TRAINING FOR MIDWIVES TO SUPPORT WOMEN TO DO THEIR EXERCISES DURING PREGNANCY. A MIXED METHOD EVALUATION OF THE MIDWIFE TRAINING DURING A FEASIBILITY AND PILOT RANDOMISED CONTROLLED TRIAL.

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HYPOTHESIS / AIMS OF STUDY
Urinary Incontinence (UI) affects around 30% of women after childbirth and in many cases can be prevented.(1) One of the biggest risk factors for women developing UI is pregnancy and childbirth.(1) Pelvic Floor Muscle Exercises (PFME) can be used for both prevention antenatally and as a treatment antenatally and postnatally.(1) However, an ethnographic study found that women do not have basic knowledge about their pelvic floor (2) and midwives lack confidence teaching PFME antenatally.(2) The study also described how local and national guidelines surrounding PFME lack clarity and consistency.(2) Yet, midwives are perfectly placed within the healthcare system to provide this kind of support during pregnancy.(2) A feasibility and pilot randomised controlled trial currently being conducted aims to increase the number of women practising PFME antenatally with the objective of preventing postnatal UI. To achieve this, midwives in the intervention arm of the trial received a training package about PFME and how to teach and support women to do their exercises along with resources for both themselves and the women in their care. This study aims to evaluate the feasibility and acceptability of the training package delivered to midwives during this trial, reporting the training evaluation for the first time.

STUDY DESIGN, MATERIALS AND METHODS
A mixed methods approach was used to collect and analyse data: training observations, Likert-scale questionnaires (pre- and post-training) and post-training qualitative interviews. During the training session observations, researchers used a checklist to assess the facilitator's fidelity to deliver the training according to the protocol. Participating midwives completed two questionnaires before the training session. A questionnaire, created for this study, gathered demographic information (years qualified as a midwife and working in the community and any previous PFME experience). A Confidence questionnaire recorded self-reported confidence scores on eight items: 1) Raising the topic of PFME; 2) Raising the topic of UI; 3) Understanding pelvic floor anatomy; 4) Assessing whether a woman is correctly able to do a pelvic floor muscle contraction; 5)Teaching a pregnant woman to do PFME; 6) Giving further advice about how to do PFME; 7) Referring women who cannot do a pelvic floor muscle contraction for further help; 8) Advising women on how to manage UI. The Confidence questionnaire was completed immediately before and also after the training session, allowing for a direct comparison of confidence scores per question pre- and post-training. Descriptive and inferential statistics were used to determine any significant changes in confidence after the training session. Midwives also completed an evaluation questionnaire post-training to assess the acceptability of the training content and delivery. Responses to six Likert-scale questions (0-10 response range, 10 = highly positive) about usefulness, content, delivery method, resources for women, resources for midwives and whether to recommend this training to other midwives) were summarised quantitatively and free-text responses summarised in categories. A subset of midwives consented to be interviewed about their experiences of the training session, the audio-recorded data were transcribed and analysed using qualitative Thematic Analysis.

RESULTS
71 midwives consented to take part in the training evaluation, with 13 participating in an interview. The average number of years working as a midwife and in the community were 11.3 (SD 9.2) and 6.2 (SD 6.4) respectively. Previous PFME experience varied, with half of midwives (50%) having no previous PFME training. The mean for the training session fidelity was 86.4% (SD 9.2%), although observation of an early training session revealed lower fidelity to the training protocol (75.8%) compared to sessions observed later (92.4%). A positive change in confidence occurred following training; the median change was at least +1 for every question. Wilcoxon signed-rank test detected a significant change in confidence for every question ($p < 0.001$). Figure 1 demonstrates high scores for overall acceptability of training content and delivery; free text responses endorsed this positive experience, many stated the training was informative and engaging, enhanced by use of mixed media and would make a difference to women's lives. Some expressed concerned about impediments to implementation: lack of time and language barriers. One main suggested improvement was to embed a prompt (to implement the training) in their clinical record software system.

From the interviews six main themes were identified: 1) Past Training and Experience varied but most reported little or no former training in PFME; 2) Acceptability of Online Delivery (Pros and Cons) which revealed polarising views reflecting difficulties faced due to COVID and poor internet connectivity which impacted group discussions, yet for some remote attendance was more convenient. 3) Midwives' Engagement (what enhanced and detracted from the training session) included the 'two-way' atmosphere created by the facilitators 'rather than just being lectured at'. 4) How the training influenced their PFME knowledge included improved PFME teaching skills and ability to ask questions about UI 'which I haven't asked about before' and referral knowledge 'I wouldn't have known what to do'. 5) Midwives' Attitude toward the Training was an enthusiasm for the training with midwives believing that PFME is an important topic to be raised antenatally, several midwives suggesting it should be part of standard care with mandatory training. The midwives were interested and keen to teach PFME, but the service delivery system stood in their way with insufficient appointment time; furthermore, inadequate PFME education at university left midwives ill-equipped to teach PFME effectively. 6) Suggestions to improve training. Many of the suggestions made were about changing the local and national system to accommodate for the training rather than actual changes to the training package.

INTERPRETATION OF RESULTS
High average fidelity demonstrated good feasibility of facilitators delivering the training according to the protocol. The training session showed immediate benefits with significant improvement in midwives' confidence observed for the key training package elements. Evaluation questionnaires and qualitative interviews indicated good overall acceptability of the training content and delivery. In line with the NHS 10 Year Long Term Plan (3), the training package supports midwives to provide women with up-to-date and accurate information on PFME, and to support them to do PFME throughout pregnancy.

CONCLUDING MESSAGE
This training programme equipped midwives with knowledge, confidence, and resources to help pregnant women take preventative measures against UI. Demonstrating good feasibility, effectiveness and most importantly acceptability amongst the intervention midwives, this investigation also highlighted some areas for improvement. For midwives who find online delivery methods difficult, enabling access to improved WIFI could help, and hybrid delivery models (with options for in-person training as was intended pre-pandemic) could be implemented for future training. Policy and system-level change is required to allow the training to reach its full potential,(2) and these changes are taking place.(3) Continuing attention is needed to ensure quality of training delivery and that evidence-based updates occur.

FIGURE 1

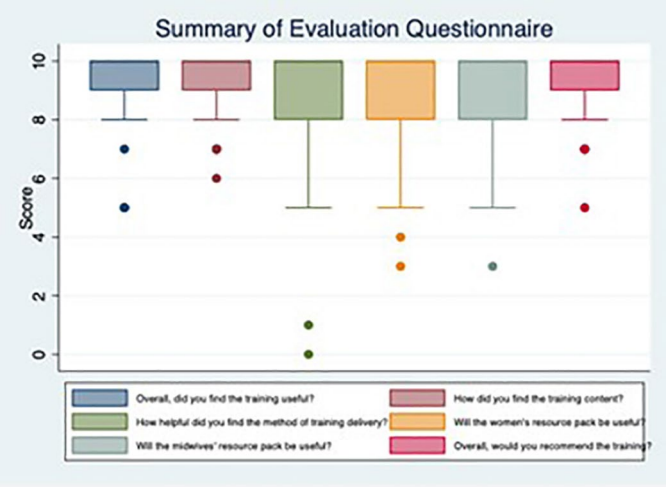

Figure 1: Evaluation Questionnaire results graph - summary of midwives' responses

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Funding Antenatal Preventative Pelvic Floor Exercises and Localisation (APPEAL) funded by the National Institute of Health Research (NIHR) Programme Grant for Applied Research programme (RP-PG-0514-20002). The NIHR Applied Research Collaboration SW Peninsula also supported SD's position at Exeter during this work. The views expressed are those of the researchers and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care. **Clinical Trial** Yes **Registration Number** Trial **Registration Number**: https://doi.org/10.1186/IS**RCT**N10833250. Registered 09/03/2020. **RCT** Yes **Subjects** Human **Ethics Committee** West Midlands – Edgbaston Research **Ethics Committee** (19/WM/0368). **Helsinki** Yes **Informed Consent** Yes

Continence 2S2 (2022) 100206
doi: 10.1016/j.cont.2022.100206