25)
6 95% CI crosses 2 MIDs (EQ5D 0.025)
7 95% CI crosses 2 MIDs (0.8, 1.25)

Table 12: Clinical evidence profile for comparison: PFMT (postnatal) versus usual care for faecal/urinary incontinence

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (postnatal)	Usual care	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): Incontinence specific QoL (PFMT for treatment) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	9	9	-	MD 1.66 lower (3.51 lower to 0.19 higher)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): Urinary symptoms (BFLUTS) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	9	9	-	MD 42.83 lower (47.06 to 38.61 lower)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): HADS (for treatment) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	238	219	-	MD 0.79 lower (1.43 to 0.05 lower)	LOW	IMPORTANT
Woodley 2020 (SR of RCTs): Sexual function (attempted sexual intercourse within 3 months of delivery) (PFMT for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	714/819 (87.2%)	681/792 (86%)	RR 1.01 (0.98 to 1.05)	9 more per 1000 (from 17 fewer to 43 more)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): Sexual function (dyspareunia within 3 months post-partum) (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	167/819 (20.4%)	154/792 (19.4%)	RR 1.05 (0.86 to 1.28)	10 more per 1000 (from 27 fewer to 54 more)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): ICIQ-Vag, bulging inside vagina (yes/no) (for treatment or prevention)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (postnatal)	Usual care	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	8/87 (9.2%)	22/88 (25%)	RR 0.37 (0.17 to 0.78)	157 fewer per 1000 (from 55 fewer to 207 fewer)	LOW	CRITICAL
Woodley 2020 (SR of RCTs): ICIQ-Vag, bulging outside vagina (yes/no) (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	5/87 (5.7%)	6/88 (6.8%)	RR 0.84 (0.27 to 2.66)	11 fewer per 1000 (from 50 fewer to 113 more)	VERY LOW	CRITICAL
Woodley 2020 (SR of RCTs): POP-Q stage 1 or 2 (for treatment or prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	61/87 (70.1%)	64/88 (72.7%)	RR 0.88 (0.46 to 1.7)	87 fewer per 1000 (from 393 fewer to 509 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.5 x SD control, 1.05)
3 95% CI crosses 1 MID (0.8, 1.25)
4 95% CI crosses 2 MIDs (0.8, 1.25)

Table 13: Clinical evidence profile for comparison: PFMT (postnatal) versus no treatment for faecal/urinary incontinence

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (postnatal)	No treatment	Relative (95% CI)	Absolute		
Woodley 2020 (SR of RCTs): Quality of life - sexual function (reduced vaginal response at 10 months post-partum) (for treatment of prevention)												
1	randomised trials	very serious[1]	no serious inconsistency	serious[3]	serious[2]	none	5/51 (9.8%)	13/56 (23.2%)	RR 0.42 (0.16 to 1.10)	135 fewer per 1000 (from 195 fewer to 23 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)
3 Serious indirectness due to comparison group ('No PFMT' which included usual postnatal care)

Table 14: Clinical evidence profile for comparison: Magnetic stimulation versus placebo/sham for SUI

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Magnetic stimulation	Placebo	Relative (95% CI)	Absolute		
Peng 2019 (SR of RCTs): Quality of life[2] (follow-up 1 week-14 months; Better indicated by higher values)												
3	randomised trials	no serious risk of bias	no serious inconsistency	no serious indirectness	serious[1]	none	59	53	-	MD 0.42 higher (0.02 to 0.82 higher)	MODERATE	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 95% CI crosses 1 MID (0.5 x control SD, 0.5)
2 Specific measures used in studies not reported.

Table 15: Clinical evidence profile for comparison: Magnetic stimulation versus placebo/sham for UI

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Magnetic stimulation	Sham	Relative (95% CI)	Absolute		
Lim 2015 (SR of RCTs): Improved incontinence												
3	randomised trials	serious risk of bias[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	65/84 (77.4%)	22/69 (31.9%)	RR 2.29 (1.60 to 3.29)	411 more per 1000 (from 191 more to 730 more)	MODERATE	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 16: Clinical evidence profile for comparison: Vaginal cones versus no treatment for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Vaginal cones	No treatment	Relative (95% CI)	Absolute		
Imamura 2010 (SR of RCTs): Improvement rate												
2	randomised trials	very serious[1]	very serious[2]	no serious indirectness	very serious[3]	none	68/106 (64.2%)	54/105 (51.4%)	OR 5.43 (0.07 to 396.77)	338 more per 1000 (from 445 fewer to 483 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Quality of life - Social Activity Index (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	27	30	-	MD 0.3 higher (0.42 lower to 1.02 higher)	VERY LOW	CRITICAL
Herbinson 2013 (SR of RCTs): No subjective improvement or cure												
2	randomised trials	very serious[1]	very serious[2]	serious[5]	serious[6]	none	38/106 (35.8%)	55/109 (50.5%)	RR 0.72 (0.52 to 0.99)	141 fewer per 1000 (from 5 fewer to 242 fewer)	VERY LOW	CRITICAL
Herbinson 2013 (SR of RCTs): No subjective cure												
4	randomised trials	serious[7]	very serious[2]	serious[5]	serious[6]	none	115/151 (76.2%)	190/224 (84.8%)	RR 0.84 (0.76 to 0.94)	136 fewer per 1000 (from 51 fewer to 204 fewer)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR : systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Very serious heterogeneity unexplained by subgroup analysis
3 95% CI crosses 2 MIDs (0.8, 1.25)
4 95% CI crosses 1 MID (0.5 x control group SD, 0.84)
5 Serious indirectness as control groups included interventions other than no treatment
6 95% CI crosses 1 MID (0.8, 1.25)
7 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 17: Clinical evidence profile for comparison: Vaginal cones versus no treatment for post-natal UI (not specified)

Quality assessment	No of patients	Effect	Quality	Importance

No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Vaginal cones	No treatment	Relative (95% CI)	Absolute		
Oblasser 2015 (SR of RCTs): Self-reported urinary incontinence (follow-up 12 months)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	10/21 (47.6%)	69/91 (75.8%)	RR 0.63 (0.4 to 0.998)	281 fewer per 1000 (from 2 fewer to 455 fewer)	VERY LOW	CRITICAL
Oblasser 2015 (SR of RCTs): Self-reported urinary incontinence (follow-up after 24-44 months)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	13/19 (68.4%)	20/37 (54.1%)	RR 1.27 (0.83 to 1.94)	146 more per 1000 (from 92 fewer to 508 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)

Table 18: Clinical evidence profile for comparison: Electrical stimulation versus no treatment for SUI

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	No treatment	Relative (95% CI)	Absolute		
Imamura 2010 (SR of RCTs): Cure rate												
6	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	9/152 (5.9%)	8/136 (5.9%)	OR 1.10 (0.41 to 2.94)	6 more per 1000 (from 34 fewer to 96 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rate												
7	randomised trials	very serious[1]	serious[3]	no serious indirectness	no serious imprecision	none	71/192 (37%)	23/177 (13%)	OR 3.93 (1.43 to 10.8)	240 more per 1000 (from 46 more to 487 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Incontinence specific QoL (Social Activity Index; IIQ) (change score) (Better indicated by higher values)												
2	randomised trials	very serious[1]	serious[3]	no serious indirectness	no serious imprecision	none	37	42	-	SMD 0.47 higher (0.02 to 0.92 higher)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): UDI (change score) (Better indicated by lower values)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	No treatment	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	12	12	-	MD 8.5 lower (18.65 lower to 1.65 higher)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure (follow-up mean 6 months)												
2	randomised trials	serious[5]	no serious inconsistency	serious[6]	serious[7]	none	18/52 (34.6%)	6/49 (12.2%)	RR 2.31 (1.06 to 5.02)	160 more per 1000 (from 7 more to 492 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure or improvement (follow-up 6 weeks to 9 months)												
5	randomised trials	very serious[1]	very serious[10]	serious[6]	no serious imprecision	none	110/174 (63.2%)	66/173 (38.2%)	RR 1.73 (1.41 to 2.11)	278 more per 1000 (from 156 more to 423 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Quality of life (KHQ; ICIQ) (follow-up median 6 weeks; Better indicated by lower values)												
6	randomised trials	very serious[1]	very serious[10]	serious[6]	no serious imprecision	none	110113	117	-	SMD 0.72 lower (0.99 to 0.46 lower)	VERY LOW	CRITICAL
Moroni 2016 (SR of RCTs): Incontinence-specific QoL - KHQ; IQoL (intravaginal stimulation) (Better indicated by lower values)												
2	randomised trials	serious[5]	serious[3]	serious[8]	no serious imprecision	none	42	39	-	SMD 1.44 lower (1.94 to 0.95 lower)	LOW	CRITICAL
Moroni 2016 (SR of RCTs): Incontinence-specific QoL - KHQ (superficial stimulation) (Better indicated by lower values)												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	22	22	-	MD 50.1 lower (66.77 to 34.25 lower)	LOW	CRITICAL
RCT: UDI-6 (final score; high score is poorer outcome; 8 weeks) (Better indicated by lower values)												
Hwang 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	16	16	-	MD 9 lower (19.11 lower to 1.11 higher)	VERY LOW	CRITICAL
RCT: PISQ - total score (final score; high score is better outcome; 8 weeks) (Better indicated by higher values)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	No treatment	Relative (95% CI)	Absolute		
Hwang 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[9]	none	16	16	-	MD 10.88 higher (0.75 to 21.01 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 Serious heterogeneity unexplained by subgroup analysis
4 95% CI crosses 1 MID (UDI, -14)
5 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
6 Serious indirectness due to no treatment groups groups including other interventions
7 95% CI crosses 1 MID (0.8, 1.25)
8 Serious indirectness due to the Castro study control group being 'no active treatment'
9 95% CI crosses 1 MID (PISQ, 6)
10 Very serious heterogeneity unexplained by subgroup analysis

Table 19: Clinical evidence profile for comparison: Electrical stimulation versus no treatment for OAB

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	No treatment for OAB	Relative (95% CI)	Absolute		
RCT: ICIQ-OAB (final score; high score is poor outcome; 5 weeks) (Better indicated by lower values)												
Teixeira Alve 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	63	25	-	MD 4.92 lower (6.35 to 3.49 lower)	LOW	CRITICAL
RCT: Adherence												
Teixeira Alve 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	63/72 (87.5%)	25/29 (86.2%)	RR 1.01 (0.86 to 1.2)	9 more per 1000 (from 121 fewer to 172 more)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 20: Clinical evidence profile for comparison: Electrical stimulation versus sham for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	Sham	Relative (95% CI)	Absolute		
Stewart 2017 (SR of RCTs): Subjective cure												
3	randomised trials	serious[1]	serious[2]	no serious indirectness	very serious[3]	none	32/95 (33.7%)	6/63 (9.5%)	RR 2.21 (0.38 to 12.73)	115 more per 1000 (from 59 fewer to 1000 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure or improvement												
5	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	71/145 (49%)	18/91 (19.8%)	RR 2.03 (1.02 to 4.07)	204 more per 1000 (from 4 more to 607 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Serious inconsistency due to significant heterogeneity (I2 = 62%, p=0.07)
3 Confidence intervals cross 2 MIDs (0.8, 1.25)
4 Confidence intervals cross 1 MID (0.8, 1.25)

Table 21: Clinical evidence profile for comparison: PFMT versus electrical stimulation for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	Electrical stimulation	Relative (95% CI)	Absolute		
Imamura 2010 (SR of RCTs): Cure rates												
5	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	15/62 (24.2%)	7/62 (11.3%)	OR 2.65 (0.82 to 8.6)	139 more per 1000 (from 18 fewer to 410 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rates												
6	randomised trials	very serious[1]	serious[3]	no serious indirectness	very serious[7]	none	69/92 (75%)	57/98 (58.2%)	OR 2.18 (0.76 to 6.28)	170 more per 1000 (from 68 fewer to 316 more)	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	Electrical stimulation	Relative (95% CI)	Absolute		
Imamura 2010 (SR of RCTs): Social Activity Index (change score) (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	25	25	-	MD 0 higher (0.57 lower to 0.57 higher)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure												
4	randomised trials	very serious[1]	serious[3]	no serious indirectness	serious[2]	none	36/71 (50.7%)	21/72 (29.2%)	RR 1.75 (1.15 to 2.68)	219 more per 1000 (from 44 more to 490 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure or improvement												
7	randomised trials	very serious[1]	serious[3]	no serious indirectness	serious[2]	none	79/118 (66.9%)	73/126 (57.9%)	RR 1.18 (0.97 to 1.43)	104 more per 1000 (from 17 fewer to 249 more)	VERY LOW	CRITICAL
Liang 2018 (SR of RCTs): Life quality score (ICI-Q-SF; lower better)												
17[5]	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[6]	none	-	-	-	MD 6.96 lower (from 10.2 lower to 3.72 lower)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

2 95% CI crosses 1 MID (0.8, 1.25)

3 Serious heterogeneity unexplained by subgroup analysis

4 95% CI crosses 2 MIDs (0.5 x control group SD, 0.51)

5 Number of studies in total NMA

6 95% CI crosses 1 MID (ICIQ-SF, 4)

7 95% CI crosses 2 MIDs (0.8, 1.25)

Table 22: Clinical evidence profile for comparison: PFMT versus vaginal cones for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	Vaginal cones	Relative (95% CI)	Absolute		
Herbison 2013 (SR of RCTs): No subjective improvement or cure												
6	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	73/180 (40.6%)	68/178 (38.2%)	RR 1.03 (0.8 to 1.33)	11 more per 1000 (from 76 fewer to 126 more)	VERY LOW	CRITICAL
Herbison 2013 (SR of RCTs): No subjective cure												
5	randomised trials	serious[1]	serious[2]	no serious indirectness	no serious imprecision	none	128/169 (75.7%)	129/169 (76.3%)	RR 0.99 (0.88 to 1.12)	8 fewer per 1000 (from 92 fewer to 92 more)	LOW	CRITICAL
Imamura 2010 (SR of RCTs): Cure rate												
3	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	very serious[4]	none	6/121 (5%)	11/124 (8.9%)	OR 0.61 (0.09 to 3.95)	33 fewer per 1000 (from 80 fewer to 189 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rate												
5	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	very serious[4]	none	110/167 (65.9%)	108/164 (65.9%)	OR 1.01 (0.52 to 1.95)	2 more per 1000 (from 158 fewer to 131 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Incontinence specific QoL (Social Activity Index; KHQ) (change score)												
2	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	41	57	-	SMD 0.32 higher (0.08 lower to 0.73 higher)	LOW	CRITICAL
Moroni 2016 (SR of RCTs): Incontinence-specific QoL (KHQ; IQoL) (Better indicated by lower values)												
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	39	39	-	MD 0.56 lower (8.4 lower to 7.28 higher)	MODERATE	CRITICAL
Liang 2018 (SR of RCTs): Life quality score (ICI-Q-SF) (Better indicated by lower values)												
17[5]	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	-	-	-	MD 0.01 higher (2.62 lower to 2.64 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review

1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Serious heterogeneity unexplained by subgroup analysis
3 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
4 95% CI crosses 2 MIDs (0.8, 1.25)
5 This is the total number of studies in the NMA

Table 23: Clinical evidence profile for comparison: PFMT versus vaginal cones for post-natal UI (not specified)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT	Vaginal cones	Relative (95% CI)	Absolute		
Oblasser 2015 (SR of RCTs): Self-reported urinary incontinence (follow-up 12 months)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	10/21 (47.6%)	9/19 (47.4%)	RR 1.01 (0.52 to 1.93)	5 more per 1000 (from 227 fewer to 441 more)	VERY LOW	CRITICAL
Oblasser 2015 (SR of RCTs): Self-reported urinary incontinence (follow-up after 24-44 months)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	13/19 (68.4%)	10/20 (50%)	RR 1.37 (0.8 to 2.33)	185 more per 1000 (from 100 fewer to 665 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8,1.25)

Table 24: Clinical evidence profile for comparison: PFMT + biofeedback versus electrical stimulation for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + Biofeedback	Electrical stimulation	Relative (95% CI)	Absolute		
Liang 2018 (SR of RCTs): Life quality score (Better indicated by lower values)												
17[1]	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[3]	none	-	-	-	MD 7.12 lower (3.16 to 11.08 lower)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 This is the number of studies included in the overall NMA
2 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
3 95% CI crosses 1 MID (ICIQ-SF, 4)

Table 25: Clinical evidence profile for comparison: Electrical stimulation versus vaginal cones for SUI

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	Vaginal cones	Relative (95% CI)	Absolute		
Herbison 2013 (SR of RCTs): No subjective cure or improvement after treatment												
3	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	28/79 (35.4%)	32/72 (44.4%)	RR 0.8 (0.54 to 1.18)	89 fewer per 1000 (from 204 fewer to 80 more)	VERY LOW	CRITICAL
Herbison 2013 (SR of RCTs): No subjective cure or improvement after 6 months												
3	randomised trials	very serious[1]	very serious[3]	no serious indirectness	serious[2]	none	42/81 (51.9%)	49/73 (67.1%)	RR 0.77 (0.59 to 1.01)	154 fewer per 1000 (from 275 fewer to 7 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Cure rates												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	5/55 (9.1%)	4/51 (7.8%)	OR 1 (0.26 to 3.91)	0 fewer per 1000 (from 57 fewer to 171 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Cure rates (long term >1 year)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	12/30 (40%)	10/24 (41.7%)	OR 0.93 (0.31 to 2.78)	18 fewer per 1000 (from 235 fewer to 248 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rates												
3	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	55/71 (77.5%)	50/70 (71.4%)	OR 1.3 (0.59 to 2.84)	50 more per 1000 (from 118 fewer to 162 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rates (long term >1 year)												

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electrical stimulation	Vaginal cones	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	17/30 (56.7%)	17/24 (70.8%)	OR 0.54 (0.17 to 1.68)	141 fewer per 1000 (from 416 fewer to 95 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Social Activity Index (change score) (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	25	27	-	MD 0.5 higher (0.07 lower to 1.07 higher)	VERY LOW	CRITICAL
Moroni 2016 (SR of RCTs): Incontinence specific QoL (Better indicated by lower values)												
2	randomised trials	serious[6]	very serious[3]	no serious indirectness	very serious[7]	none	51	45	-	MD 9.31 higher (2.77 to 15.86 higher)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure												
3	randomised trials	serious[6]	no serious inconsistency	no serious indirectness	very serious[4]	none	30/82 (36.6%)	25/75 (33.3%)	RR 1.04 (0.7 to 1.54)	13 more per 1000 (from 100 fewer to 180 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure or improvement												
5	randomised trials	serious[6]	no serious inconsistency	no serious indirectness	no serious imprecision	none	140/172 (81.4%)	119/159 (74.8%)	RR 1.09 (0.97 to 1.21)	67 more per 1000 (from 22 fewer to 157 more)	MODERATE	CRITICAL
Stewart 2017 (SR of RCTs): I-QoL (Better indicated by higher values)												
2	randomised trials	serious[6]	no serious inconsistency	no serious indirectness	very serious[7]	none	51	45	-	MD 1.59 higher (3.72 lower to 6.9 higher)	VERY LOW	CRITICAL
Liang 2018 (SR of RCTs): Life quality score (ICI-Q-SF; lower better)												
17[8]	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[9]	none	-	-	-	MID 6.97 higher (3.74 to 10.21 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)
3 Very serious heterogeneity unexplained by subgroup analysis

4 95% CI crosses 2 MIDs (0.8, 1.25)
5 95% CI crosses 1 MID (0.5 x control group SD, 0.53)
6 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
7 95% CI crosses 2 MIDs (I-QoL, 2.5)
8 This is the number of studies included in the overall NMA
9 95% CI crosses 2 MIDs (ICIQ-SF, 4)

Table 26: Clinical evidence profile for comparison: Electrical stimulation versus PTNS for OAB

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Electical stimulation	Transcutaneous posterior tibial nerve stimulation	Relative (95% CI)	Absolute		
RCT: Quality of life (King's Health Questionnaire - symptoms domain; final score; 6 weeks) (Better indicated by lower values)												
Mallmann 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	21	25	-	MD 1.4 higher (1.81 lower to 4.61 higher)	LOW	CRITICAL
RCT: Incontinence Severity Index (6 weeks) - Mild												
Mallmann 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	3/21 (14.3%)	6/25 (24%)	RR 0.6 (0.17 to 2.1)	96 fewer per 1000 (from 199 fewer to 264 more)	VERY LOW	CRITICAL
RCT: Incontinence Severity Index (6 weeks) - Moderate												
Mallmann 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	14/21 (66.7%)	11/25 (44%)	RR 1.52 (0.89 to 2.59)	229 more per 1000 (from 48 fewer to 700 more)	VERY LOW	CRITICAL
RCT: Incontinence Severity Index (6 weeks) - Severe												
Mallmann 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	4/21 (19%)	8/25 (32%)	RR 0.6 (0.21 to 1.7)	128 fewer per 1000 (from 253 fewer to 224 more)	VERY LOW	CRITICAL
RCT: Incontinence Severity Index (6 weeks) - Very severe												
Mallmann 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	0/21 (0%)	0/25 (0%)	Not estimable	-	LOW	CRITICAL

RCT: Quality of life (King's Health Questionnaire – total score; final score; 6-8 weeks) (Better indicated by higher values)												
Gungor Urgurlucan 2013	randomised trials	serious[4]	no serious inconsistency	no serious indirectness	very serious[4]	none	35	17	-	MD 66.80 lower (187.61 lower to 54.01 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 95% CI crosses 1 MID (0.8, 1.25)
4 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
5 95% CI crosses 2 MIDs (KHQ, 10-15 for medium effect)

Table 27: Clinical evidence profile for comparison: Vaginal cones versus PFMT + biofeedback for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Vaginal cones**	**PFMT + biofeedback**	**Relative (95% CI)**	**Absolute**		
Liang 2018 (SR of RCTs): Life quality score (Better indicated by lower values)												
17[1]	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	-	-	-	MD 0.14 higher (3.34 lower to 3.62 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 This is the number of studies included in the overall NMA
2 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Variations of PFMT

Table 28: Clinical evidence profile for comparison: PFMT (more) versus PFMT (less) for UI (SUI/MUI)

Quality assessment						No of patients			Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (more)	PFMT (less)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not cured (more vs less contact with health professionals: additional group supervision)												
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	43/52 (82.7%)	55/59 (93.2%)	RR 0.89 (0.78 to 1.03)	103 fewer per 1000 (from 205 fewer to 28 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not cured (more vs less contact with health professionals: individual supervision vs no supervision)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	26/31 (83.9%)	32/33 (97%)	RR 0.86 (0.73 to 1.02)	136 fewer per 1000 (from 262 fewer to 19 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved (more vs less contact with health professionals: additional group supervision)												
4	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	9/87 (10.3%)	39/90 (43.3%)	RR 0.29 (0.15 to 0.55)	308 fewer per 1000 (from 195 fewer to 368 fewer)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved (more vs less contact with health professionals: individual supervision vs no supervision)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	1/31 (3.2%)	11/33 (33.3%)	RR 0.1 (0.01 to 0.71)	300 fewer per 1000 (from 97 fewer to 330 fewer)	MODERATE	CRITICAL
HaySmith 2011 (SR of RCTs): Quality of Life Index ("How would you feel if you had to spend the rest of your life with the same urinary problem") (more vs less contact with health professionals: additional group supervision) (Better indicated by lower values)												
1	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	12	10	-	MD 1.9 lower (2.93 to 0.87 lower)	LOW	CRITICAL
HaySmith 2011 (SR of RCTs): Symptom impact index (Chinese version) - avoiding activities due to worry about leaking (more vs less contact with health professionals: individual supervision vs no supervision)												

Quality assessment						No of patients			Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (more)	PFMT (less)	Relative (95% CI)	Absolute		
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	8/31 (25.8%)	15/31 (48.4%)	RR 0.53 (0.27 to 1.07)	227 fewer per 1000 (from 353 fewer to 34 more)	LOW	CRITICAL
HaySmith 2011 (SR of RCTs): Symptom impact index (Chinese version) - avoiding activities due needing a toilet (more vs less contact with health professionals: individual supervision vs no supervision)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	7/31 (22.6%)	16/31 (51.6%)	RR 0.44 (0.21 to 0.91)	289 fewer per 1000 (from 46 fewer to 408 fewer)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)
3 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 29: Clinical evidence profile for comparison: PFMT (more) versus PFMT (less) for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (more)	PFMT (less)	Relative (95% CI)	Absolute		
Imamura 2010 (SR of RCTs): Cure rate (PFMT with additional sessions vs PFMT)												
3	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	25/58 (43.1%)	9/60 (15%)	OR 8.81 (2.33 to 33.27)	459 more per 1000 (from 141 more to 704 more)	LOW	CRITICAL
Imamura 2010 (SR of RCTs): Improvement rate (PFMT with additional sessions vs PFMT)												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	34/35 (97.1%)	21/39 (53.8%)	OR 20.74 (3.58 to 120.25)	422 more per 1000 (from 268 more to 454 more)	LOW	CRITICAL
Imamura 2010 (SR of RCTs): Cure rate (long term >1 year) (PFMT with additional sessions vs PFMT)												

1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	6/20 (30%)	4/25 (16%)	OR 2.25 (0.54 to 9.44)	140 more per 1000 (from 67 fewer to 483 more)	VERY LOW	CRITICAL
Imamura 2010 (SR of RCTs): Incontinence specific quality of life (Social Activity Index; quality of life index) (PFMT with additional sessions vs PFMT)												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	35	39	-	SMD 0.12 higher (0.37 lower to 0.61 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)

Table 30: Clinical evidence profile for comparison: PFMT (group) versus PFMT (individual) for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**PFMT (group)**	**PFMT (individual)**	**Relative (95% CI)**	**Absolute**		
Moroni 2016 (SR of RCTs): Incontinence-specific QoL (KHQ) (Better indicated by lower values)												
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	45	45	-	MD 7.96 higher (2.69 lower to 18.60 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)

Table 31: Clinical evidence profile for comparison: PFMT (group) vs PFMT (individual) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**PFMT (group)**	**PFMT (individual)**	**Relative (95% CI)**	**Absolute**		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not cured (individual supervision only vs individual and group supervision)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (group)	PFMT (individual)	Relative (95% CI)	Absolute		
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	43/52 (82.7%)	55/59 (93.2%)	RR 0.89 (0.78 to 1.03)	103 fewer per 1000 (from 205 fewer to 28 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (individual and group supervision vs individual supervision)												
3	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	3/64 (4.7%)	23/69 (33.3%)	RR 0.16 (0.05 to 0.46)	280 fewer per 1000 (from 180 fewer to 317 fewer)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (group supervision vs individual supervision)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	12/30 (40%)	10/30 (33.3%)	RR 1.2 (0.61 to 2.34)	67 more per 1000 (from 130 fewer to 447 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Quality of Life Index ("How would you feel if you had to spend the rest of your life with the same urinary problem") (Better indicated by lower values)												
1	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	12	10	-	MD 1.9 lower (2.93 to 0.87 lower)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): KHQ (incontinence impact) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	30	30	-	MD 6.7 higher (5.91 lower to 19.31 higher)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): KHQ (severity) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	30	30	-	MD 0.9 higher (9.37 lower to 11.17 higher)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): IQoL (change in total score) (Better indicated by higher values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	29	30	-	MD 13.2 lower (39.2 lower to 12.8 higher)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): IQoL (total score) (Better indicated by higher values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[7]	none	123	117	-	MD 5 lower (9.14 to 0.86 lower)	LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (group)	PFMT (individual)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Adherence (participated in >50% of supervised sessions)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	16/84 (19%)	6/92 (6.5%)	RR 2.92 (1.20 to 7.12)	125 more per 1000 (from 13 more to 399 more)	LOW	IMPORTANT
Hay-Smith 2011 (SR of RCTs): Adherence (did not attend any sessions)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	11/84 (13.1%)	12/92 (13%)	RR 1 (0.47 to 2.15)	0 fewer per 1000 (from 69 fewer to 150 more)	VERY LOW	IMPORTANT
Hay-Smith 2011 (SR of RCTs): Adherence (no exercise at home)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	100/123 (81.3%)	86/117 (73.5%)	RR 1.11 (0.96 to 1.27)	81 more per 1000 (from 29 fewer to 198 more)	LOW	IMPORTANT
RCT: PGI-I - perceived benefit (1 year)												
Dumoulin 2020	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	144/166 (86.7%)	146/171 (85.4%)	RR 1.02 (0.93 to 1.11)	17 more per 1000 (from 60 fewer to 94 more)	LOW	CRITICAL
RCT: Satisfaction (1 year)												
Dumoulin 2020	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	no serious imprecision	none	150/165 (90.9%)	154/171 (90.1%)	RR 1.01 (0.94 to 1.08)	9 more per 1000 (from 54 fewer to 72 more)	LOW	CRITICAL
RCT: KHQ - severity (final score; high score is poor outcome; 6 months) (Better indicated by lower values)												
Figueiredo 2020	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	very serious[8]	none	30	30	-	MD 1.4 lower (11.52 lower to 8.72 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)
3 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
4 95% CI crosses 2 MIDs (0.8, 1.25)
5 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)
6 95% CI crosses 2 MIDs (I-QoL, 2.5)

7 95% CI crosses 1 MID (I-QoL, 2.5)
8 95% CI crosses 1 MID (KHQ, 5-6 for small effect)

Table 32: Clinical evidence profile for comparison: PFMT (direct) versus PFMT (indirect) for UI (SUI or MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (direct)	PFMT (indirect)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not cured (PFMT vs Sapsford approach)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	32/33 (97%)	26/31 (83.9%)	RR 1.16 (0.98 to 1.36)	134 more per 1000 (from 17 fewer to 302 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (PFMT vs sham/imitation PFMT)												
2	randomised trials	very serious[3]	no serious inconsistency	no serious indirectness	serious[2]	none	25/71 (35.2%)	34/67 (50.7%)	RR 0.69 (0.47 to 1.02)	157 fewer per 1000 (from 269 fewer to 10 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (PFMT vs Sapsford approach)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	11/33 (33.3%)	1/31 (3.2%)	RR 0 (1.42 to 75.41)	32 fewer per 1000 (from 14 more to 1000 more)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): I-QoL (change in total score) (PFMT vs Paula method) (Better indicated by higher values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	29	30	-	MD 13.2 lower (39.2 lower to 12.8 higher)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): I-QoL (total score) (PFMT vs Paula method) (Better indicated by higher values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	123	117	-	MD 5 lower (9.14 to 0.86 lower)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Adherence (participated in <50% of supervised sessions) (PFMT vs Paula method)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	16/84 (19%)	6/92 (6.5%)	RR 2.92 (1.2 to 7.12)	125 more per 1000 (from 13 more to 399 more)	LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (direct)	PFMT (indirect)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Adherence (did not attend any supervision sessions) (PFMT vs Paula method)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	11/84 (13.1%)	12/92 (13%)	RR 1 (0.47 to 2.15)	0 fewer per 1000 (from 69 fewer to 150 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Adherence (documented no exercise at home) (PFMT vs Paula method)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	100/123 (81.3%)	86/117 (73.5%)	RR 1.11 (0.96 to 1.27)	81 more per 1000 (from 29 fewer to 198 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Symptom impact index (Chinese version) - avoiding activities due to worry about leaking (PFMT vs Sapsford approach)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	15/31 (48.4%)	8/31 (25.8%)	RR 1.88 (0.93 to 3.77)	227 more per 1000 (from 18 fewer to 715 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Symptom impact index (Chinese version) - avoiding activities due to needing a toilet (PFMT vs Sapsford approach)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	16/31 (51.6%)	7/31 (22.6%)	RR 1.43 (0.62 to 3.27)	97 more per 1000 (from 86 fewer to 513 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference: SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)
3 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
4 95% CI crosses 2 MIDs (I-QoL, 2.5)
5 95% CI crosses 1 MID (I-QoL, 2.5)
6 95% CI crosses 2 MIDs (0.8, 1.25)

Table 33: Clinical evidence profile for comparison: PFMT (individualised) versus PFMT (generic) for UI (SUI/MUI)

Quality assessment							Number of participants		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Individualised PFMT	Generic PFMT	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	10/30 (33.3%)	12/30 (40%)	RR 0.83 (0.43 to 1.63)	68 fewer per 1000 (from 228 fewer to 252 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): KHQ (incontinence impact) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	30	30	-	MD 6.7 lower (19.31 lower to 5.91 higher)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): KHQ (severity) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	30	30	-	MD 0.90 lower (11.17 lower to 9.37 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)

Table 34: Clinical evidence profile for comparison: PFMT (daily) vs PFMT (3x per week) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (daily)	PFMT (3x per week)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not cured												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	16/19 (84.2%)	15/21 (71.4%)	RR 1.18 (0.84 to 1.65)	129 more per 1000 (from 114 fewer to 464 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (daily)	PFMT (3x per week)	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	0/19 (0%)	0/21 (0%)	-	-	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)

Table 35: Clinical evidence profile for comparison: PFMT (upright and supine) vs PFMT (supine) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (upright and supine)	PFMT (supine)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Incontinence-specific quality of life (IIQ) (Better indicated by lower values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	19	17	-	MD 2.9 lower (23.78 lower to 17.98 higher)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Treatment adherence (number of clinic visits) (Better indicated by higher values)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	22	22	-	MD 0.5 higher (1.21 lower to 2.21 higher)	VERY LOW	IMPORTANT

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (IIQ, 16)
3 95% CI crosses 1 MID (0.5 x control SD, 1.4)

Table 36: Clinical evidence profile for comparison: PFMT (more intensive) vs PFMT (less intensive) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (more intensive)	PFMT (less intensive)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not cured (high contrast)												
3	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	69/83 (83.1%)	87/92 (94.6%)	RR 0.89 (0.8 to 0.98)	104 fewer per 1000 (from 19 fewer to 189 fewer)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not cured (low contrast)												
5	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	148/161 (91.9%)	126/143 (88.1%)	RR 1.06 (1 to 1.13)	53 more per 1000 (from 0 more to 115 more)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (high contrast)												
6	randomised trials	serious[1]	serious[2]	no serious indirectness	serious[3]	none	29/166 (17.5%)	68/169 (40.2%)	RR 0.37 (0.17 to 0.84)	253 fewer per 1000 (from 64 fewer to 334 fewer)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (moderate contrast)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	6/23 (26.1%)	16/21 (76.2%)	RR 0.34 (0.17 to 0.71)	503 fewer per 1000 (from 221 fewer to 632 fewer)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change in incontinence - not improved (low contrast)												
7	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	serious[3]	none	50/212 (23.6%)	78/193 (40.4%)	RR 0.75 (0.59 to 0.95)	101 fewer per 1000 (from 20 fewer to 166 fewer)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review

1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

2 Serious heterogeneity unexplained by subgroup analysis

3 95% CI crosses 1 MID (0.8, 1.25)

4 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 37: Clinical evidence profile for comparison: PFMT (app based) vs PFMT (written) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (app based)	PFMT (written) for UI	Relative (95% CI)	Absolute		
RCT: Adherence (Number of protocol repetitions; final score; 3 months) (Better indicated by higher values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	12	9	-	MD 26.1 higher (19.64 to 32.56 higher)	LOW	CRITICAL
RCT: Adherence (Self-reported adherence; final score; 3 months) (Better indicated by higher values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	12	9	-	MD 1.23 higher (0.37 to 2.09 higher)	VERY LOW	CRITICAL
RCT: QUID (final score; 3 months) (Better indicated by lower values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	12	9	-	MD 3.6 higher (2.01 lower to 9.21 higher)	VERY LOW	CRITICAL
RCT: ICIQ-UI SF (final score; 3 months) (Better indicated by lower values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	12	9	-	MD 0.6 lower (6.3 lower to 5.1 higher)	VERY LOW	CRITICAL
RCT: ICIQ-Vaginal Symptoms (final score; 3 months) (Better indicated by lower values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	12	9	-	MD 0.8 higher (4.84 lower to 6.44 higher)	VERY LOW	CRITICAL
RCT: ICIQ - Sexual function (final score; 3 months) (Better indicated by lower values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	12	9	-	MD 5.5 higher (6.53 lower to 17.53 higher)	VERY LOW	CRITICAL
RCT: ICIQ - QoL (final score; 3 months) (Better indicated by lower values)												
Araujo 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	12	9	-	MD 4.3 higher (1.22 to 7.38 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.5 x control group SD, 0.65)
3 95% CI crosses 1 MID (0.5 x control group SD, 3.7)
4 95% CI crosses 2 MIDs (ICIQ-SF, 4)
5 95% CI crosses 1 MID (ICIQ-SF, 4)

Table 38: Clinical evidence profile for comparison: PFMT (outpatient) vs PFMT (home) for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**PFMT (outpatient)**	**PFMT (home) for SUI**	**Relative (95% CI)**	**Absolute**		
RCT: I-QoL - avoidance and limiting behaviour (final score; high score is good outcome; 3 months) (Better indicated by higher values)												
Fitz 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	28	28	-	MD 1.1 higher (15.48 lower to 17.68 higher)	VERY LOW	CRITICAL
RCT: I-QoL - psychosocial impacts (final score; high score is good outcome; 3 months) (Better indicated by higher values)												
Fitz 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	28	28	-	MD 7.8 lower (26.5 lower to 10.9 higher)	VERY LOW	CRITICAL
RCT: I-QoL - social embarrassment (final score; high score is good outcome; 3 months) (Better indicated by higher values)												
Fitz 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	28	28	-	MD 10 lower (24.19 lower to 4.19 higher)	VERY LOW	CRITICAL
RCT: Adherence (3 months) (Better indicated by higher values)												
Fitz 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	28	28	-	MD 6.9 higher (1.22 lower to 15.02 higher)	VERY LOW	CRITICAL
RCT: Patient satisfaction (3 months)												
Fitz 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	24/34 (70.6%)	18/35 (51.4%)	RR 1.37 (0.93 to 2.02)	190 more per 1000 (from 36 fewer to 525 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (I-QoL, 2.5)

3 95% CI crosses 1 MID (0.5 x control group SD, 9.9)
4 95% CI crosses 1 MID (0.8, 1.25)

Table 39: Clinical evidence profile for comparison: PFMT + BF vs PFMT for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Liang 2018 (SR of RCTs): Life quality score (ICIQ-SF) (follow-up 4-24 weeks; Better indicated by lower values)												
17[1]	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	0	-	-	MD 0.15 lower (2.43 lower to 2.12 higher)	LOW	CRITICAL
Imanura 2010 (SR of RCTs): cure rates												
8	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	87/179 (48.6%)	64/191 (33.5%)	OR 1.88 (1.23 to 2.86)	151 more per 1000 (from 48 more to 255 more)	LOW	CRITICAL
Imanura 2010 (SR of RCTs): improvement rates												
7	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[3]	none	119/139 (85.6%)	120/157 (76.4%)	OR 1.83 (1.01 to 3.34)	91 more per 1000 (from 2 more to 151 more)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Quality of life (Social Activity Index) (follow-up 6 months; Better indicated by higher values)												
1	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[4]	none	36	34	-	MD 0.1 higher (0.22 lower to 0.42 higher)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Quality of life (Modified PRAFAB) (Better indicated by lower values)												
1	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[5]	none	20	20	-	MD 2.00 lower (6.57 lower to 2.57 higher)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Quality of life (Kings Health Questionnaire; change score) (Better indicated by lower values)												
1	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[6]	none	22	16	-	MD 1.99 lower (7.13 lower to 3.15 higher)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Quality of life (Incontinence Impact Questionnaire; change score) (Better indicated by lower values)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
1	randomised trials	very serious[2]	no serious inconsistency	no serious indirectness	serious[7]	none	10	7	-	MD 16 lower (30.7 to 1.3 lower)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Number of studies in total NMA
2 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
3 95% CI crosses 1 MID (0.8, 1.25)
4 95% CI crosses 1 MID (0.5x control group SD, 0.37)
5 95% CI crosses 1 MID (0.5x control group SD, 4.3)
6 95% CI crosses 1 MID (KHQ, 5-6 for small effect)
7 95% CI crosses 1 MID (IIQ, 16)

Table 40: Clinical evidence profile for comparison: PFMT + BF vs PFMT for UI (UUI/MUI/SUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Quality of life (Protection, Amount, Frequency, Adjustment, Body Image; PRAFAB, short version) (no difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	20	20	-	MD 0.27 lower (0.89 lower to 0.36 higher)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Quality of life (KHQ total score, change score) (no difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	22	16	-	MD 1.99 lower (4.42 lower to 0.44 higher)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Quality of life (IIQ, final score) (no difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	10	10	-	MD 41.60 lower (78.62 to 4.58 lower)	LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Quality of life (KHQ total score, final score) (no difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	11	11	-	MD 4.45 lower (18.64 lower to 9.74 higher)	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Quality of life (PRAFAB, change score) (no difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	18	15	-	MD 0.36 lower (1.05 lower to 0.33 higher)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Quality of life (KHQ - incontinence impact) (difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[13]	none	34	34	-	MD 31.39 higher (11.09 lower to 73.89 higher)	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Quality of life (KHQ - severity measures) (difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	34	34	-	MD 5.94 higher (6.56 lower to 18.44 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Perception of change - not cured or improved (No difference in PFMT)												
2	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	58/88 (65.9%)	68/89 (76.4%)	RR 0.87 (0.72 to 1.05)	99 fewer per 1000 (from 214 fewer to 38 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Perception of change - not cured or improved (difference in PFMT)												
5	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	80/162 (49.4%)	131/181 (72.4%)	RR 0.69 (0.58 to 0.83)	224 fewer per 1000 (from 123 fewer to 304 fewer)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Perception of change - not cured (combined no difference in PFMT and difference in PFMT)												
5	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	108/155 (69.7%)	126/166 (75.9%)	RR 0.92 (0.81 to 1.05)	61 fewer per 1000 (from 144 fewer to 38 more)	MODERATE	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Women's satisfaction with progress - not satisfied (combined no difference in PFMT and difference in PFMT)												
7	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	39/147 (26.5%)	60/101 (59.4%)	RR 0.65 (0.49 to 0.9)	208 fewer per 1000 (from 59 fewer to 303 fewer)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Symptom distress/Quality of life (UDI - total score) (No difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[6]	none	10	10	-	MD 31.7 lower (80.36 lower to 16.96 higher)	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Symptom distress/Quality of life (Social activity index) (No difference in PFMT) (Better indicated by higher values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[7]	none	48	46	-	MD 0.10 higher (0.18 lower to 0.38 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Anxiety (Hopkins Symptom Checklist - anxiety) (Difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	47	40	-	MD 1.40 lower (6.74 lower to 3.94 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Depression (Hopkins Symptom Checklist - depression) (Difference in PFMT) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[8]	none	47	40	-	MD 2.40 lower (7.59 lower to 2.79 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to clinical sessions) (no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	20/20 (100%)	20/20 (100%)	RR 1.00 (0.91 to 1.1)[9]	0 fewer per 1000 (from 90 fewer to 100 more)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to home treatment) (no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[10]	none	17/22 (77.3%)	13/16 (81.3%)	RR 0.95 (0.69 to 1.32)[9]	41 fewer per 1000 (from 252 fewer to 260 more)	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (exercised > 3x per week) (no difference in PFMT)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	43/48 (89.6%)	39/46 (84.8%)	RR 1.06 (0.9 to 1.23)[9]	51 more per 1000 (from 85 fewer to 195 more)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to exercises - rarely) (no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[10]	none	0/15 (0%)	1/22 (4.5%)	RR 0.48 (0.02 to 11.03)	24 fewer per 1000 (from 45 fewer to 456 more)	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to exercises - occasionally) (no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	5/15 (33.3%)	15/22 (68.2%)	RR 0.49 (0.23 to 1.06)	348 fewer per 1000 (from 525 fewer to 41 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to exercises - frequently)(no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	9/15 (60%)	6/22 (27.3%)	RR 2.20 (0.99 to 4.89)	327 more per 1000 (from 3 fewer to 1000 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (adherence to exercises - all the time)(no difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[10]	none	1/15 (6.7%)	0/22 (0%)	RR 4.31 (0.19 to 99.27)	-	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (participants exercising regularly) (difference in PFMT)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	17/19 (89.5%)	7/14 (50%)	RR 1.79 (1.04 to 3.09)	395 more per 1000 (from 20 more to 1000 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Adherence (compliance) (difference in PFMT)												
1	randomised trials	very serious[12]	no serious inconsistency	no serious indirectness	serious[11]	none	19/16 (118.8%)	16/18 (88.9%)	RR 1.12 (0.92 to 1.36)	107 more per 1000 (from 71 fewer to 320 more)	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Follow up data: Symptom distress/Quality of life (UDI - total score at follow up) (No difference in PFMT) (follow-up 24 weeks; Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[6]	none	10	9	-	MD 61.70 lower (109.85 to 13.55 lower)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Quality of life (IIQ - total score at follow up) (No difference in PFMT) (follow-up 24 weeks; Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	10	9	-	MD 39.10 lower (79.81 lower to 1.61 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Quality of life (KHQ - total score at follow up) (No difference in PFMT) (follow-up 3 months; Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[4]	none	11	11	-	MD 8.18 lower (25.52 lower to 9.16 higher)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Adherence (women still doing PFMT exercise regularly) (difference in PFMT) (follow-up 2-3 years)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	17/19 (89.5%)	7/14 (50%)	RR 1.79 (1.04 to 3.09)	395 more per 1000 (from 20 more to 1000 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Women still subjective cured (difference in PFMT) (follow-up 2-3 years)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[10]	none	5/19 (26.3%)	0/14 (0%)	RR 8.25 (0.49 to 137.94)	-	VERY LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Women still subjective improved (difference in PFMT) (follow-up 2-3 years)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	8/19 (42.1%)	4/14 (28.6%)	RR 2.39 (0.99 to 5.79)	397 more per 1000 (from 3 fewer to 1000 more)	LOW	CRITICAL
Herderschee 2011 (SR of RCTs): Follow up data: Subjective cure (difference in PFMT) (follow-up 3 months)												
1	randomised trials	very serious[12]	no serious inconsistency	no serious indirectness	very serious[10]	none	8/13 (61.5%)	19/27 (70.4%)	RR 0.87 (0.53 to 1.43)	91 fewer per 1000 (from 331 fewer to 303 more)	VERY LOW	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Follow up data: Symptomatic improvement - much better (difference in PFMT) (follow-up 3 months)												
1	randomised trials	very serious[12]	no serious inconsistency	no serious indirectness	very serious[10]	none	3/14 (21.4%)	2/15 (13.3%)	RR 1.61 (0.31 to 8.24)	81 more per 1000 (from 92 fewer to 965 more)	VERY LOW	CRITICAL
RCT: Adherence (number of appointments attended, 0-6) (Better indicated by higher values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	295	298	-	MD 0.2 higher (0.12 lower to 0.52 higher)	MODERATE	CRITICAL
RCT: ICIQ-UI SF (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	225	235	-	MD 0.3 lower (1.21 lower to 0.61 higher)	MODERATE	CRITICAL
RCT: Cure (Negative response to both "how often do you leak urine?" and "how much urine do you usually leak?"; 24 months)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[10]	none	18/229 (7.9%)	20/238 (8.4%)	RR 0.94 (0.51 to 1.72)	5 fewer per 1000 (from 41 fewer to 61 more)	VERY LOW	CRITICAL
RCT: Improvement (Reduction ICIQ of ≥3 points from baseline; 24 months)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	None	135/225 (60%)	147/235 (62.6%)	RR 0.96 (0.83 to 1.11)	25 fewer per 1000 (from 106 fewer to 69 more)	MODERATE	CRITICAL
RCT: PGI-I (Very much better or much better; 24 months)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[11]	none	93/227 (41%)	90/236 (38.1%)	RR 1.07 (0.86 to 1.35)	27 more per 1000 (from 53 fewer to 133 more)	LOW	CRITICAL
RCT: ICIQ-FLUTS incontinence (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	164	169	-	MD 0.5 higher (0.39 lower to 1.39 higher)	MODERATE	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + BF	PFMT	Relative (95% CI)	Absolute		
RCT: ICIQ-LUTSqol (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	164	169	-	MD 0 higher (2.67 lower to 2.67 higher)	MODERATE	CRITICAL
RCT: Adherence (adherence during clinic appointment - any adherence in clinic)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	231/290 (79.7%)	231/292 (79.1%)	RR 1.01 (0.93 to 1.09)	8 more per 1000 (from 55 fewer to 71 more)	MODERATE	CRITICAL
RCT: ICIQ-FLUTS filling score (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	167	168	-	MD 0.1 lower (0.63 lower to 0.43 higher)	MODERATE	CRITICAL
RCT: ICIQ-FLUTS voiding score (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	165	169	-	MD 0 higher (0.39 lower to 0.39 higher)	MODERATE	CRITICAL
RCT: ICIQ-LUTSqol bother (final score; high is poor outcome; 24 months) (Better indicated by lower values)												
Hagen 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	163	169	-	MD 0.1 higher (0.55 lower to 0.75 higher)	MODERATE	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (IIQ, 16)
3 95% CI crosses 1 MID (KHQ, 5-6 for small effect)
4 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)
5 95% CI crosses 1 MID (0.5 x control group SD, 6.1)
6 95% CI crosses 1 MID (UDI, -14)
7 95% CI crosses 1 MID (0.5 x control group SD, 0.35)
8 95% CI crosses 1 MID (0.5 x control group SD, 6.25)
9 Herdesrschee 2011 did not report RR (only reported % and not effect estimate)
10 95% CI crosses 2 MIDs (0.8, 1.25)
11 95% CI crosses 1 MID (0.8, 1.25)

12 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
13 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)

Table 41: Clinical evidence profile for comparison: PFMT + BF vs PFMT for FI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + biofeedback	PFMT for FI	Relative (95% CI)	Absolute		
RCT: Cleveland score (clinical severity; high score is poorer outcome; 3 months) (Better indicated by lower values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	36	36	-	MD 0.38 lower (2.66 lower to 1.90 higher)	VERY LOW	CRITICAL
RCT: FIQL - lifestyle (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	36	36	-	MD 0.08 higher (0.22 lower to 0.38 higher)	LOW	CRITICAL
RCT: FIQL - depression (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	36	36	-	MD 0.02 higher (0.32 lower to 0.36 higher)	LOW	CRITICAL
RCT: FIQL - coping (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	36	36	-	MD 0.13 higher (0.18 lower to 0.44 higher)	VERY LOW	CRITICAL
RCT: FIQL - embarrassment (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	36	36	-	MD 0.07 lower (0.44 lower to 0.3 higher)	VERY LOW	CRITICAL
RCT: EQ5D (high score is good outcome; 3 months) (Better indicated by higher values)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + biofeedback	PFMT for FI	Relative (95% CI)	Absolute		
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	36	36	-	MD 0.07 higher (0.06 lower to 0.2 higher)	VERY LOW	CRITICAL
RCT: ICIQ-UI (low score is good outcome; 3 months) (Better indicated by lower values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	17	13	-	MD 4.32 higher (0.28 lower to 8.92 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Confidence intervals crossed 1 MID (0.5 x control SD, 2.07)
3 Confidence intervals crossed 1 MID (FIQL, 0.4)
4 Confidence interval crosses 2 MIDs (EQ5D 0.025)
5 Confidence intervals crossed 1 MID (ICIQ-SF, 4)

Table 42: Clinical evidence profile for comparison: PFMT + Feedback vs PFMT for UI (UUI/MUI/SUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + Feedback	PFMT	Relative (95% CI)	Absolute		
Herderschee 2011 (SR of RCTs): Perception of change - not cured or improved												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	21/57 (36.8%)	45/65 (69.2%)	RR 0.53 (0.37 to 0.78)	325 fewer per 1000 (from 152 fewer to 436 fewer)	MODERATE	CRITICAL
Herderschee 2011 (SR of RCTs): Satisfaction with progress - not satisfied												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	8/55 (14.5%)	27/61 (44.3%)	RR 0.33 (0.16 to 0.66)	297 fewer per 1000 (from 150 fewer to 372 fewer)	MODERATE	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

PFMT + treatment versus PFMT alone

Table 43: Clinical evidence profile for comparison: PFMT + VC vs PFMT for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + VC	PFMT	Relative (95% CI)	Absolute		
Imanura 2010 (SR of RCTs): Cure rates												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	5/21 (23.8%)	3/25 (12%)	OR 2.29 (0.48 to 11.01)	118 more per 1000 (from 59 fewer to 480 more)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Improvement rates												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	11/21 (52.4%)	12/25 (48%)	OR 1.19 (0.37 to 3.81)	43 more per 1000 (from 225 fewer to 299 more)	VERY LOW	CRITICAL
Herbinson 2013 (SR of RCTs): No subjective improvement or cure (follow-up 6 weeks)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	13/21 (61.9%)	11/25 (44%)	RR 1.41 (0.81 to 2.45)	180 more per 1000 (from 84 fewer to 638 more)	LOW	CRITICAL
Herbinson 2013 (SR of RCTs): No subjective improvement or cure (follow-up 12 weeks)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	10/21 (47.6%)	13/25 (52%)	RR 0.92 (0.51 to 1.64)	42 fewer per 1000 (from 255 fewer to 333 more)	VERY LOW	CRITICAL
Herbinson 2013 (SR of RCTs): No subjective cure												
1	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	very serious[2]	none	8/14 (57.1%)	9/19 (47.4%)	RR 1.21 (0.63 to 2.32)	99 more per 1000 (from 175 fewer to 625 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 95% CI crosses 1 MID (0.8, 1.25)
4 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 44: Clinical evidence profile for comparison: PFMT + ES vs PFMT for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + ES	PFMT	Relative (95% CI)	Absolute		
Imanura 2010 (SR of RCTs): Cure rates												
4	randomised trials	serious[1]	serious[2]	no serious indirectness	very serious[3]	none	22/108 (20.4%)	22/104 (21.2%)	OR 0.95 (0.49 to 1.85)	8 fewer per 1000 (from 95 fewer to 120 more)	VERY LOW	CRITICAL
Imanura 2010 (SR of RCTs): Improvement rate												
3	randomised trials	very serious[4]	no serious inconsistency	no serious indirectness	very serious[3]	none	68/81 (84%)	65/79 (82.3%)	OR 1.13 (0.49 to 2.58)	17 more per 1000 (from 128 fewer to 100 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure												
3	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	9/49 (18.4%)	12/50 (24%)	RR 0.76 (0.38 to 1.52)	58 fewer per 1000 (from 149 fewer to 125 more)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective cure or improvement												
8	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	117/175 (66.9%)	85/133 (63.9%)	RR 1.10 (0.95 to 1.28)	64 more per 1000 (from 32 fewer to 179 more)	LOW	CRITICAL
Stewart 2017 (SR of RCTs): Quality of life (Better indicated by lower values)												
4	randomised trials	serious[1]	very serious[6]	no serious indirectness	no serious imprecision	none	99	94	-	SMD 0.35 lower (0.64 to 0.05 lower)	VERY LOW	CRITICAL
Stewart 2017 (SR of RCTs): Subjective assessment (VAS) (Better indicated by lower values)												
3	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	77	73	-	SMD 0.57 lower (0.9 to 0.24 lower)	MODERATE	CRITICAL
RCT: Quality of Life (Wagner's QoL scale; final score; 4 weeks) (Better indicated by lower values)												
Karaman 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	20	28	-	MD 11.1 lower (14.74 to 7.46 lower)	MODERATE	CRITICAL
RCT: UI recurrence (final score; 4 weeks)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + ES	PFMT	Relative (95% CI)	Absolute		
Karaman 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	2/20 (10%)	5/28 (17.9%)	RR 0.56 (0.12 to 2.6)	79 fewer per 1000 (from 157 fewer to 286 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Serious heterogeneity unexplained by subgroup analysis
3 95% CI crosses 2 MIDs (0.8, 1.25)
4 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
5 95% CI crosses 1 MID (0.8, 1.25)
6 Very serious heterogeneity unexplained by subgroup analysis

Table 45: Clinical evidence profile for comparison: PFMT + ES vs PFMT for UI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + Electrical stimulation	PFMT for FI	Relative (95% CI)	Absolute		
RCT: PISQ (6 months) (Better indicated by lower values)												
Jha 2018	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	30	34	-	MD 5 lower (12.04 lower to 2.04 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (PISQ, 6)

Table 46: Clinical evidence profile for comparison: PFMT + ES vs PFMT for FI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + Electrical stimulation	PFMT for FI	Relative (95% CI)	Absolute		
RCT: Cleveland score (clinical severity; high score is poorer outcome; 3 months) (Better indicated by lower values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	39	36	-	MD 1.61 lower (3.68 lower to 0.46 higher)	VERY LOW	CRITICAL
RCT: FIQL - lifestyle (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	39	36	-	MD 0.15 higher (0.14 lower to 0.44 higher)	VERY LOW	CRITICAL
RCT: FIQL - depression (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	39	36	-	MD 0.18 higher (0.11 lower to 0.47 higher)	VERY LOW	CRITICAL
RCT: FIQL - coping (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	39	36	-	MD 0.21 higher (0.15 lower to 0.57 higher)	VERY LOW	CRITICAL
RCT: FIQL - embarrassment (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	39	36	-	MD 0.08 higher (0.29 lower to 0.45 higher)	VERY LOW	CRITICAL
RCT: EQ5D (high score is good outcome; 3 months) (Better indicated by higher values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[4]	none	39	36	-	MD 0.19 higher (0.08 lower to 0.30 higher)	VERY LOW	CRITICAL
RCT: ICIQ-UI (low score is good outcome; 3 months) (Better indicated by lower values)												
Mundet 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[5]	none	15	17	-	MD 1.89 lower (6.13 lower to 2.35 higher)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference

1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.5 x control group SD, 2.07)
3 95% CI crosses 1 MID (FIQL, 0,4)
4 95% CI crosses 2 MIDs (EQ5D 0.025)
5 95% CI crosses 1 MID (ICIQ-SF, 4)

Table 47: Clinical evidence profile for comparison: PFMT (strength and motor learning) vs PFMT (motor learning alone) for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT (strength and motor learning)	PFMT (motor learning alone)	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not cured												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	60/61 (98.4%)	58/62 (93.5%)	RR 1.05 (0.98 to 1.13)	47 more per 1000 (from 19 fewer to 122 more)	MODERATE	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	9/61 (14.8%)	14/62 (22.6%)	RR 0.65 (0.31 to 1.4)	79 fewer per 1000 (from 156 fewer to 90 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Quality of life (KHQ - incontinence impact) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	60	55	-	MD 10.6 higher (0.9 to 20.4 higher)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Quality of life (KHQ - severity measures) (Better indicated by lower values)												
1	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[3]	none	57	50	-	MD 6.9 higher (1.6 lower to 15.3 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 95% CI crosses 1 MID (KHQ, 10-15 for medium effect)

Table 48: Clinical evidence profile for comparison: PFMT + abdominal exercise vs PFMT for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + abdominal exercise	PFMT	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not cured												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	very serious[2]	none	15/21 (71.4%)	15/19 (78.9%)	RR 0.9 (0.63 to 1.29)	79 fewer per 1000 (from 292 fewer to 229 more)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	0/21 (0%)	0/19 (0%)	Not estimable[3]	Risk difference 0 higher (9 lower to 9 higher)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 2 MIDs (0.8, 1.25)
3 Hay-Smith 2011 used RR rather than RD and so estimate was 'not estimable'

Table 49: Clinical evidence profile for comparison: PFMT + abdominal exercise vs PFMT for SUI

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT+abdominal exercise	PFMT for SUI	Relative (95% CI)	Absolute		
RCT: ICIQ LUTS QOL (final score; 3 months) (Better indicated by lower values)												
Ptak 2020	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	70	70	-	MD 102.6 lower (131.9 to 73.3 lower)	LOW	CRITICAL
RCT: IIQ (final score; 8 weeks) (Better indicated by lower values)												
Kucukkaya 2020	randomised trials	serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 4.5 lower (7.13 to 1.87 lower)	MODERATE	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT+abdominal exercise	PFMT for SUI	Relative (95% CI)	Absolute		
RCT: UDI (final score; 8 weeks) (Better indicated by lower values)												
Kucukkaya 2020	randomised trials	serious[2]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 7.3 lower (11.36 to 3.24 lower)	MODERATE	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment

Table 50: Clinical evidence profile for comparison: PFMT + abdominal exercise vs PFMT for PFD (UI/POP/FI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT+abdominal exercise	PFMT for PFD (UI/POP/AI)	Relative (95% CI)	Absolute		
RCT: PFDI-20 (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 15.93 higher (2.35 to 29.51 higher)	MODERATE	CRITICAL
RCT: POPDI (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 7.01 higher (1.74 to 12.28 higher)	MODERATE	CRITICAL
RCT: CRADI (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 3.96 higher (0.89 lower to 8.81 higher)	MODERATE	CRITICAL

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT+abdominal exercise	PFMT for PFD (UI/POP/AI)	Relative (95% CI)	Absolute		
RCT: UDI (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 4.8 higher (1.65 lower to 11.25 higher)	MODERATE	CRITICAL
RCT: PFIQ-7 (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	32	32	-	MD 12.28 higher (2.6 to 21.96 higher)	LOW	CRITICAL
RCT: POPIQ (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 4.86 higher (1.04 to 8.68 higher)	MODERATE	CRITICAL
RCT: CRAIQ (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 4.97 higher (2.18 to 7.76 higher)	MODERATE	CRITICAL
RCT: UIQ (Change score; 12 months) (Better indicated by lower values)												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	32	32	-	MD 2.85 higher (2.91 lower to 8.61 higher)	MODERATE	CRITICAL
RCT: Adherence												
Navarro-Brazalez 2020	randomised trials	serious[1]	no serious inconsistency	no serious indirectness	very serious[3]	none	23/32 (71.9%)	21/32 (65.6%)	RR 1.1 (0.79 to 1.53)	66 more per 1000 (from 138 fewer to 348 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference
1 Serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.5 x control group SD, 21.86)

3 95% CI crosses 2 MIDs (0.8, 1.25)

Table 51: Clinical evidence profile for comparison: PFMT + intravaginal device vs PFMT for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + intravaginal device	PFMT	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not cured												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	57/60 (95%)	53/60 (88.3%)	RR 1.07 (0.96 to 1.2)	62 more per 1000 (from 35 fewer to 177 more)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved												
2	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	30/60 (50%)	35/60 (58.3%)	RR 0.86 (0.62 to 1.2)	82 fewer per 1000 (from 222 fewer to 117 more)	VERY LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference: SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)

Table 52: Clinical evidence profile for comparison: PFMT + adherence strategy vs PFMT for UI (SUI/MUI)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + adherence strategy	PFMT	Relative (95% CI)	Absolute		
Hay-Smith 2011 (SR of RCTs): Patients' perception of change - not improved												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	serious[2]	none	10/21 (47.6%)	17/20 (85%)	RR 0.56 (0.34 to 0.91)	374 fewer per 1000 (from 76 fewer to 561 fewer)	VERY LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Adherence (did not do routine PFMT)												

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PFMT + adherence strategy	PFMT	Relative (95% CI)	Absolute		
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	0/41 (0%)	12/34 (35.3%)	RR 0.03 (0 to 0.54)	342 fewer per 1000 (from 162 fewer to 353 fewer)	LOW	CRITICAL
Hay-Smith 2011 (SR of RCTs): Adherence (did not do twice daily PFMT as recommended)												
1	randomised trials	very serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	7/41 (17.1%)	30/34 (88.2%)	RR 0.19 (0.1 to 0.38)	715 fewer per 1000 (from 547 fewer to 794 fewer)	LOW	CRITICAL

CI: confidence interval; MID: minimal important difference; MD: mean difference; OR: odds ratio; RCT: randomised controlled trial; RR: relative risk; SMD: standardised mean difference; SR: systematic review
1 Very serious risk of bias in the evidence contributing to the outcomes as per RoB assessment
2 95% CI crosses 1 MID (0.8, 1.25)

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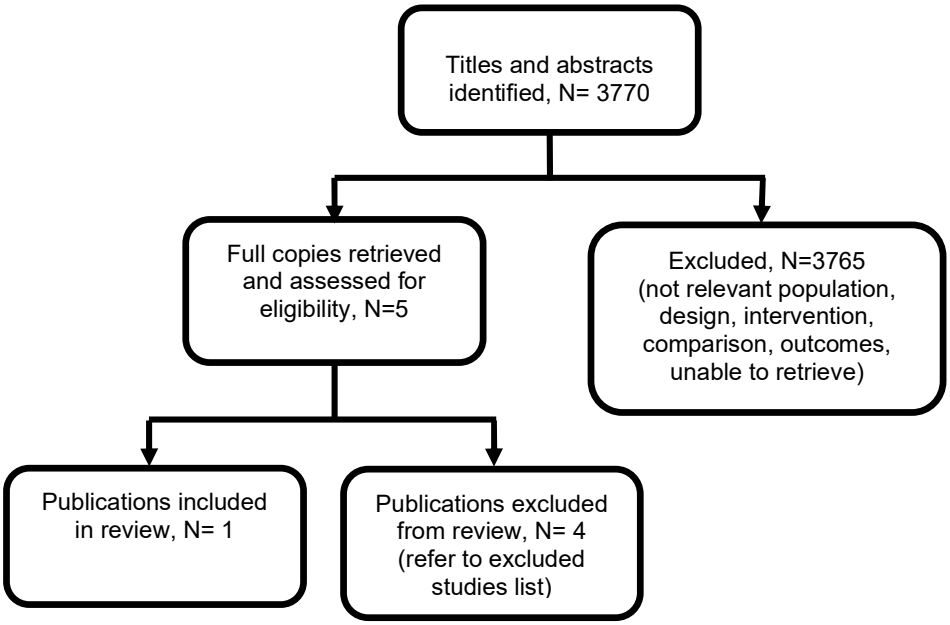
Appendix G – Economic evidence study selection

Economic evidence study selection for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Figure 2: Study selection flow chart



Appendix H – Economic evidence tables

Economic evidence tables for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Table 53: Economic evidence tables for

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Panman, C. M. C. R., Wiegersma, M., Kollen, B. J., Berger, M. Y., Lisman-Van Leeuwen, Y., Vermeulen, K. M., Dekker, J. H., Two-year effects and cost-effectiveness of pelvic floor muscle training in mild pelvic organ prolapse: a randomised controlled trial in primary care, BJOG: An International Journal of Obstetrics and Gynaecology, 124, 511-520, 2017 Cost utility analysis	*Intervention:* Pelvic Floor Muscle Training *Comparator:* Watchful waiting	Women aged 55+ Alongside a Randomised Control Trial Source of baseline data: Randomised Control trial (N=287) Source of effectiveness data: Randomised Control Trial (N=287) Source of cost data: Randomised Control Trial (N=287) Source of unit cost data: Dutch tariffs	Costs (type): Physical therapy, medical appointments, adsorbent pads. Mean cost per participant (2 years): Intervention: €330 Control: €91 Difference: €239 Primary measure of outcome (if remission how defined; if based on scale, what that scale is; if QALYs method of eliciting health valuations): Mean outcome per participant:	ICERs: €31,983 Sensitivity analysis: Bootstrap analysis (5000 iterations)	Currency: Euros Cost year: 2013 Time horizon: 2 Years Discounting: Not mentioned Applicability: Partially applicable Limitations: very serious limitations

Study country and type	Intervention and comparator	Study population, design and data sources	Costs and outcomes (descriptions and values)	Results	Comments
Funded by: The Netherlands Organisation for Health Research and Development			Intervention: -0.061 Control: -0.067 Difference: 0.008		

Appendix I – Economic evidence profiles

Economic evidence profiles for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Table 54: Economic evidence profiles for

Study and country	Limitations	Applicability	Other comments	Incremental costs	Incremental effects	ICER	Uncertainty
Panman, C. M. C. R., Wiegersma, M., Kollen, B. J., Berger, M. Y., Lisman-Van Leeuwen, Y., Vermeulen, K. M., Dekker, J. H., Two-year effects and cost-effectiveness of pelvic floor	Potentially serious limitations[1]	Partially applicable[2]	Type of economic analysis: cost utility analysis Time horizon: 2 years Primary measure of outcome: QALYs	Additional cost for Pelvic Floor Muscle Training (vs Watchful waiting): €239	Additional QALYs for Pelvic Floor Muscle Training (vs watchful waiting): 0.008	ICUR (of Pelvic Floor Muscle Training vs watchful waiting): €31,983	Deterministic sensitivity analyses: none undertaking PSA: 55% located in the north west quadrant, 45% located in the north east quadrant

Study and country	Limitations	Applicability	Other comments	Incremental costs	Incremental effects	ICER	Uncertainty
muscle training in mild pelvic organ prolapse: a randomised controlled trial in primary care, BJOG: An International Journal of Obstetrics and Gynaecology, 124, 511-520, 2017 The Netherlands							Bootstrapping: 5,000 iterations

1. *ICER very sensitive to small changes in utilities*
2. *Women over 55 in the Netherlands*

Appendix J – Economic analysis

Economic evidence analysis for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

No economic analysis was conducted for this review question.

Appendix K – Excluded studies

Excluded studies for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Clinical studies

Table 55: Excluded studies and reasons for their exclusion

Study	Reason for Exclusion
Efficacy of physical therapy for female sexual dysfunction, Zhong nan da xue xue bao. Yi xue ban [Journal of Central South University. Medical sciences], 43, 1236â 1240, 2018	Incorrect interventions, manipulation therapy and combination treatments are not included.
Abdelbary, A. M., El-Dessoukey, A. A., Massoud, A. M., Moussa, A. S., Zayed, A. S., Elsheikh, M. G., Ghoneima, W., Abdella, R., Yousef, M., Combined Vaginal Pelvic Floor Electrical Stimulation (PFS) and Local Vaginal Estrogen for Treatment of Overactive Bladder (OAB) in Perimenopausal Females. Randomized Controlled Trial (RCT), Urology, 86, 482-6, 2015	Incorrect intervention, oestrogen is not included
Abdulaziz, K., Hasan, T., Role of pelvic floor muscle therapy in obese perimenopausal females with stress incontinence: A randomized control trial, Internet Journal of Gynecology and Obstetrics, 16, 2012	Specific comparison and population is covered by a more recent systematic review.
Agur,W.I., Steggles,P., Waterfield,M., Freeman,R.M., The long-term effectiveness of antenatal pelvic floor muscle training: eight-year follow up of a randomised controlled trial, BJOG: An International Journal of Obstetrics and Gynaecology, 115, 985-990, 2008	Unclear if participants have PFD at baseline
Ahadi, T., Taghvadoost, N., Aminimoghaddam, S., Forogh, B., Bazazbehbahani, R., Raissi, G. R., Efficacy of biofeedback on quality of life in stages I and II pelvic organ prolapse: A Pilot study, European Journal of Obstetrics, Gynecology, & Reproductive BiologyEur J Obstet Gynecol Reprod Biol, 215, 241-246, 2017	Incorrect interventions, combination are not included
Ahmed, K. S., El Badry, S. M., ElDeeb, A. M., Rehan, M. R., Effect of transcutaneous versus percutaneous tibi al nerve stimulation on overactive bladder in postmenopausal women, European Journal of Molecular and Clinical Medicine, 7, 1539-1548, 2020	Incorrect interventions, both groups also have a pharmacological drug.
Allan, B. B., Bell, S., Husarek, K., Early feasibility study of non-ablative cryogen cooled monopolar radio frequency treatment for stress urinary incontinence (SUI): 12-month results, International Urogynecology Journal, 30 (1 Supplement), S273, 2019	Incorrect intervention
Alves, F. K., Riccetto, C., Adami, D. B., Marques, J., Pereira, L. C., Palma, P., Botelho, S., A pelvic floor muscle training program in postmenopausal women: A randomized controlled trial, Maturitas, 81, 300-5, 2015	Study included in an included systematic review
Amundsen, C. L., Komesu, Y. M., Chermansky, C., Gregory, W. T., Myers, D. L., Honeycutt, E. F., Vasavada, S. P., Nguyen, J. N., Wilson, T. S., Harvie, H. S., Wallace, D., Pelvic Floor Disorders, Network, Two-	Incorrect interventions, sacral neuromodulation is not included.

Study	Reason for Exclusion
Year Outcomes of Sacral Neuromodulation Versus OnabotulinumtoxinA for Refractory Urgency Urinary Incontinence: A Randomized Trial, European urology, 74, 66-73, 2018	
Amundsen, C. L., Richter, H. E., Menefee, S. A., Komesu, Y. M., Arya, L. A., Gregory, W. T., Myers, D. L., Zyczynski, H. M., Vasavada, S., Nolen, T. L., Wallace, D., Meikle, S. F., OnabotulinumtoxinA vs Sacral Neuromodulation on Refractory Urgency Urinary Incontinence in Women: A Randomized Clinical Trial, JAMA, 316, 1366-1374, 2016	Incorrect intervention, sacral neuromodulation is not included.
Andy, U. U., Jelovsek, J. E., Carper, B., Meyer, I., Dyer, K. Y., Rogers, R. G., Mazloomdoost, D., Korbly, N. B., Sassani, J. C., Gantz, M. G., Pelvic Floor Disorders, Network, Impact of treatment for Fecal Incontinence on Constipation Symptoms, American Journal of Obstetrics & GynecologyAm J Obstet Gynecol, 22, 22, 2019	Incorrect intervention, drug treatment is not included
Anonymous,, Erratum: Correction: Prenatal exercise (including but not limited to pelvic floor muscle training) and urinary incontinence during and following pregnancy: a systematic review and meta-analysis (British journal of sports medicine (2018) 52 21 (1397-1404)), British Journal of Sports MedicineBJSM online, 54, e3, 2020	Correction, rather than main review citation
Araujo, T. G., Schmidt, A. P., Sanches, P. R. S., Silva Junior, D. P., Rieder, C. R. M., Ramos, J. G. L., Transcutaneous tibial nerve home stimulation for overactive bladder in women with Parkinson's disease: A randomized clinical trial, Neurourology and Urodynamics, 40, 538-548, 2021	Incorrect population
Asklund, I., Nystrom, E., Sjostrom, M., Umefjord, G., Stenlund, H., Samuelsson, E., Mobile app for treatment of stress urinary incontinence: A randomized controlled trial, Neurourology & UrodynamicsNeurourol Urodyn, 36, 1369-1376, 2017	A more recent systematic review is included for this population and comparison
Ayala-Quispe, V. B., Guerrero-Reyes, G., Gutierrez-Gonzalez, A., Hernandez-Velazquez, R., Moysen-Marin, C. M., Barragan-Ochoa, C., Efficacy of transcutaneous vs percutaneous tibial nerve stimulation in non-neurogenic overactive bladder, Revista mexicana de urologia, 80, 2020	Not in English
Ayeleke, R. O., Hayâ Smith, E. J. C., Omar, M. I., Pelvic floor muscle training added to another active treatment versus the same active treatment alone for urinary incontinence in women, Cochrane Database of Systematic Reviews, 2015	All comparisons are combinations which are not included in the protocol
Bacchi Ambrosano Giarreta, F., Milhem Haddad, J., Souza de Carvalho Fusco, H. C., Chada Baracat, E., Casarotto, R. A., Alves Goncalves Ferreira, E., Is the addition of vaginal electrical stimulation to transcutaneous tibial nerve electrical stimulation more effective for overactive bladder treatment? A randomized controlled trial, 45, 64-72, 2021	Incorrect intervention, combination are not included
Balk, Ethan M., Rofeberg, Valerie N., Adam, Gaelen P., Kimmel, Hannah J., Trikalinos, Thomas A., Jeppson, Peter C., Pharmacologic and Nonpharmacologic Treatments for Urinary Incontinence in Women: A Systematic Review and Network Meta-analysis of Clinical Outcomes, Annals of internal medicine, 170, 465-479, 2019	The groupings of interventions used in the review do not match the groupings used within the review/guideline
Barnes, K. L., Cichowski, S., Komesu, Y. M., Jeppson, P. C., McGuire, B., Ninivaggio, C. S., Dunivan, G. C., Home Biofeedback Versus Physical Therapy for Stress Urinary Incontinence: A Randomized Trial,	Results are not usable.

Study	Reason for Exclusion
Female Pelvic Medicine & Reconstructive SurgeryFemale pelvic med, 16, 16, 2020	
Bertotto, A., Schvartzman, R., Uchoa, S., Wender, M. C. O., Effect of electromyographic biofeedback as an add-on to pelvic floor muscle exercises on neuromuscular outcomes and quality of life in postmenopausal women with stress urinary incontinence: A randomized controlled trial, Neurourology & UrodynamicsNeurourol Urodyn, 36, 2142-2147, 2017	A more recent systematic review is included for this population and comparison
Biemans, J. M. A. E., Van Balken, M. R., Efficacy and effectiveness of percutaneous tibial nerve stimulation in the treatment of pelvic organ disorders: A systematic review, Neuromodulation, 16, 25-34, 2013	Review, includes studies with men
Biemans, J. M., van Balken, M. R., Efficacy and effectiveness of percutaneous tibial nerve stimulation in the treatment of pelvic organ disorders: a systematic review, Neuromodulation, 16, 25-33; discussion 33, 2013	Includes studies that include men
Bo, K., Fernandes, A. C. N. L., Duarte, T. B., Brito, L. G. O., Ferreira, C. H. J., Is pelvic floor muscle training effective for symptoms of overactive bladder in women? A systematic review, Physiotherapy, 106, 65-76, 2020	No meta-analysis
Bo, K., Fernandes, Acnl, Duarte, T. B., Brito, L. G. O., Ferreira, C. H. J., Is pelvic floor muscle training effective for symptoms of overactive bladder in women? A systematic review, Physiotherapy, 106, 65-76, 2019	No meta-analysis, therefore results could not be extracted. Additionally some comparisons/interventions were combinations which were not included in the protocol, as well as some excluded interventions such as pharmacological interventions or bladder training.
Booth, J., Connelly, L., Dickson, S., Duncan, F., Lawrence, M., The effectiveness of transcutaneous tibial nerve stimulation (TTNS) for adults with overactive bladder syndrome: A systematic review, Neurourology and Urodynamics, 37, 528-541, 2018	Includes studies which include men
Booth, J., Hagen, S., McClurg, D., Norton, C., MacInnes, C., Collins, B., Donaldson, C., Tolson, D., A feasibility study of transcutaneous posterior tibial nerve stimulation for bladder and bowel dysfunction in elderly adults in residential care, Journal of the American Medical Directors Association, 14, 270-4, 2013	Incorrect population, includes both men and women.
Burgio, K. L., Kraus, S. R., Menefee, S., Borello-France, D., Corton, M., Johnson, H. W., Mallett, V., Norton, P., FitzGerald, M. P., Dandreo, K. J., Richter, H. E., Rozanski, T., Albo, M., Zyczynski, H. M., Lemack, G. E., Chai, T. C., Khandwala, S., Baker, J., Brubaker, L., Stoddard, A. M., Goode, P. S., Nielsen-Omeis, B., Nager, C. W., Kenton, K., Tennstedt, S. L., Kusek, J. W., Chang, T. D., Nyberg, L. M., Steers, W., Behavioral therapy to enable women with urge incontinence to discontinue drug treatment: A randomized trial, Annals of Internal MedicineAnn Intern Med, 149, 161-169, 2008	Incorrect interventions, drugs and behaviour training are not included
Cacciari, L. P., Morin, M., Mayrand, M. H., Tousignant, M., Abrahamowicz, M., Dumoulin, C., Pelvic floor morphometrical and	No relevant outcomes

Study	Reason for Exclusion
functional changes immediately after pelvic floor muscle training and at 1-year follow-up, in older incontinent women, Neurourology & UrodynamicsNeurourol Urodyn, 19, 19, 2020	
Carneiro, E. F., Araujo Ndos, S., Beuttenmüll, L., Vieira, P. C., Cader, S. A., Cader, S. A., Rett, M., Rett, M., de Oliveira, S. F., Mouta Oliveira Mdo, S., et al.,, The anatomical-functional characteristics of the pelvic floor and quality of life of women with stress urinary incontinence subjected to perineal exercises, Actas urologicas espanolas, 34, 788â 793, 2010	Specific comparison and population is already in more up to date review included in this report.
Carrion Perez, F., Rodriguez Moreno, M. S., Carnerero Cordoba, L., Romero Garrido, M. C., Quintana Tirado, L., Garcia Montes, I., Telerehabilitation to treat stress urinary incontinence. Pilot study, Medicina clinica, 144, 445â 448, 2015	Incorrect interventions, combinations are not included.
Chmielewska, D., Stania, M., Kucab-Klich, K., Blaszczak, E., Kwasna, K., Smykla, A., Hudziak, D., Dolibog, P., Electromyographic characteristics of pelvic floor muscles in women with stress urinary incontinence following sEMG-assisted biofeedback training and Pilates exercises, 14, e0225647, 2019	Incorrect interventions, pilates is not included
Coolen, R. L., Groen, J., Scheepe, J. R., Blok, B. F. M., Transcutaneous Electrical Nerve Stimulation and Percutaneous Tibial Nerve Stimulation to Treat Idiopathic Nonobstructive Urinary Retention: A Systematic Review, European Urology Focus., 2020	Systematic review, includes single arm studies and studies including men
Coolen, Rosa L., Groen, Jan, Scheepe, Jeroen R., Blok, Bertil F. M., Transcutaneous Electrical Nerve Stimulation and Percutaneous Tibial Nerve Stimulation to Treat Idiopathic Nonobstructive Urinary Retention: A Systematic Review, European Urology Focus, 2020	Includes studies of men and children
Cornelius, C., Monsour, M., Noursalehi, M., PeriCoach clinical study and real-world data insights, Female Pelvic Medicine and Reconstructive Surgery, 25 (5 Supplement 1), S287, 2019	Abstract only
da Mata, K. R. U., Costa, R. C. M., Carbone, Edsm, Gimenez, M. M., Bortolini, M. A. T., Castro, R. A., Fitz, F. F., Telehealth in the rehabilitation of female pelvic floor dysfunction: a systematic literature review, International Urogynecology Journal, 11, 11, 2020	Systematic review without meta-analysis
da Mata, Kyannie Risame Ueda, Costa, Rafaela Cristina Monica, Carbone, Ebe Dos Santos Monteiro, Gimenez, Marcia Maria, Bortolini, Maria Augusta Tezelli, Castro, Rodrigo Aquino, Fitz, Fatima Fani, Telehealth in the rehabilitation of female pelvic floor dysfunction: a systematic literature review, International Urogynecology Journal, 32, 249-259, 2021	No meta-analysis
Davenport, M. H., Nagpal, T. S., Mottola, M. F., Skow, R. J., Riske, L., Poitras, V. J., Jaramillo Garcia, A., Gray, C. E., Barrowman, N., Meah, V. L., Sobierajski, F., James, M., Nuspl, M., Weeks, A., Marchand, A. A., Slater, L. G., Adamo, K. B., Davies, G. A., Barakat, R., Ruchat, S. M., Prenatal exercise (including but not limited to pelvic floor muscle training) and urinary incontinence during and following pregnancy: a systematic review and meta-analysis [Erratum 2019; 53(2): e1], British Journal of Sports MedicineBJSM online, 52, 1397-1404, 2018	Incorrect population, women did not have to have PFD at baseline
De Berker, H. T., Vogel, I., McCabe, G., Torkington, J. H., Cornish, J. A., Systematic review: A critical appraisal of conservative treatments for faecal incontinence, Colorectal Disease, 22, 47, 2020	Abstract only

Study	Reason for Exclusion
de Oliveira Camargo, F., Rodrigues, A. M., Arruda, R. M., Ferreira Sartori, M. G., Girao, M. J., Castro, R. A., Pelvic floor muscle training in female stress urinary incontinence: comparison between group training and individual treatment using PERFECT assessment scheme, International Urogynecology Journal and Pelvic Floor Dysfunction, 20, 1455-1462, 2009	Results are not reported in an extractable way.
de Oliveira, C., Lopes, M. A., Carla Longo e Pereira, L., Zugaib, M., Effects of pelvic floor muscle training during pregnancy, Clinics (Sao Paulo, Brazil), 62, 439-46, 2007	Specific comparison and population is already in more up to date review included in this report.
de Souza Abreu, N., de Castro Villas Boas, B., Netto, J. M. B., Figueiredo, A. A., Dynamic lumbopelvic stabilization for treatment of stress urinary incontinence in women: Controlled and randomized clinical trial, Neurourology and Urodynamics, 36, 2160-2168, 2017	Incorrect intervention, dynamic lumbopelvic stabilisation is not a PFMT intervention.
Dias, S., Patidar, V., Pandey, M., Prakash, S., Namdev, R., Trivedi, S., Dwivedi, U. S., Comparison of conventional therapy and pelvic floor relaxation techniques using biofeedback in patients with chronic prostatitis/chronic pelvic pain syndrome, Indian Journal of Urology, 36 (5 Supplement 1), S3, 2020	Abstract only, incorrect population
Dmochowski, R., Lynch, C. M., Efros, M., Cardozo, L., External electrical stimulation compared with intravaginal electrical stimulation for the treatment of stress urinary incontinence in women: A randomized controlled noninferiority trial, Neurourology & UrodynamicsNeurourol Urodyn, 38, 1834-1843, 2019	Incorrect comparison, compares two different types of electrical stimulation which is not in the protocol.
Doaee, M., Moradi-Lakeh, M., Nourmohammadi, A., Razavi-Ratki, S. K., Nojomi, M., Management of pelvic organ prolapse and quality of life: a systematic review and meta-analysis, International Urogynecology Journal, 25, 153-63, 2014	Comparators are unclear (includes 'conventional therapy' but unclear what this includes)
Duarte, Thaiana B., Bo, Kari, Brito, Luiz Gustavo O., Bueno, Sabrina M., Barcelos, Thays Mr, Bonacin, Marilia Ap, Ferreira, Cristine Hj, Perioperative pelvic floor muscle training did not improve outcomes in women undergoing pelvic organ prolapse surgery: a randomised trial, Journal of physiotherapy, 66, 27-32, 2020	Incorrect interventions, control group included surgery which is not included in the protocol
Due, U., Brostrom, S., Lose, G., The 12-month effects of structured lifestyle advice and pelvic floor muscle training for pelvic organ prolapse, Acta Obstetricia et Gynecologica Scandinavica, 95, 811-9, 2016	Incorrect intervention
Due, U., Brostrom, S., Lose, G., Lifestyle advice with or without pelvic floor muscle training for pelvic organ prolapse: a randomized controlled trial, International Urogynecology Journal, 27, 555-63, 2016	Incorrect intervention
Due, U., Klarskov, N., Gras, S., Lose, G., Pelvic floor muscle training with and without supplementary KAATSU for women with stress urinary incontinence - a randomized controlled pilot study, Neurourology & UrodynamicsNeurourol Urodyn, 38, 379-386, 2019	Incorrect intervention, combination with a non-protocol intervention
Dumoulin, C., Hay-Smith, J., Pelvic floor muscle training versus no treatment for urinary incontinence in women. A Cochrane systematic review, European Journal of Physical and Rehabilitation Medicine, 44, 47-63, 2008	No meta-analysis, therefore results could not be extracted
Ferreira, C. H., Dwyer, P. L., Davidson, M., De Souza, A., Ugarte, J. A., Frawley, H. C., Does pelvic floor muscle training improve female sexual function? A systematic review, International urogynecology journal, 26, 1735-50, 2015	No meta-analysis therefore results cannot be extracted. Review also includes some

Study	Reason for Exclusion
	comparisons and interventions that are not in the protocol, including combinations, incontinence guard etc.
Ferreira, L. A., Gimenez, M. M., Matias, M. M., Fitz, F. F., Bortolini, M., Castro, R. A., Does educational program of pelvic floor muscle with vaginal palpation improve the motor control of the pelvic floor muscle of women with urinary incontinence? A randomized controlled trial, International Urogynecology Journal, 30, S319, 2019	Poster only, no relevant outcomes
Ferreira, M., Santos, P., Pelvic floor muscle training programmes: A systematic review, Acta Medica Portuguesa, 24, 309-318, 2011	Article in Portuguese
Finazzi-Agro,E., Petta,F., Sciobica,F., Pasqualetti,P., Musco,S., Bove,P., Percutaneous tibial nerve stimulation effects on detrusor overactivity incontinence are not due to a placebo effect: a randomized, double-blind, placebo controlled trial, Journal of Urology, 184, 2001-2006, 2010	Incorrect population
Firinci, S., Yildiz, N., Alkan, H., Aybek, Z., Which combination is most effective in women with idiopathic overactive bladder, including bladder training, biofeedback, and electrical stimulation? A prospective randomized controlled trial, Neurourology & UrodynamicsNeurourol Urodyn, 39, 2498-2508, 2020	Incorrect intervention
Fitz, F. F., Resende, A. P., Stupp, L., Sartori, M. G., Girao, M. J., Castro, R. A., Biofeedback for the treatment of female pelvic floor muscle dysfunction: a systematic review and meta-analysis, International urogynecology journal, 23, 1495-516, 2012	No meta-analysis therefore results cannot be extracted.
Fitz, F. F., Stupp, L., da Costa, T. F., Bortolini, M. A. T., Girao, Mjbc, Castro, R. A., Outpatient biofeedback in addition to home pelvic floor muscle training for stress urinary incontinence: a randomized controlled trial, Neurourology & UrodynamicsNeurourol Urodyn, 36, 2034-2043, 2017	Specific comparison and population is already in more up to date review included in this report.
Fjerbaek, A., Sondergaard, L., Andreasen, J., Glavind, K., Treatment of urinary incontinence in overweight women by a multidisciplinary lifestyle intervention, Archives of Gynecology and Obstetrics, 301, 525-532, 2020	Incorrect study design, no control group
Fu, Y., Nelson, E. A., McGowan, L., Multifaceted self-management interventions for older women with urinary incontinence: a systematic review and narrative synthesis, BMJ open, 9, e028626, 2019	No meta-analysis, therefore results could not be extracted. Additionally some comparisons included combinations which are not included in the protocol
Gaziev, G., Topazio, L., Iacovelli, V., Asimakopoulos, A., Di Santo, A., De Nunzio, C., Finazzi-Agro, E., Percutaneous Tibial Nerve Stimulation (PTNS) efficacy in the treatment of lower urinary tract dysfunctions: a systematic review, BMC Urology, 13, 61, 2013	Includes studies which include men and children
Giroux, M., Funk, S., Karreman, E., Kamencic, H., Bhargava, R., A randomized comparison of training programs using a pelvic model designed to enhance pelvic floor examination in patients presenting with chronic pelvic pain, International Urogynecology Journal., 2020	Incorrect population, includes men

Study	Reason for Exclusion
Glazener, C. M. A., MacArthur, C., Hagen, S., Elders, A., Lancashire, R., Herbison, G. P., Wilson, P. D., Twelve-year follow-up of conservative management of postnatal urinary and faecal incontinence and prolapse outcomes: Randomised controlled trial, BJOG: An International Journal of Obstetrics and Gynaecology, 121, 112-119, 2014	Incorrect intervention, bladder training not included
Gonzales, A. L., Barnes, K. L., Qualls, C. R., Jeppson, P. C., Prevalence and Treatment of Postpartum Stress Urinary Incontinence: A Systematic Review, Female Pelvic Medicine & Reconstructive SurgeryFemale pelvic med, 09, 09, 2020	Systematic review but no meta-analysis
Gorji, Zahra, Pourmomeny, Abbas A., Hajhashemy, Maryam, Evaluation of the effect of a new method on the pelvic organ prolapse symptoms, Lower urinary tract symptoms, 12, 20-24, 2020	Incorrect intervention, combination including postural exercises which are not included
Haddow,G., Watts,R., Robertson,J., Effectiveness of a pelvic floor muscle exercise program on urinary incontinence following childbirth, International Journal of Evidence-Based Healthcare, 3, 103-146, 2005	Most studies include women without a PFD at baseline
Hagen,S., Stark,D., Glazener,C., Sinclair,L., Ramsay,I., A randomized controlled trial of pelvic floor muscle training for stages I and II pelvic organ prolapse, International Urogynecology Journal, 20, 45-51, 2009	Incorrect intervention, combinations are not included.
Hagovska, M., Svihra, J., Evaluation of duloxetine and innovative pelvic floor muscle training in women with stress urinary incontinence (DULOXING): Study protocol clinical trial (SPIRIT Compliant), Medicine, 99, e18834, 2020	Protocol only, no results
Hagovska, M., Urdzik, P., Svihra, J., A randomized interventional parallel study to evaluate the effect of pelvic floor muscle training with stabilization exercises of high and low intensity in women with stress urinary incontinence: The PELSTAB study, Medicine, 99, e21264, 2020	Protocol only
He, Qing, Xiao, Kaiwen, Peng, Liao, Lai, Junyu, Li, Hong, Luo, Deyi, Wang, Kunjie, An Effective Meta-analysis of Magnetic Stimulation Therapy for Urinary Incontinence, Scientific reports, 9, 9077, 2019	Meta-analysis, includes some studies with men
Hou, W. H., Lin, P. C., Lee, P. H., Wu, J. C., Tai, T. E., Chen, S. R., Effects of extracorporeal magnetic stimulation on urinary incontinence: A systematic review and meta-analysis, Journal of Advanced NursingJ Adv Nurs, 76, 2286-2298, 2020	Includes studies with male participants
Hwang, Ui-Jae, Lee, Min-Seok, Jung, Sung-Hoon, Ahn, Sun-Hee, Kwon, Oh-Yun, Effect of pelvic floor electrical stimulation on diaphragm excursion and rib cage movement during tidal and forceful breathing and coughing in women with stress urinary incontinence: A randomized controlled trial, Medicine, 100, e24158, 2021	No relevant outcomes
Irct20190416043289N,, Pelvic floor treatment on pelvic floor muscle strength, http://www.who.int/trialsearch/Trial2.aspx?TrialID=IRCT20190416043289N2, 2020	Protocol only
Kang, J., Sun, Y., Su, T., Liu, Y., Liang, F., Liu, Z., Electroacupuncture for balanced mixed urinary incontinence: secondary analysis of a randomized non-inferiority controlled trial, International Urogynecology Journal, 07, 07, 2020	Incorrect interventions
Kershaw, V., Khunda, A., McCormick, C., Ballard, P., The effect of percutaneous tibial nerve stimulation (PTNS) on sexual function: a	Comparator inadequately described

Study	Reason for Exclusion
systematic review and meta-analysis, International urogynecology journal, 30, 1619-1627, 2019	
Kilpatrick, K. A., Paton, P., Subbarayan, S., Stewart, C., Abraha, I., Cruz-Jentoft, A. J., O'Mahony, D., Cherubini, A., Soiza, R. L., Non-pharmacological, non-surgical interventions for urinary incontinence in older persons: A systematic review of systematic reviews. The SENATOR project ONTOP series, Maturitas, 133, 42-48, 2020	Includes studies which include men
Kilpatrick, Kirsty A., Paton, Pamela, Subbarayan, Selvarani, Stewart, Carrie, Abraha, Iosief, Cruz-Jentoft, Alfonso J., O'Mahony, Denis, Cherubini, Antonio, Soiza, Roy L., Non-pharmacological, non-surgical interventions for urinary incontinence in older persons: A systematic review of systematic reviews. The SENATOR project ONTOP series, Maturitas, 133, 42-48, 2020	Includes studies of men
Krychman, M., Lathers, S., Viveve treatment for female sexual dysfunction: Evaluation of the onset of effect and placebo effect as measured with Female Sexual Function Index (FSFI), International Urogynecology Journal, 30 (1 Supplement), S25-S26, 2019	Abstract only
Lashin, A. M., Eltabey, N. A., Hashem, A., Hegazy, M., Wadie, B. S., Shortened 6-week percutaneous tibial nerve stimulation for refractory overactive bladder. A randomised controlled trial, Journal of Urology, 203 (Supplement 4), e475-e476, 2020	Abstract only
Lashin, A. M., El-Tabey, N. A., Wadie, B. S., Percutaneous tibial nerve stimulation versus sham efficacy in the treatment of refractory overactive bladder: Outcomes following a shortened 6-week protocol, a prospective randomized controlled trial, European Urology Open Science, 19 (Supplement 2), e812, 2020	Abstract only
Li, C., Gong, Y., Wang, B., The efficacy of pelvic floor muscle training for pelvic organ prolapse: a systematic review and meta-analysis, International Urogynecology Journal, 27, 981-92, 2016	The comparators are unclear, described as no treatment/no PFMT
Liony, C., Teles, A., Brasil, C., Lemos, A., Gomes, T., Santana, L., Lordelo, P., Non-ablative radio frequency in female anal incontinence: Preliminary randomized clinical trial, International Urogynecology Journal, 30 (1 Supplement), S144, 2019	Incorrect intervention, radiofrequency not included
Liu, L., Zhang, Y., Gong, J., Chen, X., Wu, H., Zhu, W., Effects of Different Treatment Methods on the Clinical and Urodynamic State of Perimenopausal Women with Stress Urinary Incontinence, Iranian Journal of Public HealthIran J Public Health, 47, 1090-1097, 2018	Unclear study design, does not state that participants were randomised.
Lo, C. W., Wu, M. Y., Yang, S. S., Jaw, F. S., Chang, S. J., Comparing the Efficacy of OnabotulinumtoxinA, Sacral Neuromodulation, and Peripheral Tibial Nerve Stimulation as Third Line Treatment for the Management of Overactive Bladder Symptoms in Adults: Systematic Review and Network Meta-Analysis, Toxins, 12, 18, 2020	Systematic review, includes studies with incorrect population (with men)
Lopez-Liria, R., Varverde-Martinez, M. L. A., Padilla-Gongora, D., Rocamora-Perez, P., Effectiveness of Physiotherapy Treatment for Urinary Incontinence in Women: A Systematic Review, Journal of Women's HealthJ Womens Health (Larchmt), 28, 490-501, 2019	No meta-analysis, therefore results could not be extracted
Martin-Garcia, Miguel, Crampton, Jennifer, A single-blind, randomized controlled trial to evaluate the effectiveness of transcutaneous tibial nerve stimulation (TTNS) in Overactive Bladder symptoms in women responders to percutaneous tibial nerve stimulation (PTNS), Physiotherapy, 105, 469-475, 2019	Results are not usable

Study	Reason for Exclusion
Mazur-Bialy, A. I., Kolomanska-Bogucka, D., Oplawski, M., Tim, S., Physiotherapy for Prevention and Treatment of Fecal Incontinence in Women-Systematic Review of Methods, Journal of Clinical Medicine, 9, 12, 2020	Systematic review, but no meta-analysis
McClurg, D., Hilton, P., Dolan, L., Monga, A., Hagen, S., Frawley, H., Dickinson, L., Pelvic floor muscle training as an adjunct to prolapse surgery: a randomised feasibility study, International Urogynecology Journal, 25, 883-91, 2014	Incorrect interventions, groups received surgery as well as interventions.
McLean, L., Brooks, K. C. L., Varette, K., Brison, R., Day, A., Harvey, M. A., Robert, M., Della Zazzerra, V., Baker, K., Sauerbrei, E., Physiotherapist-supervised pelvic floor muscle training as an adjunct to surgery for women with stress urinary incontinence undergoing mid-urethral sling insertion: Results of a single-blind randomized controlled trial, International Urogynecology Journal, 30, S77-S78, 2019	Abstract only
Miller, J. M., Hawthorne, K. M., Park, L., Tolbert, M., Bies, K., Garcia, C., Misiunas, R., Newhouse, W., Smith, A. R., Self-Perceived Improvement in Bladder Health After Viewing a Novel Tutorial on Knack Use: A Randomized Controlled Trial Pilot Study, Journal of Women's Health, 29, 1319-1327, 2020	Incorrect intervention, education rather than actual PFMT
Miller, J. M., Hawthorne, K. M., Park, L., Tolbert, M., Bies, K., Garcia, C., Misiunas, R., Newhouse, W., Smith, A. R., Self-Perceived Improvement in Bladder Health After Viewing a Novel Tutorial on Knack Use: A Randomized Controlled Trial Pilot Study, Journal of Women's HealthJ Womens Health (Larchmt), 2002	Incorrect comparison, education on diet and lifestyle is not included.
Monteiro, S., Riccetto, C., Araujo, A., Galo, L., Brito, N., Botelho, S., Efficacy of pelvic floor muscle training in women with overactive bladder syndrome: a systematic review, International urogynecology journal, 29, 1565-1573, 2018	No meta-analysis therefore unable to extract results
Nakib, N. J., Sutherland, S. E., Hallman, K. A., Boulware, D. J., Chrouser, K., The effect of pelvic floor muscle conditioning on 24-hr pad weight, voiding frequency and quality of life using an innovative conditioning device during PFMT in women with stressurinary incontinence, International Urogynecology Journal, 30 (1 Supplement), S111, 2019	Abstract only
Nakib, N. J., Sutherland, S. E., Hallman, K. A., Chrouser, K., Boulware, D. J., Mechanotherapy using a novel pelvic floor muscle conditioning device in women with stress urinary incontinence: Outcomes stratified by baseline urine leakage severity, Female Pelvic Medicine and Reconstructive Surgery, 25 (5 Supplement 1), S54-S55, 2019	Abstract only
Nct,, Feasibility Study of an Individualized Exergame Training for Older Adults With MI and/or UI (VITAAL), https://clinicaltrials.gov/show/NCT04587895, 2020	Protocol only, no results
Nct,, The Effect of Pelvic Floor Muscle Training With Stabilization Exercises With Various Intensity in Women With Stress Urinary Incontinence, https://clinicaltrials.gov/show/NCT04340323, 2020	Protocol only, no results
Nct,, Effect of Hypopressive Gymnastics Associated or Not With Pelvic Floor Muscle Training in Women With Urinary Incontinence, https://clinicaltrials.gov/show/NCT04339010, 2020	Protocol only, no results
Neumann,P.B., Grimmer,K.A., Deenadayalan,Y., Pelvic floor muscle training and adjunctive therapies for the treatment of stress urinary	No meta-analysis therefore unable to extract results

Study	Reason for Exclusion
incontinence in women: A systematic review, BMC Women's Health, 6 , 2006. Article Number, -, 2006	
Nipa, S. I., Sriboonreung, T., Paungmali, A., Phongnarisorn, C., Effectiveness of therapeutic interventions for women with urinary incontinence: A systematic review, Critical Reviews in Physical and Rehabilitation Medicine, 32, 1-22, 2020	Systematic review without meta-analysis
Nunes, E. F. C., Sampaio, L. M. M., Biasotto-Gonzalez, D. A., Nagano, Rcdr, Lucareli, P. R. G., Politti, F., Biofeedback for pelvic floor muscle training in women with stress urinary incontinence: a systematic review with meta-analysis, Physiotherapy, 105, 10-23, 2019	No meta-analysis, therefore results could not be extracted
Nygaard, A. S., Rydningen, M. B., Stedenfeldt, M., Wojniusz, S., Larsen, M., Lindsetmo, R. O., Haugstad, G. K., Oian, P., Group-based multimodal physical therapy in women with chronic pelvic pain: A randomized controlled trial, Acta Obstetricia et Gynecologica Scandinavica, 2020	Incorrect intervention
Pandey, M., Shrivastava, V., Patidar, V., Dias, S., Trivedi, S., Pelvic-floor relaxation techniques using biofeedback - more effective therapy for chronic prostatitis/chronic pelvic pain syndrome, Journal of Clinical Urology, 13, 454-459, 2020	Incorrect population
Peirce,C., Murphy,C., Fitzpatrick,M., Cassidy,M., Daly,L., O'Connell,P.R., O'Herlihy,C., Randomised controlled trial comparing early home biofeedback physiotherapy with pelvic floor exercises for the treatment of third-degree tears (EBAPT Trial), BJOG: An International Journal of Obstetrics and Gynaecology, 120, 1240-1247, 2013	Unclear population, no usable results.
Pelaez, M., Gonzalez-Cerron, S., Montejo, R., Barakat, R., Pelvic floor muscle training included in a pregnancy exercise program is effective in primary prevention of urinary incontinence: a randomized controlled trial, Neurourology & UrodynamicsNeurourol Urodyn, 33, 67-71, 2014	Incorrect population, women were continent at baseline.
Perez, D. C., Chao, C. W., Jimenez, L. L., Fernandez, I. M., de la Llave Rincon, A. I., Pelvic floor muscle training adapted for urinary incontinence in multiple sclerosis: a randomized clinical trial, International Urogynecology Journal, 31, 267-275, 2020	Incorrect population
Peters, K., Sirls, L., Early evaluation of an implanted chronic tibial nerve stimulation device versus percutaneous nerve stimulation for the treatment of urinary urge incontinence, Neuromodulation, 22 (7), e412-e413, 2019	Abstract only
Pires, T. F., Pires, P. M., Moreira, M. H., Gabriel, Recd, Joao, P. V., Viana, S. A., Viana, R. A., Pelvic Floor Muscle Training in Female Athletes: A Randomized Controlled Pilot Study, International Journal of Sports MedicineInt J Sports Med, 41, 264-270, 2020	Incorrect population, includes both continent and incontinent women
Polat Dunya, C., Tulek, Z., Kurtuncu, M., Panicker, J. N., Eraksoy, M., Effectiveness of the transcutaneous tibial nerve stimulation and pelvic floor muscle training with biofeedback in women with multiple sclerosis for the management of overactive bladder, Multiple SclerosisMult Scler, 1352458520926666, 2020	Incorrect population
Porta Roda, O., Diaz Lopez, M. A., Vara Paniagua, J., Simo Gonzalez, M., Diaz Bellido, P., Espinos Gomez, J. J., Adherence to pelvic floor muscle training with or without vaginal spheres in women with urinary incontinence: a secondary analysis from a randomized trial, International urogynecology journal, 27, 1185-91, 2016	Incorrect interventions, combinations are not included

Study	Reason for Exclusion
Porta-Roda, O., Vara-Paniagua, J., Diaz-Lopez, M. A., Sobrado-Lozano, P., Simo-Gonzalez, M., Diaz-Bellido, P., Reula-Blasco, M. C., Munoz-Garrido, F., Effect of vaginal spheres and pelvic floor muscle training in women with urinary incontinence: A randomized, controlled trial, Neurourology and Urodynamics, 34, 533-538, 2015	Incorrect intervention, combinations are not included.
Ptaszkowski, K., Malkiewicz, B., Zdrojowy, R., Ptaszkowska, L., Paprocka-Borowicz, M., Assessment of the short-term effects after high-inductive electromagnetic stimulation of pelvic floor muscles: A randomized, sham-controlled study, Journal of Clinical Medicine, 9 (3) (no pagination), 2020	No relevant outcomes
Savoie, M. B., Lee, K. A., Subak, L. L., Hernandez, C., Schembri, M., Fung, C. H., Grady, D., Huang, A. J., Beyond the bladder: poor sleep in women with overactive bladder syndrome, American Journal of Obstetrics & GynecologyAm J Obstet Gynecol, 222, 600.e1-600.e13, 2020	Incorrect intervention, no relevant outcomes
Schreiner, L., Nygaard, C. C., Dos Santos, T. G., Knorst, M. R., da Silva Filho, I. G., Transcutaneous tibial nerve stimulation to treat urgency urinary incontinence in older women: 12-month follow-up of a randomized controlled trial, International Urogynecology Journal, 15, 15, 2020	Incorrect intervention, bladder training not included
Silva Ferreira, A. P., de Souza Pegorare, A. B. G., Miotto Junior, A., Salgado, P. R., Medola, F. O., Christofoletti, G., A Controlled Clinical Trial on the Effects of Exercise on Lower Urinary Tract Symptoms in Women With Multiple Sclerosis, American Journal of Physical Medicine & RehabilitationAm J Phys Med Rehabil, 98, 777-782, 2019	Incorrect population
Sobhgol, S. S., Priddis, H., Smith, C. A., Dahlen, H. G., The Effect of Pelvic Floor Muscle Exercise on Female Sexual Function During Pregnancy and Postpartum: A Systematic Review, Sexual Medicine Reviews, 7, 13-28, 2019	No meta-analysis, therefore results could not be extracted
Soriano, L., Gonzalez-Millan, C., Alvarez Saez, M. M., Curbelo, R., Carmona, L., Effect of an abdominal hypopressive technique programme on pelvic floor muscle tone and urinary incontinence in women: a randomised crossover trial, PhysiotherapyPhysiotherapy, 108, 37-44, 2020	Incorrect population, only some participants had PFD at baseline
Stewart, F., Gameiro, L. F., El Dib, R., Gameiro, M. O., Kapoor, A., Amaro, J. L., Electrical stimulation with nonâ implanted electrodes for overactive bladder in adults, Cochrane Database of Systematic Reviews, 2016	Includes studies which include men
Sung, V. W., Borello-France, D., Newman, D. K., Richter, H. E., Lukacz, E. S., Moalli, P., Weidner, A. C., Smith, A. L., Dunivan, G., Ridgeway, B., Nguyen, J. N., Mazloomdoost, D., Carper, B., Gantz, M. G., Effect of Behavioral and Pelvic Floor Muscle Therapy Combined With Surgery Versus Surgery Alone on Incontinence Symptoms Among Women With Mixed Urinary Incontinence: The ESTEEM Randomized Clinical Trial, Obstetrical and Gynecological Survey, 75, 25-27, 2020	Incorrect intervention/comparison, midurethral sling is not included
Sutherland, S. E., Kennelly, M. J., Siegel, S. W., Evaluation of a non-implanted, transvaginal, electrical stimulation continence device for overactive bladder: Evanesce-OAB, Journal of Urology, 203 (Supplement 4), e553, 2020	Abstract only
Tan, Kirin, Wells, Cameron I., Dinning, Phil, Bissett, Ian P., O'Grady, Gregory, Placebo Response Rates in Electrical Nerve Stimulation Trials	Includes studies with men

Study	Reason for Exclusion
for Fecal Incontinence and Constipation: A Systematic Review and Meta-Analysis, Neuromodulation : journal of the International Neuromodulation Society, 23, 1108-1116, 2020	
Ussing, A., Dahn, I., Due, U., Sorensen, M., Petersen, J., Bandholm, T., Efficacy of Supervised Pelvic Floor Muscle Training and Biofeedback vs Attention-Control Treatment in Adults With Fecal Incontinence, Clinical Gastroenterology and Hepatology, 17, 2253-2261.e4, 2019	Included both men and women
Ussing, A., Dahn, I., Due, U., Sorensen, M., Petersen, J., Bandholm, T., Supervised pelvic floor muscle training versus attention-control massage treatment in patients with faecal incontinence: Statistical analysis plan for a randomised controlled trial, Contemporary clinical trials communications, 8, 192-202, 2017	Incorrect study design, statistical plan with no outcomes
Veeratterapillay, R., Lavin, V., Thorpe, A., Harding, C., Posterior tibial nerve stimulation in adults with overactive bladder syndrome: A systematic review of the literature, Journal of Clinical Urology, 9, 120-127, 2016	Includes studies which include men
Vereeck, S., Neels, H., Govaerts, J., Jacquemyn, Y., Re: Effect of preoperative pelvic floor muscle training on pelvic floor muscle contraction and symptomatic and anatomical pelvic organ prolapse after surgery: randomized controlled trial, Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology, 56, 120-121, 2020	Commentary on a RCT
Virseda Chamorro, M., Salinas Casado, J., Martin Garcia, C., Meta-analysis of the efficacy of perineal rehabilitation for the treatment of female urinary stress incontinence, Archivos Espanoles de UrologiaArch Esp Urol, 55, 937â 942, 2002	Article in Spainish
Von Bargen, E., Haviland, M. J., Chang, O. H., McKinney, J., Hacker, M. R., Elkadry, E., Evaluation of Postpartum Pelvic Floor Physical Therapy on Obstetrical Anal Sphincter Injury: A Randomized Controlled Trial, Female Pelvic Medicine & Reconstructive SurgeryFemale pelvic med, 09, 09, 2020	Unclear whether participants did or did not have PFD at baseline
Wagg, A., Bunn, F., Unassisted pelvic floor exercises for postnatal women: A systematic review, Journal of Advanced Nursing, 58, 407-417, 2007	Most studies include women without a PFD at baseline
Wang, M., Jian, Z., Ma, Y., Jin, X., Li, H., Wang, K., Percutaneous tibial nerve stimulation for overactive bladder syndrome: a systematic review and meta-analysis, International Urogynecology Journal, 31, 2457-2471, 2020	Systematic review includes studies with a mixed gender population
Wang, X., Meng, L., Zhang, H., Sun, S., Xu, L., Chen, M., Chen, S., Chen, J., Efficacy of pelvic floor muscle training in the treatment of female pelvic organ prolapse: A meta-analysis of randomized controlled trials, International Journal of Clinical and Experimental Medicine, 11, 11406-11414, 2018	The comparators are unclear and/or the review includes a range of comparators which are not analysed separately
Wein, A. J., Re: Group-Based vs Individual Pelvic Floor Muscle Training to Treat Urinary Incontinence in Women, a Randomized Clinical Trial, The Journal of urology, 204, 1387-1388, 2020	Incorrect study design - commentary/reply
Wibisono, E., Rahardjo, H. E., Effectiveness of Short Term Percutaneous Tibial Nerve Stimulation for Non-neurogenic Overactive Bladder Syndrome in Adults: A Meta-analysis, Acta Medica Indonesiana, 47, 188-200, 2015	Includes studies which include men

Study	Reason for Exclusion
Wiegersma, M., Panman, Cmcr, Kollen, B. J., Berger, M. Y., Lisman-Van Leeuwen, Y., Dekker, J. H., Effect of pelvic floor muscle training compared with watchful waiting in older women with symptomatic mild pelvic organ prolapse: randomized controlled trial in primary care, Nederlands tijdschrift voor geneeskunde, 159, 2015	Article in Dutch
Woodley, S. J., Boyle, R., Cody, J. D., Mørkved, S., Hayâ Smith, E. J. C., Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women, Cochrane Database of Systematic Reviews, 2017	This review has a more recent update
Wu, C., Newman, D. K., Palmer, M. H., Unsupervised behavioral and pelvic floor muscle training programs for storage lower urinary tract symptoms in women: a systematic review, International Urogynecology Journal, 31, 2485-2497, 2020	Systematic review with no meta-analysis
Xu, T. Z., Sun, Q. H., Huang, X., Lyu, B. D., A nurse-led long-term pelvic floor muscle training program in the management of female patients with overactive bladder - A study protocol for a randomized controlled trial, International Journal of Nursing Sciences, 2, 158-166, 2015	A more recent systematic review is included for this population and comparison
Yamanishi,T., Yasuda,K., Sakakibara,R., Hattori,T., Suda,S., Randomized, double-blind study of electrical stimulation for urinary incontinence due to detrusor overactivity, Urology, 55, 353-357, 2000	Incorrect population, includes both men and women
Zhang, F. W., Wei, F., Wang, H. L., Pan, Y. Q., Zhen, J. Y., Zhang, J. X., Yang, K. H., Does pelvic floor muscle training augment the effect of surgery in women with pelvic organ prolapse? A systematic review of randomized controlled trials, Neurourology & Urodynamics, 35, 666-74, 2016	No meta-analysis therefore results cannot be extracted
Zhou, Y. N., Teng, Y. C., Gan, G. P., Study on the effect of electric current intensity stimulation combined with biofeedback pelvic floor muscle training on postpartum pelvic floor dysfunction, Clinical and Experimental Obstetrics and Gynecology, 47, 932-939, 2020	Incorrect comparison

PFD: pelvic floor dysfunction

Economic studies

Study	Reason for exclusion
Golmakani, N., Khadem, N., Arabipoor, A., Kerigh, B. F., Esmaily, H., Behavioral Intervention Program versus Vaginal Cones on Stress Urinary Incontinence and Related Quality of Life: A Randomized Clinical Trial, Oman Medical Journal, 29, 32-8, 2014	Nothing on costs
Imamura,M., Abrams,P., Bain,C., Buckley,B., Cardozo,L., Cody,J., Cook,J., Eustice,S., Glazener,C., Grant,A., Hay-Smith,J., Hislop,J., Jenkinson,D., Kilonzo,M., Nabi,G., N'Dow,J., Pickard,R., Ternent,L., Wallace,S., Wardle,J., Zhu,S., Vale,L., Systematic review and economic modelling of the effectiveness and cost-effectiveness of non-surgical treatments for	All strategies include surgery

Study	Reason for exclusion
women with stress urinary incontinence, Health Technology Assessment, 14, 1-215, 2010	
Jones, H. J. S., Gosselink, M. P., Fourie, S., Lindsey, I., Is group pelvic floor retraining as effective as individual treatment?, Colorectal Disease, 17, 515-521, 2015	No Health economics
Sjostrom, M., Lindholm, L., Samuelsson, E., Mobile App for Treatment of Stress Urinary Incontinence: A Cost-Effectiveness Analysis, Journal of medical Internet research, 19, e154, 2017	Societal perspective - majority of costs are participants time to complete PFMT

Appendix L – Research recommendations

Research recommendations for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Research recommendation 1

How effective is a pessary or intravaginal device combined with pelvic floor muscle training for managing pelvic floor dysfunction, compared with pelvic floor muscle training alone?

Why this is important

Pelvic floor exercises are an important part of the management of symptoms of pelvic floor dysfunction. Undertaking pelvic floor muscle training has been shown to significantly impact an individual's health and improve symptoms of pelvic floor dysfunction. However, there are a number of issues related to pelvic floor muscle training in the management of pelvic floor dysfunction that are uncertain. The NHS long term plan published in 2019 sets out that 'We will improve access to postnatal physiotherapy to support women who need it to recover from birth' with the aim to prevent birth related symptoms of pelvic floor dysfunction. However, currently there is little evidence whether adding pessaries or weighted vaginal cones to increase the load on the pelvic floor when doing pelvic floor muscle training increases its effectiveness in the physically active population. For this reason, research on these specific details is required to allow recommendations for advice about the use of pelvic floor muscle training in the prevention of pelvic floor dysfunction to be developed.

Table 56: Research recommendation rationale

Research question	What is the effectiveness of pessary + PFMT and intra-vaginal devices + PFMT compared to PFMT alone in the active population?
Why is this needed	
Importance to 'patients' or the population	Pelvic floor exercises are often suggested to women with pelvic floor dysfunction. However, there is very limited evidence to guide the most effective way of providing pelvic floor muscle training (PFMT) to prevent symptoms associated with pelvic floor dysfunction. Without this information, people may undertake pelvic floor muscle training no useful purpose for the management of pelvic floor dysfunction.
Relevance to NICE guidance	The relative absence of evidence regarding this topic currently restricts NICE guidance from making recommendations regarding the most effective way of providing pelvic floor muscle training in the prevention of symptoms of pelvic floor dysfunction. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance.
Relevance to the NHS	Pelvic floor muscle training is an intervention with relatively low cost and may reduce the need for interventions with

Research question	What is the effectiveness of pessary + PFMT and intra-vaginal devices + PFMT compared to PFMT alone in the active population?
	higher cost impacts on the NHS such as further assessment and treatment and surgical intervention
National priorities	One of the key national priority in the NHS long term plan (2019) is the use of physiotherapy to prevent symptoms of pelvic floor dysfunction associated with childbirth. Pelvic floor muscle training to prevent pelvic floor dysfunction is also a key recommendation, following the Independent Medicine and Medical Devices Safety Review (Cumberledge review) into mesh surgery in 2020.
Current evidence base	There is currently little evidence regarding whether pelvic floor muscle training should be augmented with pessaries or intra-vaginal devices.
Equality	This may be more difficult for young women with disabilities who would find such training difficult. Considerations should be given to how groups with physical disabilities could strengthen these muscle groups and what types of training may be suitable for them depending on their individual abilities and preferences. Following instructions could be difficult for young women with learning or cognitive disabilities and efforts should be made to produce instruction material that is accessible to these groups.
Feasibility	There have been a number of studies looking at pelvic floor muscle training added to other active treatments so this is feasible.
Other comments	Pelvic floor exercises are often suggested to women with pelvic floor dysfunction. However, there is very limited evidence to guide the most effective way of providing PFMT to prevent symptoms associated with pelvic floor dysfunction. Without this information, people may undertake pelvic floor muscle training no useful purpose for the management of pelvic floor dysfunction.

PFMT: pelvic floor muscle training

Table 57: Research recommendation modified PICO table

Criterion	Explanation
Population	Active women over 12 years of age with pelvic floor dysfunction capable of understanding and responding to pelvic floor muscle training
Intervention	• Pelvic floor muscle training plus pessary • Pelvic floor muscle training plus intravaginal device
Comparator	Pelvic floor muscle training alone
Outcomes	• Change in pelvic floor strength. • Validated assessments of pelvic floor dysfunction symptoms (such as urinary incontinence, pelvic organ prolapse, sexual dysfunction, faecal incontinence). • Adherence to training schedule

Criterion	Explanation
	• Long term and short term adherence data- presence and severity of symptoms over time.
Study design	Multi-arm RCT
Timeframe	Intermediate points would allow determination of the likely length of intervention before an improvement is achieved. It may also offset some of the dropout in the long-term.
Additional information	It would be useful to compare the results of this study with previous studies looking at adherence and PFMT interventions. This would show synergies between the existing advice and any new advice to help answer the question in the guideline.

RCT: randomised controlled trial

Research recommendation 2

How effective is virtual contact with a trainer, compared with in-person contact, for pelvic floor muscle training?

Why this is important

Pelvic floor exercises are an important part of the management of symptoms of pelvic floor dysfunction; undertaking pelvic floor muscle training has been shown to significantly impact on an individual's health and improve symptoms of pelvic floor dysfunction. The Covid-19 pandemic of 2020 saw a shift towards providing care virtually, but this approach may have continuing relevance. For practical reasons virtual contact time may increase the accessibility of PFMT to some women who may not otherwise be able to attend supervised PFMT in person. Some aspects of the supervision, however, may be less effective during such virtual consultations.

Table 58: Research recommendation rationale

Research question	How effective is the provision of supervised pelvic floor muscle training virtually in comparison to face to face?
Why is this needed	
Importance to 'patients' or the population	Pelvic floor exercises are often suggested to women with pelvic floor dysfunction. However, there is very limited evidence to guide the most effective way of providing pelvic floor muscle training (PFMT) to prevent symptoms associated with pelvic floor dysfunction. Without this information, people may undertake pelvic floor muscle training no useful purpose for the management of pelvic floor dysfunction.
Relevance to NICE guidance	The relative absence of evidence regarding this topic currently restricts NICE guidance from making recommendations regarding the most effective way of providing pelvic floor muscle training in the prevention of symptoms of pelvic floor dysfunction. The outcome of this research would allow such recommendations to be developed and become part of NICE guidance.
Relevance to the NHS	Pelvic floor muscle training is an intervention with relatively low cost and may reduce the need for interventions with

Research question	How effective is the provision of supervised pelvic floor muscle training virtually in comparison to face to face?
	higher cost impacts on the NHS such as further assessment and treatment and surgical intervention. Virtual consultations may also be a more efficient use of healthcare professionals' time.
National priorities	One of the key national priority in the NHS long term plan (2019) is the use of physiotherapy to prevent symptoms of pelvic floor dysfunction associated with childbirth. Pelvic floor muscle training to prevent pelvic floor dysfunction is also a key recommendation, following the Independent Medicine and Medical Devices Safety Review (Cumberledge review) into mesh surgery in 2020.
Current evidence base	There is currently no evidence regarding whether virtual consultations are as effective as in-person consultations in encouraging adherence to pelvic floor muscle training.
Equality	This may be more difficult for young women with disabilities who would find such training difficult. Considerations should be given to how groups with physical disabilities could strengthen these muscle groups and what types of training may be suitable for them depending on their individual abilities and preferences. Following instructions, especially during a virtual consultation, could be difficult for young women with learning or cognitive disabilities.
Feasibility	There have been a number of studies looking at different ways of delivering pelvic floor muscle training so this is feasible.
Other comments	Pelvic floor exercises are often suggested to women with pelvic floor dysfunction. However, there is very limited evidence to guide the most effective way of providing pelvic floor muscle training (PFMT) to prevent symptoms associated with pelvic floor dysfunction. Without this information, people may undertake pelvic floor muscle training no useful purpose for the management of pelvic floor dysfunction.

PFMT: pelvic floor muscle training

Table 59: Research recommendation modified PICO table

Criterion	Explanation
Population	Women over 12 years of age with pelvic floor dysfunction capable of understanding and responding to pelvic floor muscle training
Intervention	Pelvic floor muscle training with virtual supervision
Comparator	Pelvic floor muscle training with in-person supervision
Outcomes	• Change in pelvic floor strength. • Validated assessments of pelvic floor dysfunction symptoms (such as urinary incontinence, pelvic organ prolapse, sexual dysfunction, faecal incontinence). • Long term and short term adherence • Presence and severity of symptoms over time.
Study design	RCT

Criterion	Explanation
Timeframe	Intermediate points would allow determination of the likely length of intervention before an improvement is achieved. It may also offset some of the dropout in the long-term.
Additional information	It would be useful to compare the results of this study with previous studies looking at adherence and PFMT interventions. This would show synergies between the existing advice and any new advice to help answer the question in the guideline.

PFMT: pelvic floor muscle training; RCT: randomised controlled trial