

Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1 Secondary Outcomes

Maternal
• Severe hypertension (systolic BP ≥ 160 mmHg and/or or diastolic BP ≥ 110 mmHg)
• Serious maternal complications (pre- eclampsia, placental abruption, transient ischemic attack or stroke, pulmonary oedema, renal failure, blood transfusion), death
• Onset of labour
• Quality of life: EQ-5D-5L
Perinatal
• Stillbirth
• Early neonatal deaths
• Gestation at delivery
• Mode of delivery
• Birth weight including centile
• Small for gestational age infants (<10th and <3 rd centile)
• Neonatal unit admissions including length of stay
Process
• Health Behaviours (Illness perception questionnaire)
• Fidelity to monitoring schedule
• STAI-6 short form anxiety questionnaire
• Health service costs: outpatient consultations (primary & secondary care), inpatient stays, type and dose of antihypertensive medication. ^a
• Cost per quality-adjusted life year gained over trial period. ^a

^aTo be reported separately

eTable 2 Primary outcome sensitivity analyses

	Self-Monitoring	Usual Care	Mean difference in days	P value
Adjusting for baseline covariates that predict missingness	n=1171	n=1175		
Raised blood pressure	179 (15.3%)	184 (15.7%)	--	
Mean time to raised blood pressure (days) ^a	104.3 (32.61)	106.2 (31.98)	-1.52 [-8.06 to 5.02]	0.65
Median (IQR)	109 (90 to 127)	115 (90 to 129)		
Multiple imputation			-1.59 [-8.15 to 4.97]	0.64
Using only blood pressure values in primary outcome	n=1171	n=1175		
Raised blood pressure	168 (14.4%)	169 (14.4%)		
Time to raised blood pressure (days) ^a				
Mean (SD)	106.3 (32.41)	106.3 (30.59)	-0.05 [-6.65 to 6.55]	0.99
Median (IQR)	112.5 (94 to 128)	114.0 (90 to 128)		
[Range]	[2 to 159]	[14 to 153]		

^a Conditional on having been diagnosed with raised blood pressure

eTable 3 Subgroup analysis

Subgroup	N	Treatment effect [95% CI]*	Test of Interaction
Eligible for aspirin at baseline			
Raised blood pressure (Hurdle effect)			0.36
Eligible	1146	-0.06 [-0.22 to 0.10]	
Ineligible	1200	0.06 [-0.14 to 0.26]	
Time to raised blood pressure (Difference in days)^a			0.34
Eligible	251	-0.13 [-8.04 to 7.78]	
Ineligible	112	-5.74 [-17.58 to 6.09]	
Gestational age at recruitment			
Raised blood pressure (Hurdle effect)			0.78
≤20 weeks	799	0.00 [-0.21 to 0.22]	
>20 weeks	1547	-0.03 [-0.19 to 0.12]	
Time to raised blood pressure (Difference in days)^a			0.36
≤20 weeks	124	2.48 [-8.57 to 13.52]	
>20 weeks	239	-3.51 [-11.43 to 4.41]	
Parity			
Raised blood pressure (Hurdle effect)			0.86
0	1419	-0.03 [-0.20 to 0.14]	
≥1	927	-0.01 [-0.20 to 0.18]	
Time to raised blood pressure (Difference in days)^a			0.62
0	190	0.01 [-9.05 to 9.08]	
≥1	173	-3.31 [-12.78 to 6.15]	
Self-monitoring blood pressure prior to randomisation			

Raised blood pressure (Hurdle effect)			0.83
Yes	606	-0.03 [-0.26 to 0.20]	
No	1720	0.00 [-0.15 to 0.15]	
Time to raised blood pressure (Difference in days)^a			0.90
Yes	127	-2.17 [-13.28 to 8.94]	
No	235	-1.30 [-9.54 to 6.85]	
Deprivation score			
Raised blood pressure (Hurdle effect)			0.03
≤Median	1170	0.11 [-0.07 to 0.28]	
>Median	1161	-0.17 [-0.35 to 0.01]	
Time to raised blood pressure (Difference in days)^a			0.66
≤Median	198	-2.99 [-11.84 to 5.87]	
>Median	163	0.04 [-9.88 to 9.95]	
Ethnicity			
Raised blood pressure (Hurdle effect)			0.68
White British or White Irish	1746	0.00 [-0.15 to 0.14]	
Asian/Asian British, Black/Black British, Chinese, Mixed, or Other	584	-0.06 [-0.31 to 0.19]	
Time to raised blood pressure (Difference in days)^a			0.03
White British or White Irish	270	-5.98 [-13.51 to 1.55]	
Asian/Asian British, Black/Black British, Chinese, Mixed, or Other	93	11.07 [-1.83 to 23.98]	
Educational Qualifications			
Raised blood pressure (Hurdle effect)			
Post graduate or above	694	-0.10 [-0.34 to 0.14]	
First degree or professional qualifications	884	-0.03 [-0.24 to 0.18]	0.67

A-level or equivalent, GCSE, O-Level or CSE, vocational qualifications, or no formal qualifications	745	0.05 [-0.16 to 0.26]	0.36
Time to a raised blood pressure (Difference in days)^a			
Post graduate or above	93	-8.27 [-21.09 to 4.54]	
First degree or professional qualifications	124	0.89 [-9.97 to 11.76]	0.29
A-level or equivalent, GCSE, O-Level or CSE, vocational qualifications, or no formal qualifications	146	0.48 [-9.52 to 10.47]	0.29

^a Conditional on having been diagnosed with raised blood pressure

eTable 4 Additional maternal outcomes

	Self-Monitoring	Usual Care	Adjusted relative risk	P value
Onset of labour n	1187	1181		
Spontaneous ^a	482 (40.6%)	493 (41.7%)	0.97 [0.88 to 1.07]	0.58
Induction	421 (35.5%)	393 (33.3%)		
Rupture of membranes/Stimulation of labour	24 (2.0%)	31 (2.6%)		
Pre-labour caesarean section	260 (21.9%)	264 (22.4%)		
Indication for induction of labour or pre-labour CS*. n	705	688		
Hypertension-related complication	92 (13.1%)	84 (12.2%)		
Other maternal medical complication	139 (19.7%)	126 (18.3%)		
Fetal compromise (on scan or cardiotocography)	143 (20.3%)	148 (21.5%)		
Breech presentation	28 (4.0%)	26 (3.8%)		
Twins	26 (3.7%)	25 (3.6%)		
Other fetal/placental complication	106 (15.0%)	116 (16.9%)		
Previous Caesarean section	62 (8.8%)	80 (11.6%)		
Maternal request	32 (4.5%)	28 (4.1%)		
Reaching ≥37 week's gestation	101 (14.3%)	83 (12.1%)		
Other/Missing	12 (1.7%)	7 (1.0%)		

^aSelf-monitoring versus usual care. Log-Poisson generalised linear mixed effects model with robust standard errors of the proportion of women with spontaneous onset of labour modelled against randomised arm, and parity as fixed effects; and site as a random effect. Level of significance = 0.05

eTable 5 Additional perinatal outcomes

Outcome	Self-Monitoring	Usual Care	Adjusted effect measure (95% CI)	P value
	n=1249	n=1235		
Birthweight grams	3247.4 (675.29)	3264.1 (640.86)		
Birthweight centile	57.2 (30.32)	57.5 (30.51)		
Length of neonatal unit stay (for those admitted) ^a	n=158	n=161		
	15.3 (21.20)	13.1 (19.08)	0.00 [-0.85 to 0.85]	1.00
Mode of delivery n	n=1259	n=1244		
Spontaneous vaginal delivery	550 (43.7%)	527 (42.4%)		
Assisted vaginal delivery	229 (18.1%)	210 (16.9%)		
Emergency pre-labour caesarean section	97 (7.7%)	100 (8.0%)		
Emergency caesarean section in labour	153 (12.2%)	178 (14.3%)		
Elective pre-labour caesarean section	230 (18.3%)	229 (18.4%)		

^aNNU length of stay missing for 3 admitted babies in SM arm and 2 in UC arm.

eTable 6: Summary statistics of the STAI-6 short form anxiety questionnaire and the adjusted mean difference between the randomised groups

	STAI-6 at baseline ^b	STAI-6 at 30 weeks follow-up ^b	STAI-6 at postnatal follow-up ^b	Adjusted mean difference at 30 weeks [95% CI] ^a	Adjusted mean difference at postnatal follow-up [95% CI] ^a
Self-Monitoring (N=1220)	23.4 (18.18) 1203	25.5 (18.49) 884	23.3 (19.93) 672	-	-
Usual Care (N=1217)	23.2 (18.00) 1191	27.0 (20.11) 881	24.6 (20.96) 688	-1.45 [-3.11 to 0.22] p=0.088	-1.37 [-3.25 to 0.51] p=0.152

^a self-monitoring versus usual care. Linear mixed effects model of STAI-6 at 30 weeks and postnatal follow-up modelled against randomised arm, time point, an interaction between randomised arm and time point, parity, and baseline STAI-6 as fixed effects; site as a random effect, and a random intercept for each participant. Level of significance = 0 .05

^b STAI: short form of stait-trait anxiety inventory (6 items range 6-24; scaled to be out of 100, higher is more anxious).

eTable 7: Summary statistics for the adapted brief illness perception questionnaire

	Self-Monitoring (N=1220)			Usual Care (N=1217)		
	Baseline	30 week follow-up	Postnatal follow-up	Baseline	30 week follow-up	Postnatal follow-up
1 How confident are you that you can use a blood pressure monitor correctly? (N)	1210	881	675	1203	882	680
Mean (SD)	8.5 (2.22)	9.4 (1.16)	9.6 (1.0)	8.5 (2.26)	7.2 (3.38)	7.1 (3.49)
2 How confident are you that you can accurately measure your blood pressure at home?	1211	891	679	1207	882	683
Mean (SD)	8.6 (2.06)	9.4 (1.19)	9.5 (1.15)	8.5 (2.21)	7.1 (3.47)	7.1 (3.50)
3 How well do you feel you understand your blood pressure?	1207	891	674	1207	888	689
Mean (SD)	7.1 (2.72)	8.3 (1.85)	8.4 (1.86)	7.1 (2.73)	6.6 (2.93)	6.6 (2.98)
4 How much control do you feel you have over your blood pressure?	1209	887	673	1206	887	686
Mean (SD)	5.9 (2.38)	6.4 (2.19)	6.6 (2.04)	5.9 (2.4)	5.6 (2.26)	5.8 (2.42)
5 How concerned are you about your blood pressure?	1210	890	676	1206	890	685
Mean (SD)	3.8 (3.11)	3.0 (2.97)	2.1 (2.8)	3.8 (3.06)	3.5 (2.93)	2.3 (2.75)
6 How much do you think your treatment can help manage your blood pressure?	1208	866	653	1205	872	664
Mean (SD)	5.8 (3.4)	5.7 (3.32)	5.8 (3.46)	5.7 (3.32)	5.2 (3.31)	4.9 (3.94)
Combined Score						
Mean (SD)	42.0 (8.86)	46.2 (6.97) ^a	47.7 (6.62)	42.0 (8.67) ^b	38.2 (11.33) ^a	39.3 (12.27) ^b

Combined score is sum of individual component with q5concern reversed. Maximum 60, higher reflects greater confidence in ability to manage hypertension

^a and ^b $p < 0.001$ for mean differences: Linear mixed effects model of adapted brief illness perception questionnaire score at 30 weeks and postnatal follow-up modelled against randomised arm, time point, an interaction between randomised arm and time point, parity, and baseline adapted brief illness perception questionnaire as fixed effects; site as a random effect, and a random intercept for each participant.

eTable 8: Summary of maternal health-related quality of life measured using EQ-5D-5L instrument

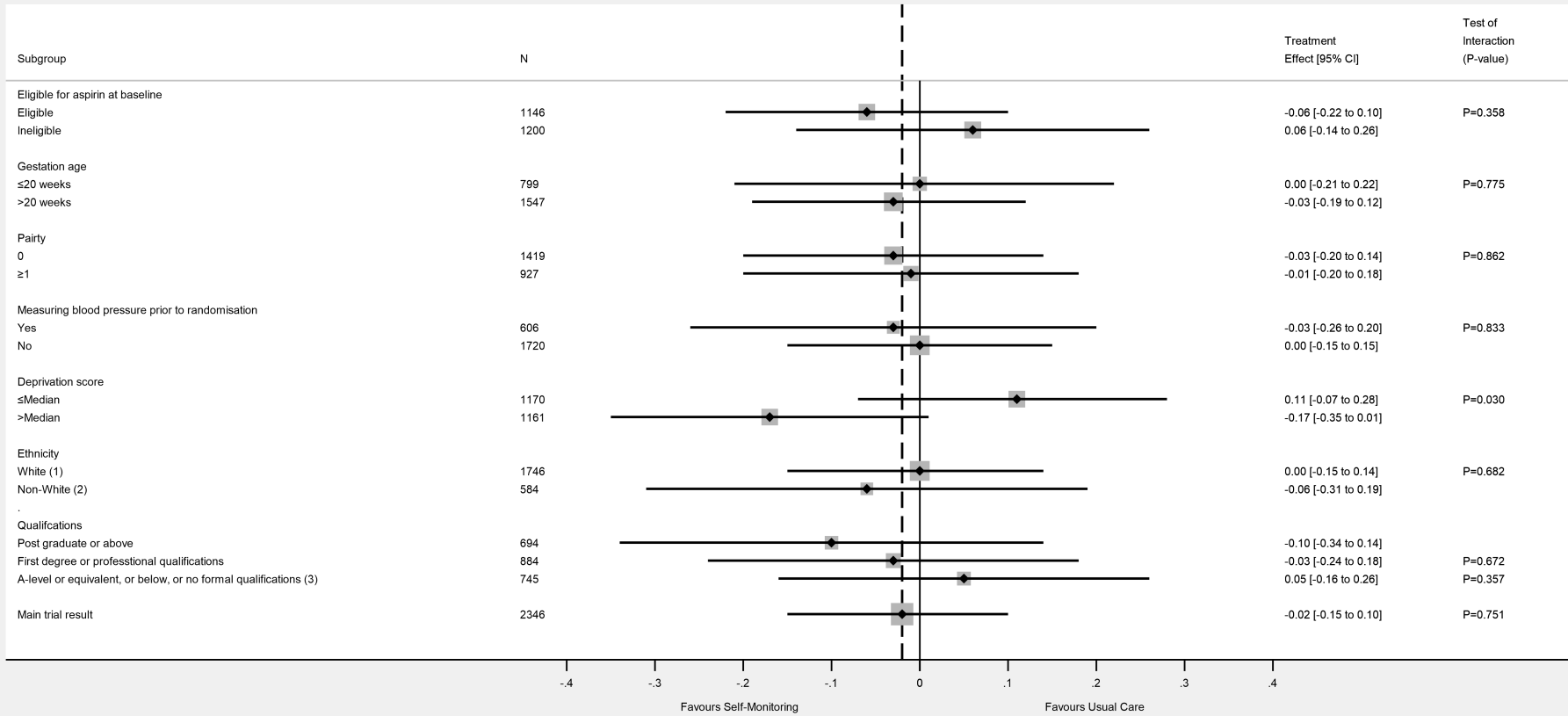
	Self-monitoring (n=1,220)		Usual care (n=1,217)		Mean difference (95% confidence interval) ^a
	n	Mean (SD)	n	Mean (SD)	
<i>Complete cases</i>					
EQ-5D-5L baseline	1,202	0.870 (0.148)	1,194	0.862 (0.148)	
EQ-5D-5L 30-weeks	875	0.783 (0.166)	897	0.767 (0.184)	0.012 (-0.002 to 0.026)
EQ-5D-5L post delivery	660	0.859 (0.158)	669	0.853 (0.160)	0.001 (-0.015 to 0.017)
	n	Mean (SE)	n	Mean (SE)	Mean difference (95% confidence interval) ^a
<i>Multiple imputation^b</i>					
EQ-5D-5L baseline	1,220	0.869 (0.004)	1,217	0.862 (0.004)	
EQ-5D-5L 30-weeks	1,220	0.780 (0.005)	1,217	0.765 (0.006)	0.012 (-0.002 to 0.026)
EQ-5D-5L post delivery	1,220	0.857 (0.006)	1,217	0.850 (0.006)	0.004 (-0.011 to 0.019)

EQ-5D-5L: EuroQol five-level health-related quality of life instrument; SD: standard deviation;

^a Adjusted for centre, parity and potential EQ-5D-5L index baseline imbalances

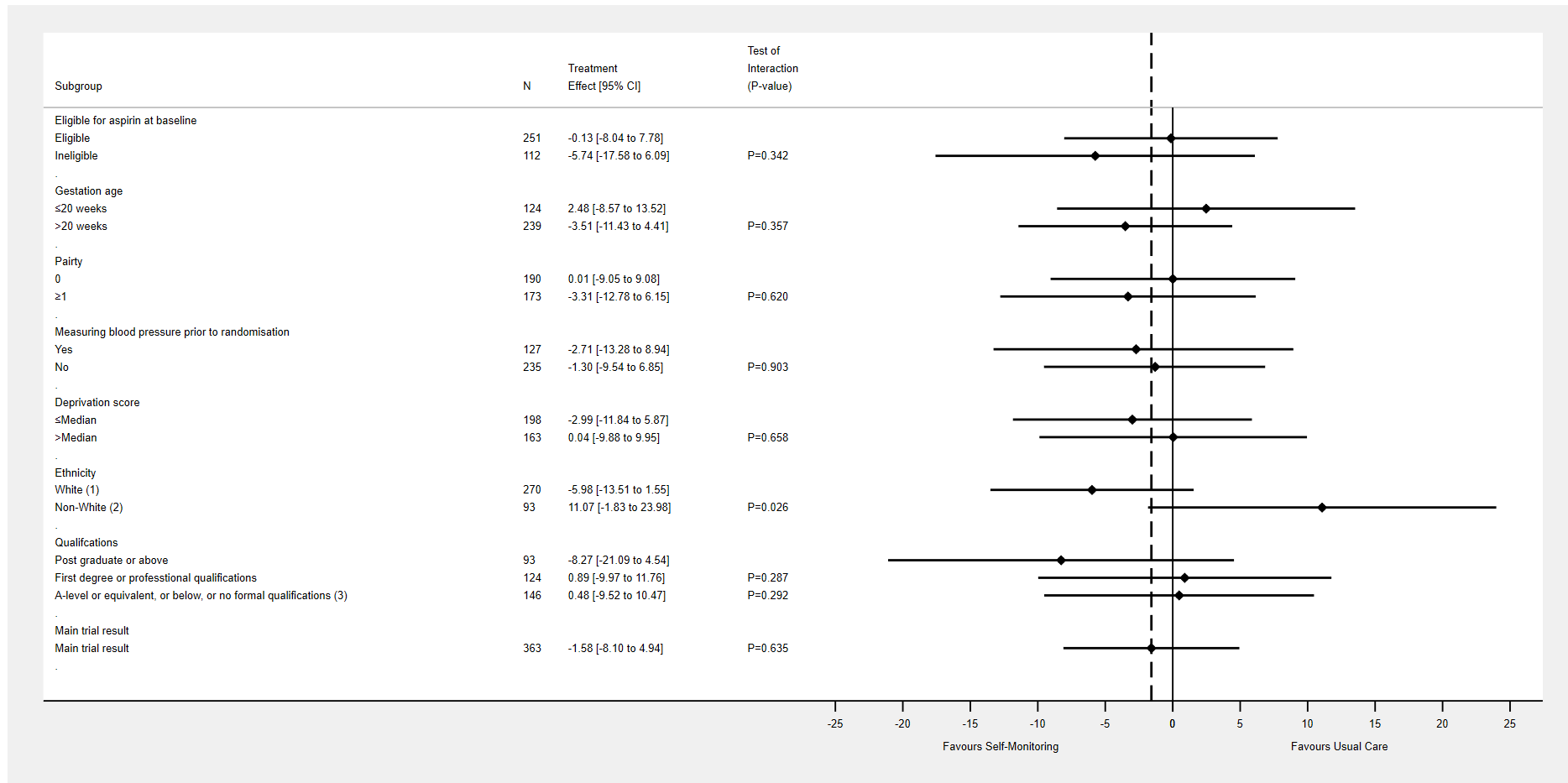
^b missing values replaced by multiple imputation

eFigure 1: Forest plot for the subgroup analysis for the raised blood pressure (hurdle effect) outcome



- (1) Including British, Irish, and White Other
- (2) Including Asian/Asian British, Black/Black British, Mixed, Multiple, and Other ethnic groups
- (3) Including A-level or equivalent, CGSE, O-level or CSE, vocational qualifications, or no formal qualifications

eFigure 2 Forest plot for the subgroup analysis for the time to a raised blood pressure (difference in days, conditional on having a raised blood pressure) outcome



- (1) Including British, Irish, and White Other
- (2) Including Asian/Asian British, Black/Black British, Mixed, Multiple, and Other ethnic groups
- (3) Including A-level or equivalent, CGSE, O-level or CSE, vocational qualifications, or no formal qualifications

eFigure 3: Blood Pressure Interpretation Chart

LEVEL	BLOOD PRESSURE /mmHg	ACTION
HIGH	SYS 150 or more OR DIA 100 or more	Your blood pressure is high Sit quietly for 5 minutes then measure it again and send in the reading. Contact your maternity unit for urgent assessment today (within 4 hours) and continue to monitor your BP daily.
RAISED	SYS 140-149 OR DIA 90-99	Your blood pressure is raised Sit quietly for 5 minutes then measure it again and send in the reading. If your repeated reading is raised please contact your maternity unit within 24 hours and continue to monitor your BP daily.
HIGH NORMAL	SYS 135-139 OR DIA 85-89	Your blood pressure is normal but moving towards the raised threshold Sit quietly for 5 minutes then measure it again and send in the reading. If your repeat reading is still high-normal, please monitor your blood pressure daily.
NORMAL	SYS 110-134 OR DIA 70-84	Your blood pressure is normal. Continue blood pressure monitoring and your current care
LOW	SYS 109 or less AND DIA 69 or less	Your blood pressure is low. Repeat once more in 5 minutes. If you are taking blood pressure medication, contact your maternity unit within 24 hours or within 4 hours if you feel unwell (e.g. dizzy or faint). If you are not taking medication and you are feeling well this blood pressure does not need any further action.