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.

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

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?
	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 mounted FICO lable	Table 57:	Research recommendation modified PICO table
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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 pessaryPelvic 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