Systematic review of interventions designed to improve participation in UK national screening programmes amongst underserved population groups – antenatal and neonatal screening programmes

APPENDIX 1

Trial summary tables and risk of bias assessments

Contents

Dormandy (2010) SCT

Primary reference		Dormandy et al (2010) 'Antenatal Screening for Haemoglobinopathies in Primary Care: A Cohort Study and Cluster Randomised Trial to Inform a Simulation Model. The Screening for Haemoglobinopathies in First Trimester (SHIFT) Trial'						
Trial registration #		ISRCTN00677850						
Additional resources		(Protocol included in Appendix 2 of report)						
NHSSP	**Design[a]**	**Consent?**	**Population & setting**	**Outcome(s)[b]**	**Control [N][c]**	**Intervention(s) [N][c]**	**USGs [N][d]**	**Comment**
SCT	cRCT Minimisation by PCT and number of GP partners (27 practices randomised with only 25 "completing the trial")	No (cluster-level consent used for non-questionnaire-based outcomes; eligible individuals were given an explanation of the study and asked for consent for contact by researchers for further evaluation)	1,708 eligible pregnancies (of 2,421 total) from 25 GP practices in two deprived inner city London boroughs (Lambeth and Newham), 2005-2006. Eligible pregnancies had to be less than 20 weeks gestation with reliable estimate of gestational age based on first day of last menstrual period (LMP), planned to continue, with no record of carrier status in notes. Exclusions: LMP unknown (50) Carrier status recorded (189) Termination for reasons other than fetal abnormality (201) Miscarriage (138) Pregnancy confirmed after 20 weeks gestation (248) 87 excluded on more than one criterion. 41 miscarriages and 28 terminations after SCT testing were included in the analysis.	Uptake (before 10 weeks gestation, based on date of blood sample) Timing of screening offer (gestational age) Knowledge of father's status by 11 weeks Informed choice Cost-effectiveness	Midwife (secondary care at booking appointment) with sequential testing [441 eligible pregnancies of 619 total, in 8 clusters]	1. GP with sequential testing [590 eligible pregnancies of 792 total, in 9 clusters] 2. GP with parallel testing [677 eligible pregnancies of 1010 total, in 8 clusters] Primary care interventions were offered at time of first confirmation of pregnancy Take-home testing packs offered for fathers who were not present or not registered at the same practice (parallel testing group)	Age [not reported in detail] Ethnicity [not reported in detail] Higher-risk family origin: African, Asian, South and East European	Standard practice is to test fathers sequentially if the mother is found to be a carrier. Parallel testing tests both at the same stage. The purpose of this trial was to investigate the feasibility of offering testing at an earlier stage (in primary care at the time of first pregnancy confirmation). Two (of 27) practices withdrew after randomisation and before the intervention phase (a violation of intention-to-treat). 993 of 1,708 eligible pregnancies agreed to be contacted by researchers, with 727 agreeing to take part in the questionnaire follow-up and 511 completing the questionnaires. Completed questionnaires received from 464 who met the eligibility criteria. 17 individuals had more than one pregnancy but only one was eligible for analysis in both pregnancies.

[a] RCT, cRCT (cluster-randomised), qRCT (quasi-randomised), fRCT (factorial design), xRCT (crossover design); combine pre-fixes where required (eg xcRCT)
[b] inc details of measurement
[c] total N for this arm of the trial (report total number analysed for USGs in the next column)
[d] USGs – underserved groups

Quality assessment (RoB 2)


RoB 2 cribsheet

The RoB 2 cribsheet (updated version published 22/08/19) is embedded (left). The tool has been compressed into the table below (with some of the information required included in the summary table above). Hover over the links in the table to see the questions. Delete colour-coded answers as applicable and add any comment required.

RoB should be assessed with respect to ITT uptake for all trials. State where ITT results cannot be constructed from the published report, or uptake is not reported. Answer section 5.2 with respect to outcomes (eg multiple definitions or measurements) and section 5.3 with respect to subgroups reported (note where answers are mixed).

Domain 1: randomisation		Domain 2: adherence		Domain 3: missing data		Domain 4: measurement		Domain 5: pre-specification	
RoB 1.1	Y	RoB 2.1	Y	RoB 3.1	Other than ITT exclusions (ethnicity data missing for 15%) PY	RoB 4.1	N	RoB 5.1	Y
RoB 1.2	Cluster-randomised N	RoB 2.2	Y	RoB 3.2	NA	RoB 4.2	Bloods taken and analysed in different settings, uptake data provided by different sets of records Y	RoB 5.2	N
RoB 1.3	Imbalances in ethnicity and baseline screening uptake, likely due (at least in part) to the small number of clusters and withdrawal of two practices, not the randomisation process itself PN	RoB 2.3	PN	RoB 3.3	NA	RoB 4.3	NA	RoB 5.3	N
Quasi-randomised?	No	RoB 2.4	NA	RoB 3.4	NA	RoB 4.4	NA		
Stratified or minimisation ?	Yes (minimised by PCT and practice size)	RoB 2.5	NA			RoB 4.5	NA		
	-	RoB 2.6	ITT analysis not possible as no data available from practices which withdrew N						
	-	RoB 2.7	PY						
Risk-of-bias	**Some concerns**	**Risk-of-bias**	**High**	**Risk-of-bias**	**Low**	**Risk-of-bias**	**High**	**Risk-of-bias**	**Low**
Direction	Favours experimental (parallel)	Direction	Unpredictable	Direction		Direction	Favours experimental	Direction	

Comments	Adjusted analyses used to account for imbalances in cluster populations. ITT analysis was not possible; difficult to assess possible impact of the two practices which withdrew after randomisation without knowing why they withdrew.		
Risk-of-bias	**High**	Direction	Favours experimental

Abbreviations: N – no; NA – not applicable; NI – no information; PN – probably no; PY – probably yes; Y – Yes (green colour preferable to red)

Results

Endpoint	Control	Intervention	Ethnicity	Age	Comments
Uptake (<70 days gestation)	A-SEQ-HC	pre.A-SEQ-GP	Pre-specified? Unclear No numerical data reported. No interaction with treatment effect found. Some evidence that 'high risk' groups screened earlier but data from individual practices suggest that this was due to two practices with very high proportions of ethnic minority patients and very short time intervals to screening.	Pre-specified? Unclear Limited numerical information reported. No interaction with treatment	Overall 9/441 (2%) v 167/590 (28%) at 10 weeks Adjusted: RD 27.8% (14.8%, 40.7%), p<0.001 324/441 (73%) v 481/590 (82%) at 26 weeks (p=0.148)
	A-SEQ-HC	pre.A-PAR-GP	See above		Overall 9/441 (2%) v 161/677 (24%) at 10 weeks Adjusted: RD 16.5% (7.1, 25.8), p=0.002 324/441 (73%) v 571/677 (84%) at 26 weeks (p=0.09)
	pre.A-SEQ-GP	pre.A-PAR-GP	See above		
Screening offered by 10 weeks gestation	A-SEQ-HC	pre.A-SEQ-GP	Pre-specified? Unclear		3/90 (3%) v 281/590 (48%) (Data for control group only available for those who completed a questionnaire)
	A-SEQ-HC	pre.A-PAR-GP			3/90 (3%) v 321/677 (47%) (Data for control group only available for those who completed a questionnaire)
	pre.A-SEQ-GP	pre.A-PAR-GP			
Informed choice	A-SEQ-HC	pre.A-SEQ-GP			Less than a third made an informed choice, reflecting poor knowledge. Informed choice was equally likely in primary and secondary settings.
	A-SEQ-HC	pre.A-PAR-GP			
	pre.A-SEQ-GP	pre.A-PAR-GP			
Costs					£13 v £16.40 v £18.50 per pregnancy

					ICERs (cost per additional woman screened): £12 (primary, sequential) and £23 (primary, parallel) compared to standard care (secondary, sequential)
Comments	Study originally designed using an ICC of 0.03 but this was found to be valid only for all pregnancies, an ICC of 0.068 was later estimated for eligible pregnancies only and the study period extended for 7 months to increase the sample size accordingly. Data were not available for the two practices which withdrew and so an ITT analysis was not possible. Analyses adjusted for age group, parity, family origin risk status, practice screening uptake in run-in phase, number of partners and PCT. The authors were unable to provide more information.				

* note whether cluster trials are adjusted for an ICC and, for all trials, whether the reported results were *adjusted and if so, how:*
'raw' if not adjusted
'strat' if adjusted only for factors used to stratify the randomisation (or for baseline measurement of the outcome)
'adj' if adjusted for other factors
Where more than one result is reported, the order of preference is strat > raw > adj

Additional considerations

Are the intervention(s) well-described **and** reproducible?	Yes
Is the control arm used for this review comparable to current NHS-SP practice?	Yes
Any other issues with generalisability or external validity?	Deprived London boroughs with low incomes and high minority ethnic population
Is there anything else not covered in the tables above?	No

Hewison (2001) FASP (Down Syndrome only)

Primary reference		Hewison et al (2001) 'Use of Videotapes for Viewing at Home to Inform Choice in Down Syndrome Screening: A Randomised Controlled Trial'						
Trial registration #								
Additional resources								
NHSSP	**Design[a]**	**Consent?**	**Population & setting**	**Outcome(s)[b]**	**Control [N][c]**	**Intervention(s) [N][c]**	**USGs [N][d]**	**Comment**
dFASP	qRCT Odd or even unit number	No But participants were informed that new methods of giving information were being evaluated and they might be asked to respond to a survey later on	2,000 consecutive women referred for antenatal care (due at 12 weeks gestation), Hull maternity hospital. Dates of recruitment not reported.	Uptake (not explicitly defined) Knowledge Psychological distress	Standard information leaflet sent with appointment details [1,007]	Video (12 mins, 15 secs) sent with appointment details and standard information leaflet [993]	Housing tenure [based on questionnaire subset; sub-sample sizes not reported] Age [based on questionnaire subset; sub-sample sizes not reported] Too few ethnic minority participants for subgroup analysis	All participants received a standard information leaflet before booking and another copy from a midwife at the booking. Six page leaflet with video covering the same information. 62% returned the video at the appointment, as requested. Subset of 1,200 sent a questionnaire at 17-19 weeks gestation for secondary endpoints. 149 of the 1,200 had miscarried or terminated, moved or transferred (included in primary analysis). Completed by 420/552 (75.7%) and 359/499 (71.9%) in leaflet and video groups respectively.

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[c] total N for this arm of the trial (report total number analysed for USGs in the next column)
[d] USGs – underserved groups

Quality assessment (RoB 2)


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Answer section 5.2 with respect to outcomes (eg multiple definitions or measurements) and section 5.3 with respect to subgroups reported (note where answers are mixed).

Domain 1: randomisation		**Domain 2: adherence**		**Domain 3: missing data**		**Domain 4: measurement**		**Domain 5: pre-specification**	
RoB 1.1	Y	RoB 2.1	Could not be blinded to intervention but did not know they were in a comparative trial PN	RoB 3.1	Y	RoB 4.1	N	RoB 5.1	PY
RoB 1.2	Predictable from unit number but consecutive appts randomised (and no informed consent) N	RoB 2.2	Y	RoB 3.2	NA	RoB 4.2	N	RoB 5.2	PN
RoB 1.3	NI	RoB 2.3	Midwife interactions may have been affected by knowledge that video had been provided PY	RoB 3.3	NA	RoB 4.3	Videos returned on attendance (62%) so midwives aware of some allocations PY	RoB 5.3	PN
Quasi-randomised?	Yes	RoB 2.4	PN	RoB 3.4	NA	RoB 4.4	PY		
Stratified or minimisation ?	No	RoB 2.5	PN			RoB 4.5	PN		
	-	RoB 2.6	Y						
	-	RoB 2.7	NA						
Risk-of-bias	Low	**Risk-of-bias**	Some concerns	**Risk-of-bias**	Low	**Risk-of-bias**	Some concerns	**Risk-of-bias**	Low
Direction		Direction	Unpredictable	Direction		Direction	Unpredictable	Direction	
Comments	The trial asked for videos to be returned on attendance at the appointment, before the final decision on screening had been made. There is some potential for bias in interactions with the midwife caused by their knowledge that a video had been provided. (Note that we would like to have a "possibly" response here as "probably" is too strong.)								
Risk-of-bias	Some concerns		Direction	Unpredictable					

Abbreviations: N – no; NA – not applicable; NI – no information; PN – probably no; PY – probably yes; Y –Yes (green colour preferable to red)

Results

Endpoint	Control	Test	Housing tenure	Age	Comments
Uptake	NFA	Video	Pre-specified? Unclear "no interactions" for any of the three outcomes	Pre-specified? Unclear "no interactions" for any of the three outcomes	Overall uptake: 652/1007 (64.7%) v 638/993 (64.2%)
Comments	No numerical data reported for subgroup analyses. Data not sought because the trial is very old and the narrative results are sufficient (but means this trial will be excluded from the plots). Knowledge scores were higher for video information than the written leaflet with no difference on psychological endpoints, and for participants with higher socioeconomic status with no interaction by the type of information provided.				

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Additional considerations

Are the intervention(s) well-described **and** reproducible?	No (edited version video may be available but no details of how to acquire it given)
Is the control arm used for this review comparable to current NHS-SP practice?	Yes
Any other issues with generalisability or external validity?	Hull, limited details of population. Physical video cassettes are no longer a feasible means of delivery; internet-based delivery of videos might include/exclude slightly different populations.
Is there anything else not covered in the tables above?	No

Michie (1997) FASP

Primary reference		Michie et al (1997) 'Patient Decision Making: An Evaluation of Two Different Methods of Presenting Information about a Screening Test'						
Trial registration #								
Additional resources								
NHSSP	**Design[a]**	**Consent?**	**Population & setting**	**Outcome(s)[b]**	**Control [N][c]**	**Intervention(s) [N][c]**	**USGs [N][d]**	**Comment**
FASP	fRCT	Post-randomisation	1,580 women attending midwife consultation were randomised with 1,332 consenting to take part. 720 completed a questionnaire at 10-12 weeks gestation and 382 a follow-up at 16 weeks gestation. Drop out was primarily due to: miscarriage, transfer to another hospital, not attending for antenatal care, or not returning the first questionnaire. 324 participants who had received the allocated intervention and completed questionnaires at both timepoints were included in the analysis. This group were more likely to be educated to at least GCSE level (92% v 86%), white (71% v 53%) and to be screened (81% v 37%). The authors justify the large number of exclusions based on the explanatory (rather than pragmatic) nature of the trial. With around 80% of eligible participants excluded, measures of uptake are unlikely to be a good reflection of the real world.	Uptake Knowledge (and change in knowledge) Process of decision-making Anxiety (and change in anxiety) Satisfaction with decision made	Simple leaflet [88 included; number randomised not reported]	1. Simple leaflet + video [76 included; number randomised not reported] 2. Expanded leaflet (inc decision tree) [93 included; number randomised not reported] 3. Expanded leaflet (inc decision tree) + video [67 included; number randomised not reported] Leaflets and videos were provided by midwives at the consultation for participants to take home.	No qualifications [25] Ethnic minority [93]	Early trial before systematic information was provided about testing (ie PIL was new also). The expanded leaflet and video included the same information as the simple leaflet and in addition emphasised that the decision was a personal one and gave arguments for and against being tested. The expanded leaflet also included a decision tree to help guide the decision-making process. The video was a 12 minute edit of an original produced by John Burn at the University of Newcastle on Tyne. Knowledge (11 multiple choice questions), decision-making process (3 multiple choice questions and a 7 point scale) and satisfaction with decision (3 7-point scales) were assessed using questionnaires developed for the study. Anxiety was assessed using the six-item short-form version of the State Scale of the Speilberger State-Trait Anxiety Inventory. Follow-up at 16 weeks included a check on the intervention delivered. Cases where participants did not report receiving the allocated intervention were excluded (a violation of ITT).

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Domain 1: randomisation		**Domain 2: adherence**		**Domain 3: missing data**		**Domain 4: measurement**		**Domain 5: pre-specification**	
RoB 1.1	No details given PY	RoB 2.1	Post-randomisation consent to participate in a trial Y	RoB 3.1	N	RoB 4.1	N	RoB 5.1	No protocol or trial registration referenced NI
RoB 1.2	Post-randomisation consent PY	RoB 2.2	Y	RoB 3.2	N	RoB 4.2	N	RoB 5.2	Choice of analysis and exclusions not obvious with large number of ways to approach the data NI
RoB 1.3	Reported that "the groups were comparable on all the demographic measures" but no detail given PN	RoB 2.3	~80% of randomised participants excluded, primarily due to lack of follow-up at 10 or 16 weeks Y	RoB 3.3	Y	RoB 4.3	Lab unlikely to have been aware PN	RoB 5.3	Unclear why the binary education qualifications (GCSEs: yes/no) chosen over other measures of SES NI
Quasi-randomised?	No	RoB 2.4	Y	RoB 3.4	Y	RoB 4.4	**NA**		
Stratified or minimisation ?	No	RoB 2.5	NI			RoB 4.5	**NA**		
	-	RoB 2.6	Large number of post-randomisation exclusions (including for wrong intervention recalled by participants and lack of follow-up at 10 and 16 weeks) N						
	-	RoB 2.7	Y						
Risk-of-bias	**Low**	**Risk-of-bias**	**High**	**Risk-of-bias**	**High**	**Risk-of-bias**	**Low**	**Risk-of-bias**	**Some concerns**
Direction		Direction	Unpredictable	Direction	Unpredictable	Direction		Direction	Unpredictable
Comments									
Risk-of-bias	**High**		Direction	Unpredictable [highly unrepresentative sub-sample included in analysis]					

Abbreviations: N – no; NA – not applicable; NI – no information; PN – probably no; PY – probably yes; Y – Yes (green colour preferable to red)

Results

Endpoint	Control	Intervention	Education	Minority ethnicity	Comments
Uptake			25/324 participants had no educational qualifications. No numerical details of uptake reported; no interaction found. *"Further analyses were performed to assess whether or not the interventions had a greater effect upon the 25 participants with no educational qualifications. Two-way analysis of variance showed no intervention effects upon scores for any of the outcome measures within this subsample.".*	93/324 participants were not white. No numerical details of uptake reported; no interaction found. *"analyses were carried out to assess the effects of the interventions upon participants from ethnic minorities. For the 93 non-White women, two-way analysis of variance showed no intervention effects upon their scores for any of the outcome measures."*	"Systematic" decision-making, as measured by the instrument developed for the trial, was associated with greater anxiety at 16 weeks (r=0.17, p<0.01), greater increase in anxiety (r=0.12, p<0.05) and lower satisfaction with the decision made (r=-0.36, p<0.001). Systematic decision-making was not associated with knowledge at 16 weeks or change in knowledge. Those making more systematic decisions were less likely to have the test than those deciding more heuristically (p<0.005).
Comments	This trial was primarily concerned with decision-making processes rather than uptake. The very large proportion excluded after randomisation (1256/1580), and the clear differences between those who consented and provided information at both timepoints suggest that the reported results are not useful for measuring real world uptake.				

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Additional considerations

Are the intervention(s) well-described **and** reproducible?	Video and leaflets not published. Materials available from authors (23 years ago)
Is the control arm used for this review comparable to current NHS-SP practice?	Yes (but standard leaflet likely to have changed, there was no standard PIL at the time)
Any other issues with generalisability or external validity?	As noted previously, this group was so highly selected from the original pool of eligible participants, it can't really tell us anything about uptake
Is there anything else not covered in the tables above?	No

Simpson (1999) IDPS

Primary reference		Simpson et al (1999) 'Uptake and Acceptability of Antenatal HIV Testing: Randomised Controlled Trial of Different Methods of Offering the Test'						
Trial registration #								
Additional resources		Simpson et al (1998) 'Uptake and acceptability of antenatal HIV testing: randomised controlled trial of different methods of offering the test'						
NHSSP	**Design[a]**	**Consent?**	**Population & setting**	**Outcome(s)[b]**	**Control [N][c]**	**Intervention(s) [N][c]**	**USGs [N][d]**	**Comment**
hivIDPS	(f)RCT Randomised blocks (n=24) 2:1:1:1:1 ratio Interventions form a factorial trial ignoring the now outdated opportunistic control	Post-randomisation consent (only from intervention arms)	3,024 (of 3,505 randomised) pregnant women with consecutive bookings at a hospital antenatal clinic covering most of Edinburgh, Scotland. Early May 1996 to end of February 1997 *"Reasons for exclusion (following randomisation) were as follows: known HIV positive status (n = 1); poor English, with either no interpreter available or in cases in which the interpreter felt it was inappropriate to discuss HIV testing (n = 6, comprising two Pakistanis, two Chinese, one Russian and one Italian). Reasons for not participating were: miscarriages or terminations before booking (n = 311); not receiving study information through the post (n = 33); never attending the clinic (n = 119); refusal to participate (n = 11)."*	Uptake (of HIV testing) Knowledge Acceptability Costs	No information or invite (opportunistic) [994] Intervention 1 will be considered the control for the purposes of this review.	1. Information leaflet for HIV with minimal midwife interaction [495] 2. Information leaflet for HIV and other antenatal blood tests with minimal midwife interaction [495] 3. Information leaflet for HIV only with comprehensive midwife discussion [519] 4. Information leaflet for HIV and other antenatal blood tests with comprehensive midwife discussion [521]	SES (7 groups based on Carstairs; group 5: 144; group 6: 94; group 7: 93) Unemployed [179] Age <30 [1,433]	A subsample of 788 also completed a questionnaire at 32 week booking. 88% of survey respondents were in favour of HIV testing. Perceived low risk appeared to be the main reason for not taking the test. Average time for comprehensive discussion was 7 mins 40 secs (se 4 mins 30 secs), for minimal 4 minutes 30 seconds (se 3 mins 5 secs). Note there is substantial potential for contamination between the four intervention groups due to midwives delivering all four of the interventions (flagged with coded stickers in notes). Anonymised data was linked with neonatal Guthrie card to establish proportion who did not have the test but were antibody positive. Post-randomisation exclusions violate ITT, especially vis-a-vis the no-contact control (but this group is not being considered for this review). Decision to exclude could be biased by the amount of midwife time required (eg language difficulties would be more prominent in the intensive arm compared to the brief interaction) or consent might be more likely with intensive interaction. The group sizes do differ more than might be expected from randomised blocks but the sample sizes don't suggest more attrition in the intensive midwife interaction groups.

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Domain 1: randomisation		Domain 2: adherence		Domain 3: missing data		Domain 4: measurement		Domain 5: pre-specification	
RoB 1.1	Y	RoB 2.1	Y	RoB 3.1	(Apart from 481 post-randomisation exclusions where data could and should have been collected; see domain 2) Y	RoB 4.1	N	RoB 5.1	PY
RoB 1.2	Y	RoB 2.2	Y	RoB 3.2	NA	RoB 4.2	N	RoB 5.2	PN
RoB 1.3	N	RoB 2.3	Some possibility that consent procedures influenced by knowledge of intervention and also potential for contamination between groups with the same midwives delivering all interventions PY	RoB 3.3	NA	RoB 4.3	Outcome is having bloods taken for screening at the ante-natal visit with midwives aware of allocation Y	RoB 5.3	PN
Quasi-randomised?	No	RoB 2.4	PY	RoB 3.4	NA	RoB 4.4	N		
Stratified or minimisation ?	No	RoB 2.5	PY			RoB 4.5	NA		
	-	RoB 2.6	Post-randomisation exclusions violate ITT and may be systematically different between groups N						
	-	RoB 2.7	PY						
Risk-of-bias	Low	**Risk-of-bias**	Some concerns	**Risk-of-bias**	Low	**Risk-of-bias**	Low	**Risk-of-bias**	Low
Direction		Direction	Unpredictable	Direction		Direction		Direction	
Comments	Informed consent after randomisation may have introduced some bias due to the midwives' knowledge of the intervention. Balanced block randomisation would have produced exactly equal, or very close to equal, numbers in each group but there are around 5% more in both of the intensive midwife interaction groups. This could be due to chance but might also indicate a slightly higher (net) consent rate in the intensive group.								
Risk-of-bias	Some concerns		Direction	Unpredictable					

Abbreviations: N – no; NA – not applicable; NI – no information; PN – probably no; PY – probably yes; Y – Yes (green colour preferable to red)

Results

Endpoint	Control	Test	SES	Unemployed	Age <30	Comments
Uptake	HIV-only leaflet	Combined leaflet	Pre-specified? Yes "no interaction"	Pre-specified? Yes "no interaction"	39% v 37% Interaction: p=0.02 (moderate evidence in the context of many tests). Older women more likely to respond to combined leaflet (36% v 28%)	
	HIV-only leaflet	HIV-only leaflet + comprehensive midwife discussion	"no interaction"	"no interaction"		
	HIV-only leaflet	Combined leaflet + comprehensive midwife discussion	"no interaction"	"no interaction"		
	All HIV-only leaflets (regardless of midwife interaction)	All combined leaflets (regardless of midwife interaction)	"no interaction"	"no interaction"		
	Minimal midwife interaction (either leaflet)	Comprehensive midwife discussion (either leaflet)	"no interaction"	"no interaction"		
Knowledge						2,704 (89%) completed the questionnaire.
Acceptability						
Costs						8 hours training plus 4 hours/week for midwife time Minimal discussion: 4.5 minutes Comprehensive discussion: 7.7 minutes Stationery (stamps, envelopes, photocopying) £564 per 1750 leaflets
Comments	Uptake varied from 15% to 48% amongst the 10 midwives, the most important predictor of uptake other than being invited. The authors were unable to provide additional information.					

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'strat' if adjusted only for factors used to stratify the randomisation (or for baseline measurement of the outcome)
'adj' if adjusted for other factors

Where more than one result is reported, the order of preference is strat > raw > adj

Additional considerations

Are the intervention(s) well-described **and** reproducible?	Yes, leaflets reproduced in an appendix and there is a full chapter on discussion protocols
Is the control arm used for this review comparable to current NHS-SP practice?	Yes?? (What sort of leaflet is currently used? Should combined leaflet be the control?)
Any other issues with generalisability or external validity?	Edinburgh demographics, low ethnic diversity and relatively low risk of HIV
Is there anything else not covered in the tables above?	No

Risk of bias RoB 2 question list

1.1 Was the allocation sequence random?
1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions?
1.3 Did baseline differences between intervention groups suggest a problem with the randomization process?

2.1. Were participants aware of their assigned intervention during the trial?
2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?
2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the trial context?
2.4. If Y/PY to 2.3: Were these deviations likely to have affected the outcome?
2.5. If Y/PY/NI to 2.4: Were these deviations from intended intervention balanced between groups?
2.6. Was an appropriate analysis used to estimate the effect of assignment to intervention?
2.7. If N/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized?

3.1. Were data for this outcome available for all, or nearly all, participants randomized?
3.2. If N/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data?
3.3. If N/PN to 3.2: Could missingness in the outcome depend on its true value?
3.4. If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value?

4.1. Was the method of measuring the outcome inappropriate?
4.2. Could measurement or ascertainment of the outcome have differed between intervention groups?
4.3. If N/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants?
4.4. If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?
4.5. If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?

5.1. Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?
5.2. Is the numerical result being assessed likely to have been selected on the basis of the results from multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?
5.3. Is the numerical result being assessed likely to have been selected on the basis of the results from multiple eligible analyses of the data?

Abbreviations: N – no; NA – not applicable; NI – no information; PN – probably no; PY – probably yes; Y – Yes (green colour preferable to red)