Delivered with care:

a national survey of women's experience of maternity care 2010

Maggie Redshaw

Katriina Heikkila

Acknowledgements

Most thanks are due to the many women who participated in the survey.

Staff at the Office for National Statistics drew the sample and managed the mailings, Ciconi printed and prepared the survey packs, Paramount Design set up the online survey and Document Technologies were responsible for the data entry.

At the NPEU Jenny Bulstrode managed the survey returns, Andy Kirk contributed to the questionnaire design and Rachel Rowe and Andy King commented on the final report.

The survey was funded by the Department of Health. The views expressed in this report are those of the authors and do not necessarily reflect the views of the Department of Health. The National Perinatal Epidemiology Unit (NPEU) is funded by the Department of Health in England.

First published in November 2010 by
The National Perinatal Epidemiology Unit,
University of Oxford,
Old Road Campus,
Oxford OX3 7LF.

Delivered with care: a national survey of women's experience of maternity care 2010

Delivered with care: a national survey of women's experience of maternity care 2010

Executive Summary

As maternity services change and the population of women and families served also changes, there is a need to document the views of women with recent experience of care. Maternity services are evolving and the information from this study provides a picture of current practice and point of comparison for the future. This survey was carried out in 2010 and used similar methods to those employed in 1995 and 2006. A random sample of 10,000 women giving birth in England over a two week period were selected by the Office for National Statistics from birth registration records. Women whose babies had died and new mothers less than 16 years of age were excluded. The usable response rate was 54%, with 5,333 women participating. A total of 14% of respondents came from Black and Minority Ethnic (BME) groups and 21% had been born outside the UK. An online version of the questionnaire was made available to all survey participants; only 8% of those responding used this method of return.

Data were analysed and are presented by parity, with some specific univariate analyses in relation to clinical factors such as mode of delivery and demographic factors, such as maternal age or geographical region. Some comparisons are made with previous surveys. Multivariate analyses, with adjustment for potential confounders, were carried out in relation to 20 selected outcomes contributing to quality of care.

Key findings

Care in pregnancy

- A large proportion of women (74%) indicated that their pregnancy was planned.
- Contact with a health professional about maternity care had taken place for almost all women (95%) by the end of the twelfth week of pregnancy.
- The booking appointment had taken place for nearly two-thirds of women by 10 weeks and almost all by 18 weeks' gestation.
- There was some regional variation in the health professional first seen, the timing of first contact and of the booking appointment.
- The median number of antenatal checks was 9 for women who had previously given birth and 10 for women having their first baby.
- Antenatal appointments took place in a range of settings, with relatively few at the women's home; most took place at the GP's surgery, followed by hospital clinics.

- More than half of the women responding (57%) reported seeing a midwife for all their antenatal checks and just under a third (30%) saw an obstetrician at least once.
- Three-quarters of women reported having screening for Down's syndrome; however, a fifth of women indicated that they had not been screened as they had not wanted this.
- Dating and anomaly scans were reported by 90% or more of women, with almost all women having the latter type of scan, although not all felt they had a choice about these.
- Antenatal education was more likely to be offered and taken up by first time mothers.
- Many women reported insufficient classes and coverage of the topics they preferred.
- When pregnant, a quarter of women were told about the NHS Choices website (25%) and half of these found it useful. Non-NHS sites were used by 42% of women.
- Two-thirds of women had the NHS Pregnancy Book and almost all found it useful (90%).
- Overall during their pregnancy most women indicated that staff treated them well; a small proportion did not feel they were treated with kindness or respect by one of more midwives or medical staff providing their care**.**

Care during labour and birth

- Many women (80%) were not aware of the four possible options for place of birth (at home, in a free-standing midwifery unit, in an alongside midwifery unit or in a unit where the team included obstetricians).
- There was regional variation in the choices that women reported were available to them.
- For labour and birth 60% of women had midwife-led care in hospital, 33% had consultant-led care and smaller proportions had care in a midwife-led unit or birth centre separate from hospital (3%) or a home birth (3%), most of which were planned.
- A small proportion of women reported being transferred in labour between locations for care (7%), half between co-located midwifery and obstetric units on the same site, and otherwise between hospitals, freestanding midwifery units and home.
- Most women gave birth in the NHS trust where they received their antenatal care (83%).
- Many women started labour naturally (62%) and continuous fetal monitoring was experienced for all or part of their labour by 48% of women.
- Most women (63%) had an unassisted vaginal birth, a quarter had a caesarean (25%), and small proportions had vaginal birth which involved the use of forceps (7%) or ventouse (6%).
- 40% of caesareans were planned before labour, 8% planned and carried out after labour started and 52% followed unforeseen problems after labour had started.

- The reasons for caesarean birth were almost entirely clinical. A total of 8% of women having a caesarean wished their baby to be born this way, but for less than 2% was this the only reason given.
- With regard to pain relief, induction of labour and position for vaginal birth, women largely felt they had a choice, at least up to the point when clinical needs took over.
- Most women were helped to hold their baby after the birth (89%), have skin-to-skin contact (83%) and many put their baby to the breast (72%) at this time.
- One in ten babies born to the women in the study were admitted to a neonatal unit (9.5%)
- Relatively few labouring women had one midwife caring for them through labour (18%). A quarter (24%) had four or more midwives providing care. Women with shorter labours and those having unassisted vaginal births were more likely to have care provided by one or two midwives only.
- A high proportion of women (81%) reported not having previously met any of the midwives caring for them during labour and birth.
- Over half the women reported that their baby was delivered by a midwife (57%), fewer (37%) that their baby was delivered by a doctor and a small proportion with a doctor and midwife working together (6%).
- Most women or their partners were not left alone at a time when it worried them either in labour or afterwards (76%). Women with longer labours were more likely to report this experience.
- Perceptions of the quality of labour care, reflected in always having trust and confidence in staff, was high (75%), in describing staff as communicating very well (68%) and in women feeling they had been talked to in a way they could understand (97%) and treated with respect most of the time (96%). Small proportions of women indicated that one or more staff did not behave in this way.

Care during the postnatal period

- Women having their first baby had an average postnatal hospital stay of just over 2 days and women who had previously given birth had an average stay of just over one and a half days.
- Women's views about their length of stay varied: for 70% their stay was 'about right', for some (12%) it was 'too short' and others (15%) it was 'too long'.
- Almost all women (95%) had the name and contact details of a midwife they could contact after discharge home, 98% were visited by a midwife at home and a further 1% went to see the midwife rather than having a home visit.

- On average women saw a midwife 3.8 times (median 3), with no difference between first time and more experienced mothers**.**
- Most women (72%) thought that there were sufficient postnatal home visits.
- The timing of the last contact with midwifery services varied with parity: first time mothers were seen for longer (median 14 days) compared with mothers who had previously given birth (median 12 days).
- There was some regional variation in length of postnatal stay, the numbers of midwife and maternity support worker visits provided and the time over which these took place.
- Being treated as an individual and having confidence in the staff may be markers for perceived quality of postnatal care: just over half of respondents 'always' felt treated as an individual, for a further third this happened 'sometimes' and a small group of women felt this rarely or never happened (11%).
- Most women 'always' had confidence in the staff caring for them at this time (69%), some only 'sometimes' (27%) and only 4% of women reported rarely or never having confidence in the staff. First time mothers were less likely to report always being treated as an individual and having confidence in the staff.
- Almost all women felt staff talked to them in a way they could understand (94%), with respect (91%) and kindness (91%) most of the time. They were more critical of this aspect of their maternity care experience than of other phases of care and some reported that not all staff behaved in this way. Women having their first baby were more critical about this aspect of care than those who had given birth previously.
- Most women (85%) had a postnatal check by their family doctor following childbirth, some missed this for personal or other reasons (8%). Others were not offered a check at all (6%).
- During the first few days after birth 80% of women exclusively or partially breast-fed their babies; by the time the infants were three or more months old, the comparable figure was 32%.
- Many women reported receiving consistent advice (78%), practical help (78%) and active support and encouragement from midwives and other health professionals in relation to infant feeding (80%).
- Many women wanted to be able to have a midwife visit at home (87%) while one in five would also like to be able to contact health professionals by telephone for advice or to be able to use drop-in clinics.
- Approximately 40% of women used parenting websites in the postnatal period.

Fathers and Partners

- Many fathers and partners were involved in pregnancy and labour and birth as shown by the high proportions attending at least one antenatal check (61%), one or more ultrasounds (88%) and being present during labour and birth (89%).
- A third or more of fathers and partners directly sought out information about pregnancy (40%) and birth (38%).
- Midwifery and medical staff communicated well with more than 80% of fathers and partners during pregnancy and labour and birth.
- Many new fathers and partners are directly involved in infant care a great deal, changing nappies (65%), bathing the baby (65%) and playing with the baby (80%).
- A total of 71% of fathers and partners had been able to take paternity or parental leave which could be as much as eight weeks (median 20 days, 4 working weeks).

The overall experience of maternity care

- Some women felt they were definitely given choices about their maternity care (60%) and others to some extent (32%). Similar proportions felt they were definitely involved in making decisions about their own care (63%) and others to some extent (28%).
- When asked overarching questions about pregnancy, labour and birth and the postnatal period women were largely positive about their care. They were most satisfied about pregnancy care (88%), labour and birth care (87%) and slightly less satisfied with postnatal care (75%).

The experience of different groups of women

- Some differences in the way and timing with which care was accessed were evident for women from Black and Minority Ethnic (BME) groups.
- There were also differences in the way that care was experienced by BME women, with poorer staff communication and feelings about not being treated with respect.
- Similar findings occurred when the focus was on the experience of BME women born outside the UK.
- Single women, those who had left education at 16 years or earlier, women living in the most deprived areas and BME women were all less likely to have seen a health professional by 12 weeks about their pregnancy care or to be aware of all the options for where they could give birth.

Change over time

In comparison with the earlier survey in 2006, reported as ‘Recorded Delivery’, in 2010:

- The proportion of women seeing a health professional about their pregnancy care by 12 weeks gestation has increased (87% to 90%).
- More women are having ultrasound dating (86% to 90%) and anomaly scans (97% to 99%).
- The number of antenatal appointments has not decreased since 2006, with little difference between the numbers for first time mothers and those who had given birth before.
- The caesarean section rate has increased from 23% to 25%.
- Postnatal stays have reduced (median 3 to 1.4 days).
- Slightly more women are satisfied with care during pregnancy (86% to 88%), labour and birth (87% to 88%) and slightly fewer with postnatal care (80% to 76%).

Conclusion

Most women were positive about most of their maternity care. Differences between phases of care, between regions and populations, between women with varying clinical needs and between women with different individual and other characteristics emphasise the need both to respond to the individual, and to provide a service which meets the needs of the whole population of child-bearing women and their families.

1. The context

As maternity services change over time it is critical to document the views of women with recent experience of maternity care, at national and local level. Following on from a survey carried out a decade earlier[1] the last national survey of recent mothers was carried out four years ago in 2006[2]. This was followed by the Healthcare Commission Maternity Service Review[3], which showed substantial variation between trusts and regions in the services provided and women's experience of care.[4]

Maternity services are evolving and the information from the study enables comparison with similar work carried out in 2006, and provides a benchmark of current practice and a baseline for measuring change in the future. It also enables comparison between women's experience and care in different regions of England. Such a study will inform policy in maternity care, support implementation and change and provide a further point of comparison for local surveys of user views and experiences in individual trusts.

Obtaining information about women's views and experiences is important for several reasons:

- All health care is about more than the technical aspects of treatment. Good care meets the needs of people as individuals, including their needs for choice, information, support and reassurance.
- Women's reactions to care around the time of birth can affect the way they care for themselves and their baby and influence the contact they go on to have with care-givers. It is also a window of opportunity for intervention, as many women and their partners are in touch with services at this time.
- Some aspects of care can be assessed only by asking women, or are more practical to get this way. Women need to be the ones to say whether they received sufficient information, whether they were able to understand what was said to them, whether or not they were treated kindly, and to describe the quality of the services and facilities. Women are also best able to say whether they knew the care-givers who looked after them at different stages.

[1] Garcia et al, First Class Delivery: a national survey of women's views of maternity care, 1998, Audit Commission, London.
[2] Redshaw et al, Recorded Delivery: a national survey of women's experience of maternity care, 2007, NPEU, Oxford.
[3] Towards Better Births: a review of maternity services in England, 2008, Healthcare Commission, London.
[4] Women's experience of maternity care in the NHS in England. 2007, Healthcare Commission, London

The over-arching research questions this survey aimed to address were:

1) What is current practice in the provision of maternity care in England? This includes clinical aspects of care and aspects of service provision and organisation associated with that care.
2) What are the key areas of concern for women receiving contemporary maternity care in England?
3) Have women's experiences and perceptions of care changed over recent years?
4) Are there regional differences in women's experience of maternity care?

2. Methods and Sample

The methods followed those used in earlier maternity surveys on women's experience of care in terms of the type of instrument used, sampling and survey management.

2.1 The survey instrument

The 2010 survey of recent mothers used a similar format to that employed in 2006 for 'Recorded Delivery'. The twenty-eight page questionnaire took women through their pregnancy, labour and birth and postnatal care and allowed them to describe the care they have received, to express their views about their care in response to structured questions and to make some written responses if they wished.

The questionnaire used for the 2006 national survey of recent mothers formed the basis of the 2010 survey to enable comparison (See Appendix A). However, some questions were added and minor adjustments made to other questions to ensure that it reflected current issues of interest, such as: planned pregnancy, choice in accessing maternity care, and information to support that choice, the midwife as first point of antenatal contact, place of birth, father and partner engagement, postnatal support and care after discharge home.

The changes to the instrument were tested with a small number of women in cognitive interviews to ensure that the additional questions could be understood and answered. No pilot study was undertaken as the survey used the modified 2006 survey instrument which was of similar length, structure and content.

Additional data on respondents were provided by ONS. This included marital status, the small area based measure Index of Multiple Deprivation (IMD) quintile, and Strategic Health Authority (SHA) in order to identify the large scale geographical region in which women were living.

2.2 Sample

A random sample of 10,000 women aged 16 years and over, who had their baby in a two week period (October-November 2009) in England were selected for the survey by the Office for National Statistics from birth registration. Checks were made by ONS for notification of any baby deaths in the months following birth registration and replacements made for the survey sample. Thus the views expressed are based on the care associated with births during late 2009.

2.3 Data collection

The survey mailing was managed by ONS and a questionnaire was sent to each woman selected, along with an invitation letter, an information leaflet and a sheet with information in a range of languages and a freephone contact number. Women were offered two methods of response: a paper questionnaire which could be completed and returned by post to the National Perinatal Epidemiology Unit, or an online option which involved using a link from the NPEU website, a unique reference number and an individual password. The questionnaires, each identifiable only by a unique reference number, were returned by post to NPEU and logged. Online return information was sent to NPEU on a daily basis. Checks were made at NPEU and return details sent to ONS to prevent inappropriate reminders being mailed. The initial mail out took place in January 2010. A reminder letter was sent out after two weeks, a further questionnaire after 4 weeks and a further reminder letter 4 weeks later.

2.4 Survey response

The breakdown of returns is as follows:

10,000 questionnaires mailed out
149 returned as undelivered
4,945 postal completed returns
407 online completed returns
165 blank returns /do not wish to participate phone calls
5,333 completed returns (postal and online, excluding duplicates)

A response rate of 55.1% was achieved, with a usable response rate 54.1%. A total of 8% of responses were completed on-line. Completed postal and online responses to the survey were been returned by a further 47 women after the cut-off date. These were not included in the response rates or analyses reported. Comparison with 2006 patterns of return, with a 63% usable response rate, indicates that the main drop off period was in the first two weeks following initial survey mailing when weather conditions in England were extreme (January-February 2010).

2.5 Analysis

Analyses were undertaken using Stata 10.1 and SPSS 17.0. Data are presented for the whole group of respondents and separately for women who had given birth previously (multiparous women) and those for whom this was a first birth (primiparous women). A small number of women did not provide data on parity and so the tables show different totals for primiparous women, multiparous women and all women. Selected data are presented by geographical area (Strategic Health Authority) and some comparisons are made with earlier survey findings. Descriptive statistics, including means, medians and proportions were calculated and proportions compared using Chi-squared tests or other non-parametric tests as appropriate. Statistical significance for univariate analyses was set at $p < 0.01$. (* indicates $p < 0.01$, and ** $p < 0.001$ on tables).

Preliminary regression analyses on selected outcomes were undertaken to adjust for some of the factors that could have contributed to the observed differences between groups reported from the univariate analyses. The outcomes investigated included access to antenatal and postnatal care and women's perceptions of care during pregnancy, labour and delivery and the postnatal period. The confounders used in the adjustment were largely demographic factors that included maternal age, ethnicity and partner status as well as parity and type of delivery. Specific regression analyses focused on:

1. Black and Minority Ethnic (BME) women compared with White women;
2. BME women born outside the UK compared with White women born in the UK;
3. Women in the highest quintile of deprivation, using an area based measure, the Index of Multiple Deprivation (IMD,) compared with women in the other four quintiles;
4. Single women compared with women living with partners;
5. Women who left school aged 16 years or less compared with those who attended school beyond the age of 16 years

3. Results

Summary data describing the characteristics of the respondents and non-respondents and of the postal and online respondents are presented in Appendix B. A comparison of the age, parity and ethnicity of women responding to surveys in 1995, 2006, 2007 and 2010 is also shown in Appendix B.

The women responding to the 2010 survey were equally likely to have given birth before (50.4%) or for this to have been the first baby (49.6%) to which they had given birth. Data on parity from the Hospital Episode Statistics (HES) for 2008 suggest that 42% of women giving

birth in that year were primiparous, however, for 43% of women in 2008-09 HES, data parity status at the time of giving birth was unknown[5]. The proportion of primiparous women in survey returns to NPEU in 2006 was 41% and 48% for the Healthcare Commission review in 2007.

As with other surveys, women from some groups were less likely to respond[6]. Those responding were more likely to be older, to be married, to be living in the least deprived areas and to be born in the United Kingdom. A total of 11.5% were living as single parents at the time of the survey, 85.7% were white and 78.7% were born in the UK. The women born outside the UK came from many parts of the world: from 29 different African countries, 9 in the Middle East, 11 in South America, 16 in Asia, many countries in the European Union, including Eastern Europe and countries from the former Soviet Union, as well as North America, Australia and New Zealand.

Almost all respondents had singleton births (98.4%). A small proportion (6.5%) took place before 37 weeks' gestation (10.9% before 38 weeks).

There were no significant differences between the women who completed the postal and on-line surveys in terms of age, marital status and IMD. More online respondents lived in London than in other regions and more women who were born outside the UK responded online.

3.1 Care during pregnancy

Maternity care is an integral part of the healthcare service provided by the NHS for women and their families. Pregnancy is a key time during which there is an opportunity to maximize the possibility of positive outcomes for all those involved. A large part of the survey focused on services and experience of care during this time.

3.2 Pregnancy awareness

When care first begins, where it takes place, who provides the care and the nature of the care provided are all topics on which the survey provides evidence. Women's awareness of pregnancy is critical in the timing and initiation of pregnancy care. Many women recognized

[5] ONS, Review of the National Statistician on births and patterns of family building in England and Wales, 2008 Series FM1 No.37

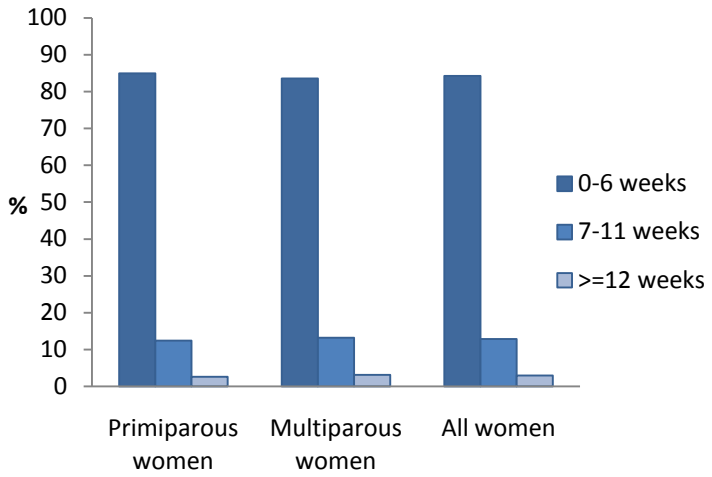
[6] Garcia et al, First Class Delivery: a national survey of women's views of maternity care, 1998, Audit Commission, London; Redshaw et al, Recorded Delivery: a national survey of women's experience of maternity care, 2007, NPEU, Oxford; Healthcare Commission, Towards Better Births: a review of maternity services in England, 2008, Healthcare Commission, London.

very early on that they were pregnant, although some took considerably longer (Table 1). Most had realised that they were pregnant by 6 weeks' gestation (84%) and a further 13% between 7 and 11 weeks, with only a very small proportion (3%) not recognising the pregnancy until after this time (Figure 1). No differences were evident by parity.

Table 1. Mean number of weeks' gestation when women first realised they were pregnant

Number of weeks	Mean	sd	Median	Range	
Primiparous	5.1	3.2	5.0	1.0	42.0
Multiparous	5.3	3.4	5.0	1.0	41.0
All women	5.2	3.3	5.0	1.0	42.0

Figure 1. Number of weeks' gestation (grouped) when women first realised they were pregnant



A large proportion of women indicated that their pregnancy was planned (74% overall) with no significant difference by parity. A similar proportion of women (71%) reported intentionally conceiving in the Avon Longitudinal Study of Parents and Children[7]. This is higher than the proportion with a reported planned pregnancy in the Millenium Cohort Study sample (58%)[8], suggesting that the timing of data collection at nine months after the birth and interpretation of the question may have been different. Planned pregnancy was associated with ethnicity and age, with older women and women self-identifying as Asian being more likely to report having planned their pregnancy.

Pregnancy confirmation for almost all women was by home pregnancy test (91%) with no difference by parity. Very few women had their pregnancy confirmed by a midwife (2.5%)

[7] Farrow et al, Prolonged use of oral contraception before a planned pregnancy is associated with a decreased risk of delayed conception. Human Reproduction, 2002,17, 2754-2761

[8] Dex and Joshi, Children of the 21st century: From birth to nine months. 2005.Policy Press, Bristol.

and more women who had not previously given birth saw a doctor at this time (21% compared with 15%) (Table 2).

Table 2. Method of pregnancy confirmation

Pregnancy confirmed by	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Home pregnancy test	2,394	91.7	2,353	90.4	4,855	91.1
Doctor *	536	20.5	389	15.0	945	17.7
Midwife	63	2.4	68	2.6	135	2.5

More than one response is possible **Difference by parity*

3.3 Access to antenatal maternity care

The first health professional most women saw about their pregnancy care was their general practitioner or family doctor (Table 3). While three-quarters saw a GP (77%), some saw a midwife (20%) and this was more common among women who had previously given birth than in first time mothers (26% compared with 14%). Older women were less likely to see a midwife first. Almost all women were able to see this health professional as soon as they wished (90%) and this was more likely the earlier that women had their first health professional contact.

Table 3. Health professional first seen about pregnancy care

Health professional **	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
GP/family doctor	2,127	81.7	1,853	71.4	4,072	76.6
Midwife	367	14.1	681	26.3	1,069	20.1
Other	109	4.2	60	2.3	174	3.3

** *Difference by parity*

The first health professional seen differed for the women surveyed in different areas (Strategic Health Authority was used here) (Table 4).

Table 4. First health professional seen about pregnancy in different areas of England

SHA Region **	GP/family doctor		Midwife		Other	
	n	%	n	%	n	%
East of England	498	77.7	126	19.7	17	2.7
East Midlands	272	67.0	121	29.8	13	3.2
London	806	88.6	52	5.7	52	5.7
North East	156	67.8	62	27.0	12	5.2
North West	494	77.3	130	20.3	15	2.3
South Central	408	80.6	88	17.4	10	2.0
South East Coast	347	78.5	88	19.9	7	1.6
South West	376	70.5	135	25.3	22	4.1
West Midlands	366	73.3	124	24.8	9	1.8
Yorkshire and Humberside	349	68.7	142	28.0	17	3.3
Total	4,071	76.6	1,068	20.1	174	3.3

** *Difference by region*

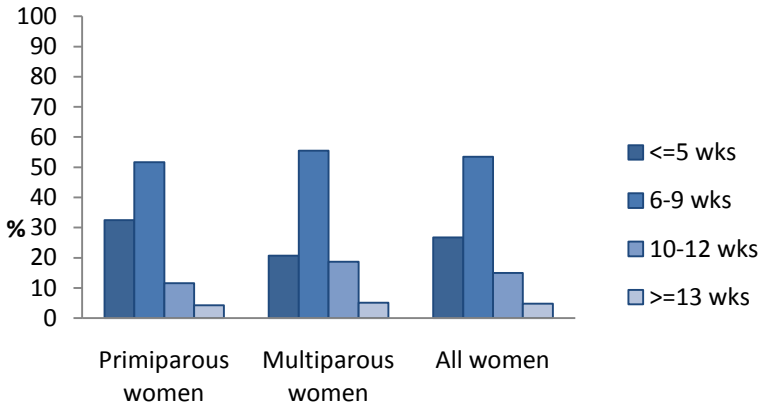
For example, in the East Midlands 29% of women were first seen by a midwife, compared with 20% in the East of England, 17% in South Central and 6% in London.

The timing of this first contact varied. First time mothers' contact with a health professional about care in pregnancy took place quite early (median 6 weeks) and only slightly later for women who had previously given birth (median 8 weeks) (Table 5). A total of 90% of women had seen a health professional by 11 weeks and a further 5% by 12 weeks (Figure 2). There were significant associations with timing of the first contact. This was significantly earlier for first time mothers and those in less deprived quintiles and later for younger women, women who left school at 16 years or less and those identifying as Black or Black British.

Table 5. Number of weeks' pregnant when first saw a health professional about care

Number of weeks	Mean	sd	Median	Range	
Primiparous women	7.1	3.5	6.0	0.0	39.0
Multiparous women	7.8	3.2	8.0	0.0	36.0
All women	7.4	3.4	7.0	0.0	39.0

Figure 2.Timing of first contact with health professional (weeks' gestation)



Some differences in the timing of first contact with a health professional by geographical area were evident (Table 6), the median was 7 weeks for all areas, but was less for London (median 6 weeks) and more for East Midlands (median 8 weeks).

Relatively few women were aware they could go straight to a midwife, rather than to a GP or family doctor as first point of contact for their pregnancy care (28%). However, women who had previously given birth were more aware of this possibility (36% of multiparous women compared with 20% of primiparous women). No differences were found by age, ethnicity or IMD, though women leaving school at or below 16 years were slightly less aware of being able to go straight to a midwife. However, there were significant differences by SHA region

with this being most common in Yorkshire and Humberside (36%) and East Midlands (35%) and least in London (15%).

Table 6. Weeks' pregnant when a health professional seen about the pregnancy in different regions.

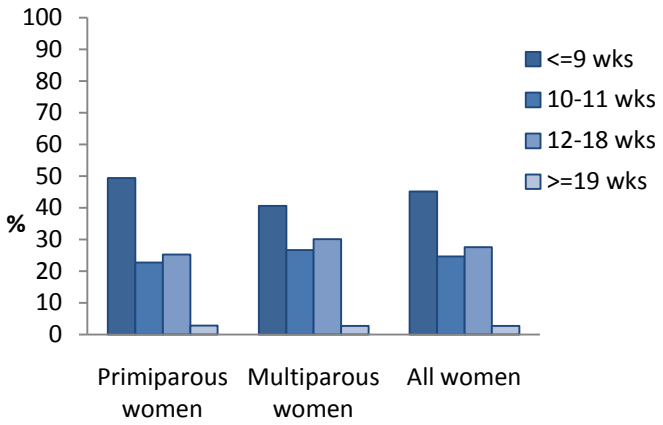
SHA Region*	<=5 wks		6-9 wks		10-12 wks		>=13 wks	
	n	%	n	%	n	%	n	%
East of England	162	25.7	348	55.2	90	14.3	31	4.9
East Midlands	92	22.9	210	52.4	78	19.5	21	5.2
London	301	33.7	430	48.2	114	12.8	48	5.4
North East	56	25.1	118	52.9	37	16.6	12	5.4
North West	175	27.7	340	53.8	86	13.6	31	4.9
South Central	131	26.1	280	55.8	70	13.9	21	4.2
South East Coast	120	27.6	235	54.0	66	15.2	14	3.2
South West	143	27.0	281	53.0	86	16.2	20	3.8
West Midlands	104	21.1	281	57.0	84	17.0	24	4.9
Yorkshire and Humberside	116	23.1	283	56.4	75	14.9	28	5.6
Total	1,400	26.7	2,806	53.5	786	15.0	250	4.8

** Difference by region*

The 'booking' appointment at which women have their history taken, usually by a midwife, and they are given their pregnancy notes, is an important marker in planning care. Women were asked about contacts with health professionals about their pregnancy care prior to booking and reported a median of one appointment before this, with just over a quarter of women (27%) having at least two appointments before booking.

Women who had previously given birth were significantly later in booking (Figure 3).

Figure 3.Timing of 'booking' appointment (weeks' gestation).



Two-thirds of primiparous women (66%) and fewer multiparous women (59%) had attended a booking appointment by 10 completed weeks' gestation[9]. Almost all women had booked by

[9] National Institute for Clinical Excellence. 2008. Antenatal Care: routine care for the healthy pregnant woman. NICE, London.

12 weeks (86%).The proportions of women with a booking appointment by 10 weeks showed some variation across the different regions of the country (Table 7).

Table 7. Proportions of women in different areas having their pregnancy booking appointment by 10 weeks' gestation

SHA Region**	**n**	**%**
East of England	407	66.3
East Midlands	262	67.5
London	419	48.6
North East	153	70.5
North West	331	53.5
South Central	330	66.9
South East Coast	269	65.3
South West	378	73.3
West Midlands	344	71.2
Yorkshire and Humberside	301	61.9
Total	3,194	62.7

** *Difference by region*

The proportion of women having a booking appointment by 10 weeks was lowest in London and the North West and highest in the South West. Relatively few women booked much later, however a total of 6% of women in London booked at more than 19 weeks gestation compared with 2.8% overall, perhaps reflecting the mobility of the population living in the capital.

Locations for booking appointments varied. For almost half of the women in the study (45%) this took place at the GP surgery and for smaller proportions the appointment took place in a hospital clinic (23%), at home (16%) or in a local clinic (10%) (Table 8).

Table 8. Locations for pregnancy 'booking' appointment

Locations	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
Local clinic	267	10.3	262	10.1	543	10.2
Children's centre	123	4.7	128	4.9	253	4.8
GP surgery	1,179	45.5	1,140	44.0	2,371	44.8
Hospital clinic	600	23.1	590	22.8	1,222	23.1
Home	398	15.3	448	17.3	862	16.3
Other location	27	1.0	20	1.0	47	1.0

While the location for booking may have been in a GP surgery or hospital clinic, booking appointments have been traditionally carried out by midwives. Data were not collected on this point directly. However, that half or more of the women having a booking at local clinics, Children's Centres, GP surgeries, local maternity units or birth centre and hospital clinics received midwife only care, suggests that midwives are largely responsible for providing this

service. No differences by parity were evident in the locations used. 'Other' locations included the local maternity unit (0.5%) or birth centre, a private clinic (0.1%) or care abroad (0.1%).

Antenatal checks are a key part of care in pregnancy and almost all women (98%) had these, very few had no check-ups (1%) and a few were uncertain about the number (1%). The median number of check-ups for women giving birth for the first time was 10 and only slightly fewer for women who had previously given birth, with a median of 9 check-ups (Table 9). Checks were made on outliers reporting very high numbers of antenatal checks and for individual women these were associated with serious maternal or feto-maternal history and health problems. NICE antenatal care guidelines[10] suggest that in an uncomplicated pregnancy, there should be 7 appointments for women who have previously given birth and 10 appointments for women who have not.

Table 9. Mean number of antenatal check-ups

Number of antenatal check-ups	Mean	sd	Median	Range
Primiparous	10.5	6.0	10.0	0 81
Multiparous	9.9	4.8	9.0	3 35
All women	10.2	5.4	9.0	0 81

The mean number of checks for women in each SHA area varied little, ranging from 9.7 (median 9) in the East Midlands to 10.7 (median 10) in the South East.

Antenatal care takes place in different locations and with members of different health professional groups (Figure 4, Tables 10 and 11). Home, hospital and GP surgeries are the most common places for both primiparous and multiparous women to have at least one check-up during their pregnancy. When looking at the locations for all the appointments women reported (Table 10) just under half were carried out at the GP's surgery (46%) where midwife clinics are commonly run, less than a third in hospital clinics (28%) and smaller proportions at home (6%) or in local clinics (12%). Women also reported having appointments in specialist clinics and maternity units or birth centres. 'Other' places included an NHS walk in centre, hospitals outside the UK and private clinics.

[10] National Institute for Clinical Excellence. 2008. Antenatal Care: routine care for the healthy pregnant woman. NICE, London.

Figure 4. Proportion of women having one or more antenatal checks in specific locations

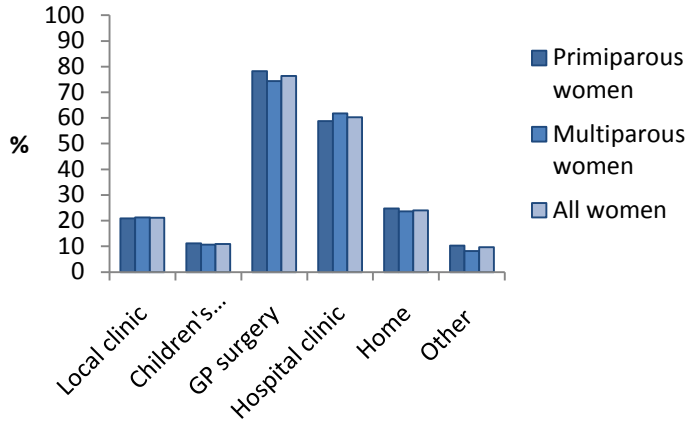


Table 10. Locations for all antenatal appointments reported.

Location	n	%
Local clinic	5 937	12.0
Children's Centre	2 689	5.4
GP surgery	22 621	45.8
Hospital clinic	13 919	28.2
Home	3 005	6.1
Specialist clinic	108	0.2
Private clinic	72	0.1
Maternity unit or birth centre	151	0.3
Other location	927	1.9
Total	49 429	100.0

While some women only attended one location for antenatal care (GP surgery 16%, hospital 4%, local clinic 3%, home 1% and smaller proportions at specialist clinics, birth centres and private clinics), many attended more than one type of clinic for antenatal checks. Among individual women over a third (40%) had three or more appointments at a hospital clinic and most (64%) had at least three checks at the GP surgery. Fewer had checks at home (7% had three or more), slightly more (17%) had at least three appointments at a local clinic. Overall, a quarter of women (26%) only attended at one location, nearly half at two locations (45%), a fifth at three locations (20%) and a small proportion at more than this (5%). With this kind of variation, continuity of carer during the antenatal period may be difficult to organise and maintain.

The health professionals most commonly providing antenatal care were midwives, with almost all women (94%) seeing a midwife one or more times (Table 11). With regard to care being provided entirely by midwives, over half of the women responding (57%) had care of this type and it was significantly more common for women who were first time mothers (60% compared with 53%). Approximately one fifth (19%) of women had at least one appointment

with their GP and a third of women (30%) had at least one appointment with hospital obstetric medical staff and this was significantly more common for women who had previously given birth (36% compared with 24%).

Table11. Health professional seen by women for antenatal checks

Health professional	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Midwife	2,353	94.3	2,356	93.4	4,794	93.7
GP/family doctor*	516	20.7	448	17.8	980	19.2
Obstetrician/hospital doctor**	608	24.4	907	35.9	1544	30.2
Other health professional	66	2.6	87	3.4	156	3.0

**Difference by parity More than one response is possible*

Where so many women are moving between healthcare providers effective communication of information between the health professionals providing antenatal care at the different sites and with the individual women is critical.

Women were asked if they had been given a choice about where antenatal checks could take place and about who would carry them out. Approximately a quarter (27%) reported that they felt they had a choice about the location and fewer (14%) that they had a choice about who would carry them out. Slightly more women who had previously given birth felt they had a choice compared with women having their first baby.

3.4 Antenatal Screening

An important part of antenatal care is the screening that is carried out during pregnancy. Women were asked about some of the tests they may have had, whether the tests were explained and if they felt they had a choice about having the tests.

In relation to screening for Down's syndrome three quarters of women (76%) reported that they had been screened with a blood test or a nuchal scan or both methods of testing. One in five women (22%) reported not wishing to have the tests and not doing so (Table 12).

Table12. Proportions of women having screening for Down's syndrome

B16 Screening tests for Down's syndrome	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Blood test only	994	38.3	875	33.8	1,901	35.9
Nuchal scan only	124	4.8	131	5.1	268	5.1
Blood test and nuchal scan	876	33.8	919	35.5	1,831	34.6
Did not want tests	523	20.2	587	22.7	1,138	21.5
Not offered tests	42	1.6	45	1.7	87	1.6
Don't know/cannot remember	34	1.3	31	1.2	71	1.3

A very small proportion of women reported not being offered the tests at all and a similar proportion did not know or were unable to remember being offered the tests. Few differences were evident by parity. Most women felt they had a choice about the screening for Down's syndrome (93%) and that the reasons for screening had been clearly explained (93%), with no differences between women who had previously given birth and those who had not.

Other screening using ultrasound scans is also a routine part of pregnancy care. As with screening for Down's syndrome women were asked if screening had taken place, if they were given explanations about the procedure and if they felt they had a choice. A large proportion of pregnant women had a dating scan early on in pregnancy (90%) and almost all (98.5%) reported having an anomaly or '20 week scan' (Table 13). No differences were found between women having their first baby and those who had given birth before in the proportions being screened.

Table 13. Women having dating and anomaly ultrasound scans

Scans	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
Dating scan at about 8-14 weeks	2,316	90.3	2,302	89.7	4,712	89.8
Anomaly scan at about 20 weeks	2,548	98.6	2,545	98.4	5,203	98.5

Some variation was evident between different areas of the country and the proportions of women having dating scans (Table 14), 85% in London, compared with 91% or more in six other SHAs. Differences were less evident in relation to the proportions having the later anomaly scan, though the rate for London was lowest at 96%.

Table 14. Proportions of women in different areas having dating and anomaly scans

	Dating scan**		**Anomaly scan****	
SHA	**n**	**%**	**n**	**%**
East of England	579	91.3	631	99.1
East Midlands	368	91.8	403	99.3
London	762	85.3	872	96.1
North East	216	94.7	226	98.7
North West	577	91.3	625	98.0
South Central	444	88.8	500	99.4
South East Coast	390	89.4	435	98.9
South West	471	88.9	525	99.2
West Midlands	448	91.2	487	99.0
Yorkshire and Humberside	456	91.4	498	99.2
Total	4,711	89.8	5,202	98.5

** *Difference by region*

Almost all women felt that they had received explanations about both the dating and anomaly scans (92% and 95%), with little difference by parity. In contrast to the Down's screening, fewer women felt they had a choice about the dating (77%) or anomaly scans (80%). First time mothers were less likely to feel they had a choice about the dating scan (26% compared with 22%), though no parity difference was evident in relation to the anomaly scan.

Women were also asked about the timing of their first ultrasound scan and the total number of scans that they had been given during their pregnancy. The data on timing fits with what has been reported on early screening in that 85% of women reported having had a scan by 13 weeks or earlier, with this on average taking place at 11.6 weeks' gestation (median 12 weeks). Only one woman had no scans at all, with women on average having 3.5 scans (median 3 scans).

3.5 Antenatal information and education

Women can obtain information about pregnancy and childbirth from a range of sources and by different methods, including formal and informal interactions with health professionals. For example, women may use clinic appointments, drop in sessions, or parent education groups and some may use written material or websites. Different sources may suit different women and several questions were asked about what was available and how useful they found the different information sources.

Approximately two-thirds of women (67%) were given 'The NHS Pregnancy Book', though as might be expected significantly more first time mothers received it than mothers who had previously given birth (79% compared with 55%). The book was important to those who had a copy, almost all of whom (90%) found it useful, with little difference between those having a first baby and those who had previously given birth.

Women were asked two questions about use of the 'NHS Choices' website. A quarter of women (25%) reported being given information about the site during their pregnancy. First time mothers were slightly more likely to be given the information (27% compared with 23%). Responses to a second question about use of the site showed that actual use was lower, with 12.4% reporting doing so. First time mothers were twice as likely to use the site as women who had previously given birth (16% compared with 8%). No marked differences were evident in relation to age, ethnicity or IMD. Women were also asked about other web sites they had used during pregnancy.

Table 15. Non-NHS websites used by women during pregnancy

Sites	n	%
Babycentre	778	14.6
Bounty	366	6.9
National Childbirth Trust/NCT	178	3.3
Pampers	167	3.1
Emma's Diary	96	1.8
Boots Mother and Baby	76	1.4
Netmums	70	1.3
Mumsnet	67	1.3
Cow & Gate	67	1.3
Hipp Baby Club	31	0.6
Askbaby	27	0.5
Other sites	375	7.0

A total of 42% of women used non-NHS sites which provide information, discussion forums and opportunities for signing up for product information and samples (Table 15).
There were significant effects of parity, age, ethnicity and IMD on the use of any such websites. This was higher for first time mothers than experienced mothers (49% compared with 39%), and among mothers who were older (30% of women aged 19 years or less, compared with 40% or more of mothers aged 30-39 years), higher among White women than women from Asian and African groups (43% compared with 30% and 25% respectively) and higher among those women living in less deprived areas (49% in the least deprived quintile 1 compared with 36% in the most deprived quintile 5).

During pregnancy a large proportion of women (92%) had the name and contact details of a midwife they could get in touch with if they were worried. There were no differences by age or parity, and a small proportion of women (1.4%) were not sure on this point. However, women from the BME groups were less likely to report this, as were women living in more deprived areas.

Antenatal education classes can be an important source of information and support. More than two-thirds of women (69%) were offered classes or workshops, although the offer was more commonly made to first time mothers (87%) than to women who had previously given birth (50%) (Table 16).

Table16. Women offered and attending antenatal classes or workshops

Antenatal classes/workshops**	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Not offered	342	13.2	1,300	50.2	1,669	31.5
Offered	2,258	86.8	1,288	49.8	3,629	68.5
Attended	1,551	62.6	247	12.2	1,849	40.2

*** Difference by parity*

The younger women were, the more likely they were to have been offered classes (80% of those aged 19 or less, compared with 65% of those of 40 or more years of age). There was no difference by IMD, though Asian and Black women were less likely to be offered classes than white women (60% and 55% compared with 70%). No further information was directly collected on this point.

Of those women offered classes, many fewer with previous birth experiences were likely to attend such education sessions (12% of multiparous women compared with 67% of first time mothers). Attendance at classes was for many at the start of the third trimester (median 32 weeks). A small proportion of women (12%) attended private antenatal classes for which they had to pay and of those who reported doing so, most (85%) were first time mothers. Paying for private antenatal classes was much less common among women under 30 years, those living in more deprived areas and women from almost all the Black and Minority Ethnic groups.

Women in some areas were more likely to be offered classes (Table 17). The proportions ranged from 73% in the North East to 62% in East Midlands. Less variation was evident in the proportions who actually attended classes, for which the range was between 37% and 45%. Greater variation between areas occurred in the proportions of women attending and paying for antenatal classes privately (4-20%), with the highest proportion being in London.

Table 17. Proportions of women in different areas offered and attending NHS antenatal classes or workshops

	Offered**		Attended	
SHA	**n**	**%**	**n**	**%**
East of England	428	67.2	210	38.9
East Midlands	254	62.4	127	38.3
London	633	70.0	340	41.6
North East	167	72.9	78	38.6
North West	463	72.3	228	39.7
South Central	334	66.4	186	42.0
South East Coast	295	66.7	149	40.4
South West	379	71.4	207	44.7
West Midlands	337	67.5	164	37.9
Yorkshire and Humberside	339	67.1	160	37.3
Total	3,629	68.5	1,849	40.2

*** Difference by region*

Women who knew about antenatal classes, 4,334 in number, responded to a question about aspects of class organisation and availability (Table 18). These included women who did attend and some women who did not. Two-thirds of women responding to this question indicated that partners were welcome to attend (67%), slightly fewer (64%) that these were

conveniently located and at the right stage of pregnancy (59%), and for just over half (53%) classes were at a convenient time of day. Less than half reported that there were enough classes in the course (42%) and that the classes covered the topics women wanted (45%). A small proportion of women said there were separate classes for partners (10%).

Women who were first time mothers, who were more likely to have been offered and to have attended antenatal education, were also more likely to report that classes were at the right stage of pregnancy, at a convenient time and place, to have welcomed partners, to have covered the topics wanted and provided enough classes in the course. Women who had previously given birth were more critical of all aspects of antenatal education.

Table 18. Women's views about NHS antenatal classes

Aspects of antenatal education	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
At right stage pregnancy **	1,725	72.1	784	42.2	2,563	59.0
At a convenient time of day**	1,607	67.1	631	34.0	2,298	52.9
Partner welcome to attend with you**	1,946	81.3	897	48.3	2,909	67.0
At a convenient location **	1,849	77.2	873	47.0	2,782	64.0
Enough classes in the course **	1,257	52.5	520	28.0	1,818	41.9
Covered topics mother wanted **	1,351	56.4	555	29.9	1,955	45.0

*** Difference by parity*

3.6 Women with more complex pregnancies

Women were asked about any long term health problems they had that might have made their pregnancy difficult or complicated, to describe these, to indicate whether they had received specialist care and how well that care was co-ordinated. A total of 9.1% of women identified themselves as having problems, examples of which included epilepsy, essential hypertension, depression, hyperthyroidism and diabetes. A large proportion (88%) reported having additional or specialist care which was 'very well' (54%) or 'quite well' co-ordinated (36%).

A question was also asked about specific pregnancy related problems which affected women or their baby, to describe these, to indicate if they had received specialist care and indicate how well the care was co-ordinated. Nearly a quarter of women identified problems (24%) which included, for example, pre-eclampsia, threatened pre-term labour, placenta praevia, hyperemesis and bleeding from the vagina. Of this group many reported receiving additional or specialist care (84%) which was 'very well' (62%) or 'quite well' co-ordinated (30%). For some pregnant women their condition or that of their baby gives rise to concern and they are admitted to hospital for observation or treatment. Thus women were asked

about any overnight antenatal stays in hospital and the reasons for these (excluding admissions associated with induction of labour at term or a planned caesarean). A total of 19% of women had overnight stays of this kind for reasons which included pre-eclampsia, poor fetal growth, suspected preterm labour, obstetric cholestasis and urinary tract infections.

3.7 Perceptions of antenatal care

A question about how women viewed interpersonal aspects of their care involved both positive and negative statements about the care received. The broad statements about care have large proportions of women making a positive response (96% or more) (Table 19a and Table 19b). However, at least one in ten women agreed with each of the negative statements relating to one or more midwives (11-13%) and not being talked to in a way they could understand, treated with respect or kindness.

Table 19a Women's perceptions of midwifery care during their pregnancy

Midwives	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
Talked to me in a way could understand	2,500	96.3	2,529	97.6	5,135	96.9
One or more did not talk to me in a way I could understand	314	12.4	252	10.2	566	11.3
Treated me with respect most of the time	2,459	95.3	2,484	96.4	5,049	95.8
One or more did not treat me with respect*	348	13.8	280	11.4	628	12.6
Treated me with kindness	2,410	93.7	2,462	95.5	4,978	94.7
One or more did not treat me with kindness**	369	14.7	270	11.0	639	12.9

** Difference by parity Not all respondents gave responses to all items*

Table 19b Women's perceptions of medical care during their pregnancy

Doctors	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
Talked to me in a way could understand*	2,412	95.0	2,422	96.6	4,937	95.8
One or more did not talk to me in a way I could understand	257	10.5	238	9.9	495	10.2
Treated me with respect most of the time	2,414	95.6	2,394	96.1	4,909	95.8
One or more did not treat me with respect	233	9.6	225	0.5	458	9.5
Treated me with kindness*	2,350	93.3	2,378	95.2	4,829	94.3
One or more did not treat me with kindness	240	9.9	208	8.8	448	9.3

** Difference by parity Not all respondents gave answers to all items*

As with care from midwives, the women responding to the survey were positive about their experience of the medical staff with whom they came into contact, with 94% or more responding to the general statements with agreement. Responses to the negative statements similarly showed that small proportions of women (9% or 10%) felt that one or

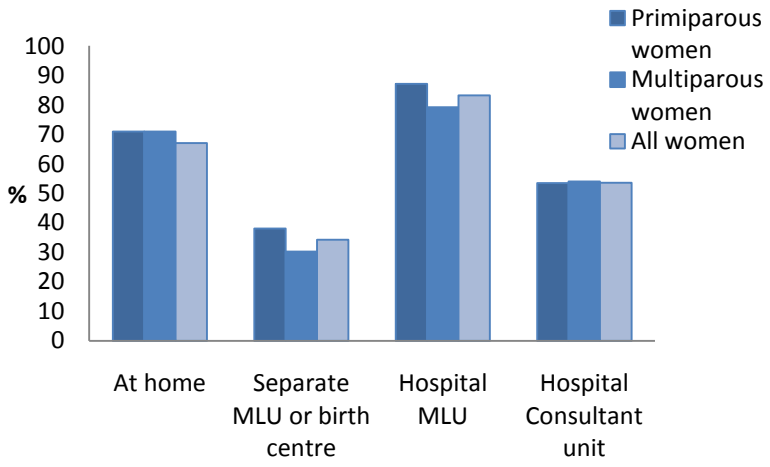
more doctors did not treat them with kindness or respect or talk to them in a way they could understand.

3.8 Choice and place of birth

Timely and appropriate information is essential to help women make informed choices about their clinical care and the way that they use maternity services. Access to information that can support choice is enhanced by early and easy contact with antenatal services and the healthcare professionals involved. Survey questions were asked which might reflect this aspect of care.

A specific question concerned women's options for where they could have their baby (Figure 5). Two thirds of women were aware of being able to give birth at home (67%), fewer felt they had the choice of a freestanding midwifery-led unit (MLU) or birth centre separate from the hospital (34%), a large proportion were aware of midwifery-led units within the hospital (83%) and just over half (54%) reported a consultant-led hospital maternity unit as an option. Significant differences were evident in relation to parity between women's awareness of home birth and both types of midwifery-led unit as options for place of birth, with women who had not previously given birth more likely to report these midwife only options.

Figure 5. Proportions of women aware of options for place of birth



Not all options are available in all areas of the country and of the four different NHS options theoretically available to women, on average women reported 2.3 (median 2). Similar proportions of women were aware of having one or two options (28% and 30%), and slightly smaller proportions (22% and 20%) were aware of three or four options (Table 20). Women who had previously given birth were more likely to report having had only one option (31%

compared with 24%) and to indicate that all four possibilities were open to them (18% compared with 23%).

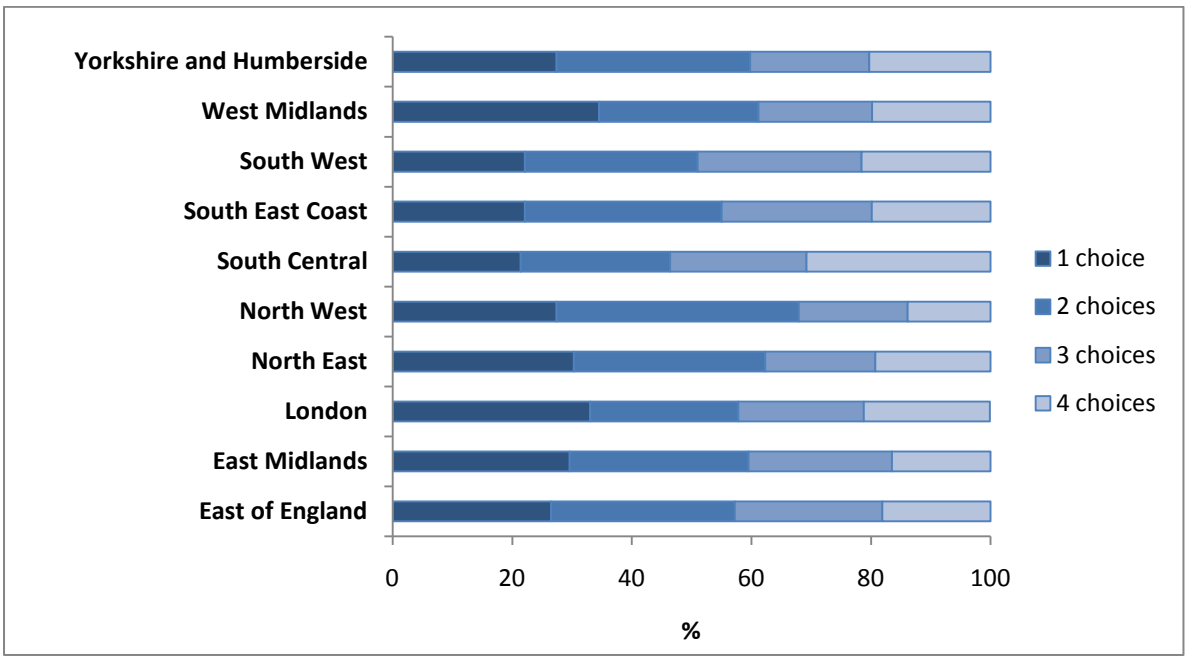
Table 20. Number of options for place of birth of which women were aware

Number of options**	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
1	618	23.8	798	31.1	1,457	27.7
2	784	30.2	777	30.3	1,586	30.1
3	606	23.3	538	21.0	1,165	22.1
4	590	22.7	450	17.6	1,060	20.1

*** Difference by parity*

In some parts of the country women reported having more choices in relation to place of birth (Figure 6). This is to some extent supported by the data from the Healthcare Commission Review of Maternity Care in 2007[11] in which the variation in provision of midwifery-led units in the different SHAs was described.

Figure 6. Proportions of women reporting having different numbers of options for place of birth in different areas of England



Choices about place of birth were made at different times by individual women. When asked about timing of the decision about place of birth some women (16% of the sample) reported that they did not have a choice; over half made their choice in early pregnancy (58%), others did so during mid or late pregnancy (24%) and only a small proportion made the decision at the start of labour (2%) (Table 21). Women who had given birth before tended to make their

[11] Towards better births: a review of maternity services in England, 2008, Healthcare Commission, London.

choices earlier. Women were also asked if they had been given an opportunity to change their mind about where to have their baby, and for those who reported having a choice, nearly half (47%) said there was an opportunity to do so.

Table 21. Women's timing in relation to choosing place of birth

Timing**	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Early pregnancy	1,461	56.3	1,547	60.0	3,060	58.0
Mid-pregnancy	455	17.5	335	13.0	809	15.3
Late pregnancy	262	10.1	188	7.3	462	8.8
Start of labour	57	2.2	60	2.3	118	2.2
Had no choice	360	13.9	448	17.4	831	15.7

*** Difference by parity*

For birth itself more than half of the respondents reported having midwife-led care in hospital (60%), with a third (33%) having consultant-led care and smaller proportions having care in a midwife-led unit or birth centre separate from hospital (2.8%) or a home birth (3.4%), of which most (77%) had a home birth that had been planned at the onset of labour or before. Women who had previously given birth were more likely to have a home birth (5.5%) compared with women having their first baby (1.3%), otherwise few differences were evident by parity. A small proportion of women reported being transferred during labour (7%), more commonly first time mothers. Of the 350 women in this situation half (51%) were transferred within the same hospital from a midwife-led unit or birth centre to a consultant-led unit, others from home to hospital (21%), from a separate midwife-led unit to hospital (10%) or to another hospital (8%). The main reasons for transfer were slow progress in labour (35%) and concern about the baby (31%). Some transfers were associated with having an epidural for pain relief (18%) and very few because the mother was ill or needed care elsewhere (4%).

Women were asked a number of questions about where they had given birth: whether this was where they had received their antenatal care; ideally where they wanted their baby to be born; where they had planned at the start of labour and whether the place of birth had specialist facilities that might be needed. Almost all women gave birth in the area or NHS trust where they had received antenatal care (83%), where they would have wished in ideal circumstances (86%), where was planned at the start of labour (86%) and where specialist facilities were available (91%). A small proportion of babies were preterm being born before 37 weeks gestation (6.4%) and one in ten (9.5%) were born weighing less than 2500 grams, For some of these babies care in specialist facilities would have been planned prior to birth.

In comparison with first time mothers, those who had given birth previously were slightly more likely to have delivered where they had wished (88% compared with 85%), where they had planned at labour onset (88% compared with 84%) and slightly less likely to have given birth where specialist facilities were available (90% compared with 93%). The 17% of women crossing trust boundaries were slightly less likely to give birth in a consultant-led unit (31% compared with 36%). Comparison among the regions shows some variation in the proportions of women having their antenatal and intrapartum care in the same area or trust (Table 22). For example, in South Central and the South West more than 20% of women reported having maternity care in more than one area.

Table 22. Proportions of women giving birth in the same area in which they received antenatal care and giving birth where they wished.

SHA Region	Same area or NHS Trust as for antenatal care**		Ideally where mother wanted**	
	n	%	n	%
East of England	497	84.7	503	87.3
East Midlands	308	83.9	330	89.9
London	733	87.7	674	82.9
North East	176	83.4	186	87.7
North West	493	83.0	512	89.0
South Central	361	77.8	383	82.2
South East Coast	330	81.5	348	85.7
South West	380	78.2	410	84.0
West Midlands	376	81.0	397	86.7
Yorkshire and Humberside	379	83.5	421	91.9
All SHAs	4,033	82.8	4,164	86.4

*** Difference by region*

3.9 Care during labour and birth

Women were asked about their care during labour and birth. This included questions about interventions, details of the staff caring for them and perceptions of that care. Clinical aspects of care on which data were collected included monitoring, methods of pain relief and induction, position for birth, type of delivery, episiotomy, perineal damage and repair.

For many women labour started naturally (62%), with no difference by parity. Similar proportions of primiparous and multiparous women were given one or more membrane sweeps (23% and 22%); however, more first time mothers had an amniotomy (19% compared with 13%), a vaginal gel or pessary (20% compared with 12%) or a drip to induce labour (18% compared with 8%).

Of the women who laboured (excluding women who had a planned caesarean and did not labour), 6% reported no monitoring at all, 15% had only occasional checks by stethoscope

and 28% reported that a sonicaid was used. The most common form of monitoring during labour was by using a belt around the abdomen continuously and this was experienced by 44**%** of women for some or all of their labour. Continuous monitoring was more often used with women who had not previously given birth. A relatively small proportion of all labours (9%) involved continuous monitoring and a scalp clip attached to the baby's head.

A range of methods were reported to have been used for pain relief during labour. Most women who laboured used natural methods such as breathing and massage at some time (83%) and the same proportion used gas and air (entonox) (83%), though some women (12%) did not find it helpful. Over a third used water or a birthing pool (38%). Nearly half of women having a vaginal birth reported having pethidine or a similar analgesic for pain relief (48%) and a similar proportion (45%) reported having an epidural. No information is available about the type of epidural anaesthesia. These proportions are higher than might have been expected based on HES data returned for 2008-09. The way the question was phrased had been changed after 2006 to give women the opportunity to indicate how well the different types of pain relief worked for them and the question structure may have affected the accuracy of response on this item. First time mothers were more likely to have pethidine and epidurals as well as to have used natural methods.

Most women had a vaginal birth (63%); however, over a third of women (38%) had an assisted delivery of some kind, including a quarter (25%) who had a caesarean (Table 23). Women who were first time mothers were more likely to have an assisted vaginal birth (21% compared with 4%) or a caesarean (26%) compared with women who had given birth before (23%).

Table 23. Mode of delivery for study sample

Type of delivery**	**Primiparous women**		**Multiparous women**		**All women**	
	No.	%	No.	%	No.	%
Normal (vaginal)	1,342	52.4	1,880	73.2	3,275	62.6
Forceps	299	11.7	51	2.0	359	6.9
Ventouse	246	9.6	51	2.0	302	5.8
Caesarean	676	26.4	587	22.8	1,299	24.8

*** Difference by parity*

Of the quarter of women who had a caesarean birth, just over half were as a consequence of unforeseen problems in labour (52%). However, a substantial proportion were planned and carried out before labour (40%) and a smaller proportion planned and carried out after labour had started (8%) (Table 24). A clear relationship with parity is evident, with women giving birth for the first time being considerably more likely to have a caesarean following

unforeseen problems in labour (72% compared with 28%). More than one reason could be given for a caesarean. The most common were fetal distress (31%), failure to progress (32%), disproportion (12%), breech presentation (18%), previous caesarean (22%) and concern about the mother's health (14%).

Table 24. Proportions of women experiencing different types of caesarean section.

Type of caesarean**	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Planned and carried out before labour started	156	22.8	360	61.6	527	40.4
Planned, but carried out after labour started	37	5.4	60	10.3	103	7.9
Due to unforeseen problem during labour	492	71.8	164	28.1	675	51.7

*** Difference by parity*

A total of 8% of women having a caesarean indicated that they had wished their baby to be born this way, but for only 1.2% was this the sole reason for the section. Almost all women having a caesarean had epidural or spinal anaesthesia for the surgery (93%) and for almost all of the 7% of women having a general anaesthetic, this was associated with a caesarean following unforeseen problems arising during labour. Most of the infants delivered by caesarean section were term infants (84%), with some (14%) born between 32 and 37 weeks and a very small proportion born earlier than this (2%).

Perineal trauma and repair are important aspects of labour and childbirth that affect women at the time and subsequently. In intervening to assist with the birth of the baby an episiotomy may be performed. The overall rate for this intervention as reported for the women who had vaginal births was 25%. For instrumental births it was used relatively routinely (86% for forceps and 79% ventouse). Minor tears not requiring stitches were reported by 15% of women. However, tears associated with delivery that needed stitches were reported by a larger proportion of women (38%) and this was more commonly associated with unassisted vaginal births (41%) and ventouse (29%), whereas more serious 3rd and 4th degree tears were associated with deliveries that involved the use of forceps (11% compared with 4% for ventouse and unassisted vaginal births).

3.10 Choice in labour

Women had some choice about place of birth, as described in section 3.8 and in relation to the use of pain relief as described above. Questions were also asked about other aspects of choice and autonomy during labour and birth.

Over half of the women (54%) experiencing some form of induction felt they had a choice about the procedures used. More than half of those who had a labour reported that they had been able to move around and choose the position that made them most comfortable most of the time (54%) and a further proportion (27%) were able to do so some of the time. Of those women who had caesareans, while some (20%) felt they were not involved in decision-making about the procedure, others (44%) felt they were involved and a further group (37%) felt involved to some extent.

Most women gave birth on a bed (87%), with women who had assisted vaginal births being more likely to have done so. Small proportions of women gave birth on a mat or mattress on the floor (5%), in a pool (4%), and some used a birthing stool or other furniture that allowed an upright posture. During the birth itself a total of 14% of women who had a vaginal birth adopted a position which allowed them to give birth squatting, kneeling or standing, a third (30%) gave birth sitting or supported sitting by pillows, 17% were lying flat and a small proportion on their side (6%). Women who needed instrumental assistance were not able to adopt such positions. Thus those who gave birth sitting or lying with their legs supported in stirrups were more likely to have assisted vaginal births (74% of forceps and 82% of ventouse).

3.11 Infant contact following birth

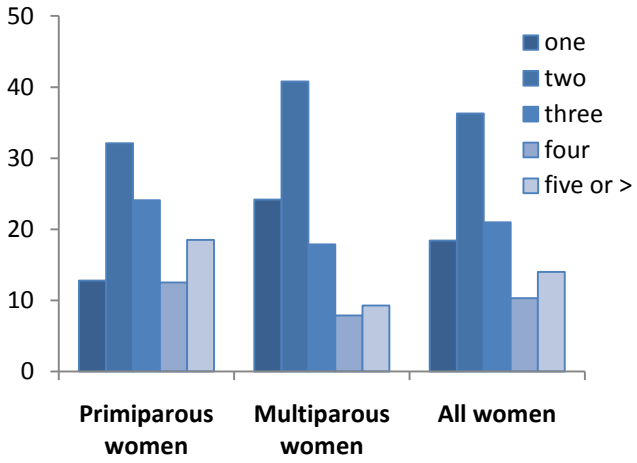
Contact with their infants during and shortly after birth is thought to be reassuring and beneficial for women and their babies. Women in the study were asked about holding their baby, having skin-to-skin contact and breastfeeding their baby shortly after the birth. Most women (89%) held their baby, had skin-to-skin contact (83%) and put their baby to the breast (72%) soon after the birth. First time mothers were more likely to hold and have skin-to-skin contact with their baby than women who had previously given birth and were equally likely to breast-feed at this time. Small proportions of women were not offered the possibility of these activities, some were not well enough and very small proportions did not wish to have this kind of contact. Women whose baby was admitted to a neonatal unit were much less likely to hold, have skin-to-skin contact or to breastfeed at this time.

3.12 The staff providing care during labour and birth

There has been concern about both continuity and ‘one-to-one’ care during labour and thus women were asked about the numbers of midwifery staff who had looked after them during their labour and birth (Figure 8) and whether they had met them before. Relatively few had one midwife caring for them during this time (18%), and overall nearly a quarter had four or

more midwives (24%). Achieving continuity during labour care and providing one-to-one woman-midwife ratios may be difficult given the individual nature of labour and the birth process. First time mothers were more likely to have greater numbers of midwives, as did women who had longer labours and those with more complex deliveries. Among those women whose labours were 8 hours or less most (70%) were cared for by one midwife, whereas 74% of women having labours of 18 hours or longer had care provided by at least four or more midwives. Nearly two-thirds (63%) of women having an unassisted vaginal birth had just had one or two midwives. More than a third of the women having a forceps or ventouse delivery (41%) had 3 or 4 midwives and for a further proportion of these women (22%) care was provided by five and more. Women were also asked if they had met any of the midwives before they went into labour. While a small proportion had previously met all the midwives providing care in labour (4%) a high proportion (81%) said they had not met any of them before this point in time.

Figure 8. Women having labour and birth care provided by different numbers of midwives



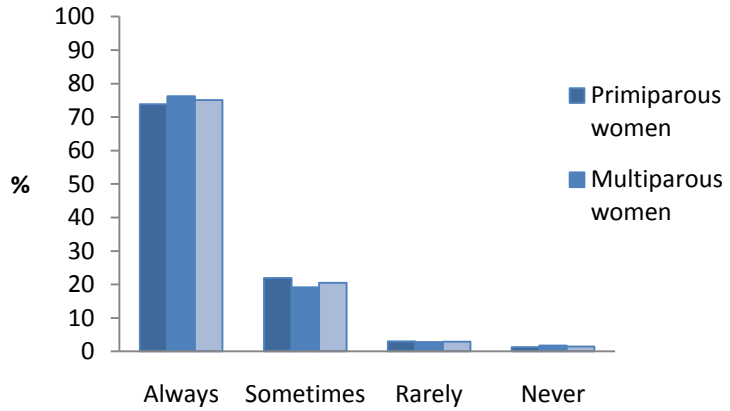
Over half of women (57%) reported that a midwife delivered their baby; 37% of deliveries were undertaken by a doctor, and for some women (6%) the responsibility was shared between the professional groups.

3.13 Perceptions of care during labour and birth

Women were asked a range of questions about the way in which they were cared for during their labour and birth. Having trust and confidence in the staff caring for you during labour and birth is critical to women's perceptions of care and may influence their choices and decisions in the future, as well as how they feel about themselves. Three-quarters of women (75%) 'always' felt they had confidence and trust in the staff caring for them at this time, a

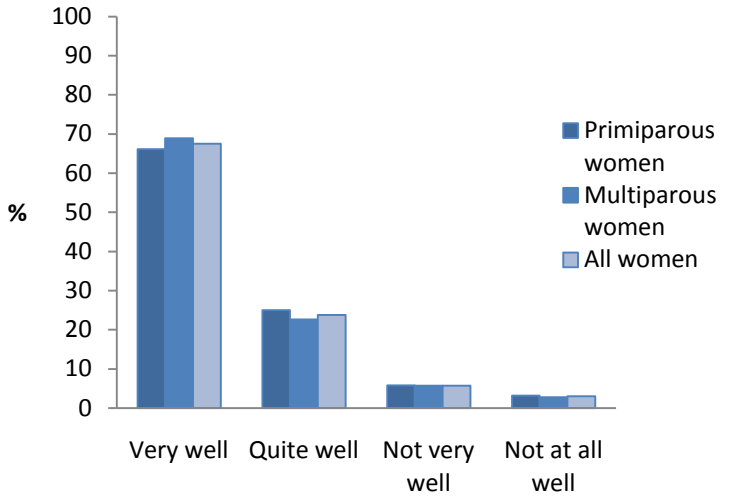
further 21% said they ‘sometimes’ felt this and small proportions (2%) reported this as ‘rarely’ or ‘never’ (Figure 9). The proportions were similar for first time mothers and women who had given birth previously.

Figure 9. Proportions of women having confidence and trust in the staff caring for them during labour and birth



Women reported on the quality of communication during labour and birth about their care. Approximately two-thirds (68%) described the staff as communicating ‘very well’ a quarter (24%) as doing this ‘quite well’ and 9% were more critical (Figure 10).

Figure 10. Proportions of women indicating how well staff communicated with them about their care during labour and birth



A practical marker for being able to communicate their needs to staff is for women to have been shown the call button that they could use when staffs were not with them. While for some women who were having a planned caesarean this was not applicable, most of those experiencing labour (87%) were shown how to use the call button to contact staff. There

were no differences between the proportions of women labouring for the first time and women who had previously given birth.

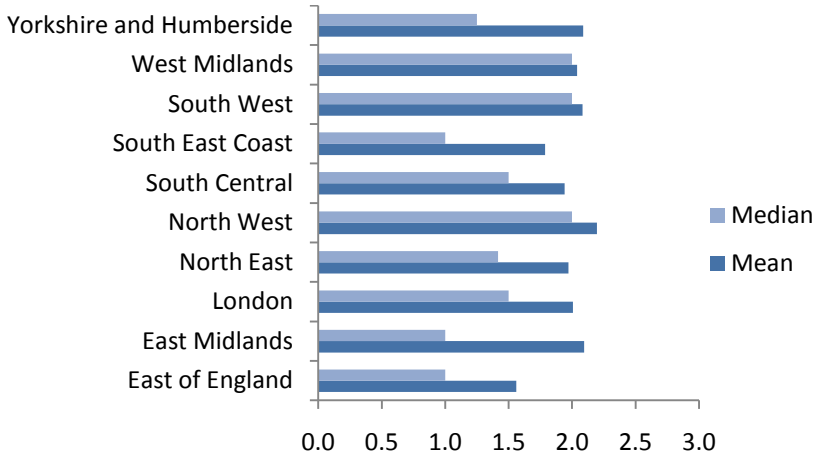
Similar questions to those used about interpersonal aspects of interaction with midwifery and medical staff during pregnancy were asked about care during labour and birth. Almost all women reported that midwives talked to them in a way they could understand (96%), treated them with respect (95%) and with kindness (94%). Responses about the medical staff were similarly positive, with almost all (94%) indicating that doctors talked to them in a way they could understand, treated them with respect (94%) and with kindness (92%). However, small proportions of women reported that one or more midwifery and medical staff did not talk to them in a way they could understand, treat them with kindness or with respect (9%, 12% and 12% respectively in relation to midwives and slightly fewer (8%, 7% and 8%) in relation to medical staff.

Being left alone in labour or shortly after the birth may allow women and their partners or birth companions to be together and have some time with their new baby, but being left alone may also concern women at what for them is a very important time. A question was thus asked about labour and the time immediately after the birth and if women and/or their husband, partner or companion were left alone at a time when it had worried them. Most women (76%) were not left alone at a time when it worried them at all, during labour or afterwards. Some (19%) reported being left alone during labour and worried and a smaller proportion were worried after the birth (10%). First time mothers were no more likely to be left alone and worried than women who had previously given birth. An association was found with length of labour and being worried and left alone at this time, with women having longer labours being more likely to report this experience. However, for all types of vaginal birth the proportion reporting this was similar. In contrast, women having a planned caesarean were much less likely to report being left alone and worried (5%), while those having an unplanned caesarean were slightly more likely to report this (23%) than women having a vaginal birth.

3.14 Postnatal care

The postnatal period is one during which women recover from childbirth, establish infant feeding and begin to get to know their baby. The length of time that women stayed in hospital after the birth of their baby varied. On average women having their first baby stayed for two days (mean 2.4, median 2) and women who had previously given birth stayed for one and a half days (mean 1.6, median 1 day). Not unexpectedly, women having assisted or operative deliveries were more likely to have longer postnatal stays in hospital.

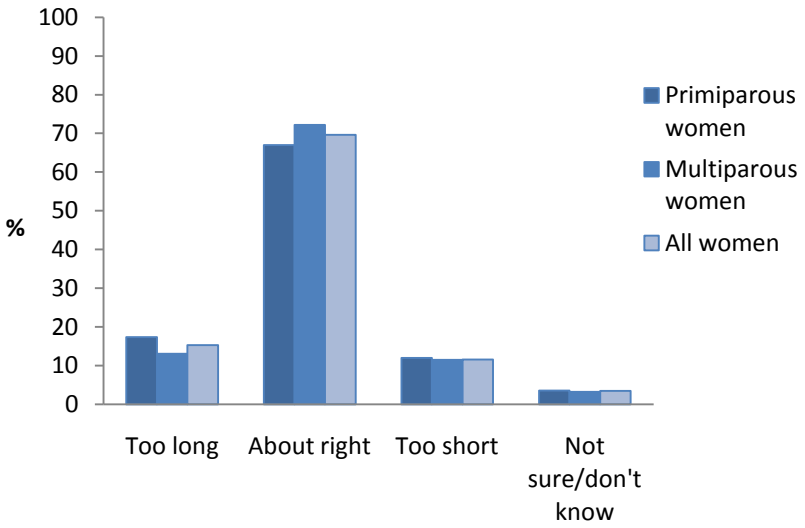
Figure 11. Duration of stay (mean and median days) in different regions



Some variation is shown in the length of postnatal stay reported by women receiving maternity care in parts of England (Figure 11), with some regions having a median of two days (West Midlands, South West and North West) and others one day (East Midlands, South East Coast and East of England). This was not obviously associated with type of deliveries for the women surveyed in the different geographical areas.

Women's views about their length of postnatal hospital stay varied (Figure 12). Most (70%) found it 'about right', for some (12%) it was too short, slightly more (15%) found it 'too long' and a small proportion (4%) were not sure. First time mothers were slightly more likely to describe their stay as too long (18% compared with 13%) and women who had previously given birth more often described their stay as 'about right' (72% compared with 67%).

Figure 12. Women's views about the length of their postnatal hospital stay



Women were asked about the quality of their postnatal care as reflected in being treated as an individual and having confidence in the staff caring for them at this time. Just over half (57%) 'always' felt treated as an individual, a further proportion (33%) felt this happened 'sometimes' and a small group of women felt this rarely or never happened (11%). A greater proportion of women 'always' had confidence in the staff caring for them at this time (69%), a further proportion 'sometimes' had confidence (27%) and only 4% of women reported rarely or never having confidence in the staff. However, in response to both questions first time mothers were less likely to report always being treated as an individual and having confidence in the staff.

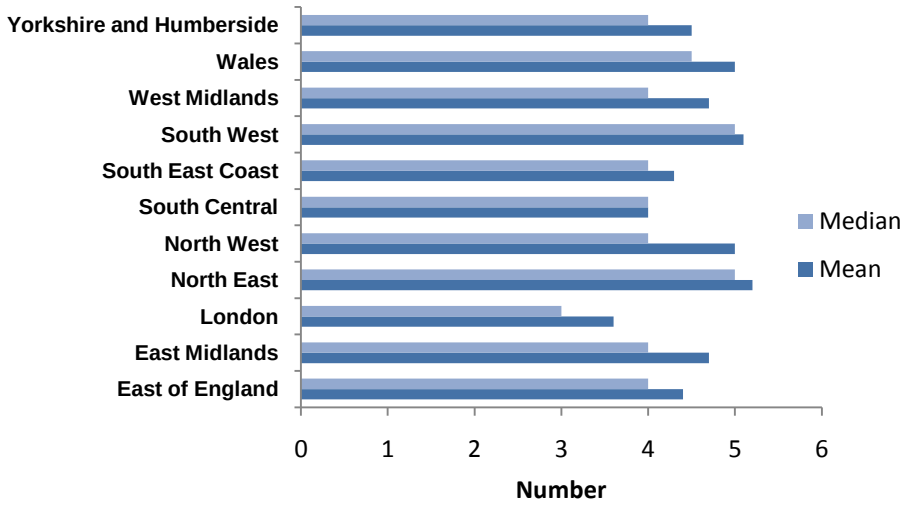
A similar question was asked about women's perceptions of postnatal care and their interactions with staff, as had occurred with earlier phases of care. Most women felt staff talked to the in a way they could understand (94%), with respect (91%) and kindness (91%) most of the time. However, women were more critical of this aspect of their care experience, than of other phases of maternity care and some reported that not all staff behaved in this way: one or more staff did not talk to them in a way they could understand (13%), treat them with respect (20%) or with kindness (20%). Women having their first baby were more critical about this aspect of their care than those who had given birth previously, as was also the case with perceptions of labour and birth care.

Support and information, as with pregnancy care, can be provided by midwifery staff and in a written format. Nearly two-thirds of women (65%) were given the NHS 'Birth to five' book as a source of helpful information, with a greater proportion of women having their first baby receiving it (80% compared with 49%). Almost all women (95%) had the name and telephone number of a midwife or health visitor they could contact after discharge home.

Women were asked about the numbers of home visits made to them by midwives and maternity support workers. At home most women (98%) were visited by a midwife and a further 1% went to see the midwife themselves. Very small proportions of women were either not offered a visit (0.2%) or did not see a midwife for other reasons (0.7%). Some women also saw a maternity support worker. On average women saw a midwife 3.8 times (median 3) with no difference between the numbers of visits to women with their first baby and those who had previously given birth. Contact with maternity support workers was variable and they were seen on average once, though many women did not see them at all (median 0). If the data on home visits by a midwife and visits by a maternity support worker are combined, then the mean number of postnatal home visits was 4.6 (median 4). Additionally, phone

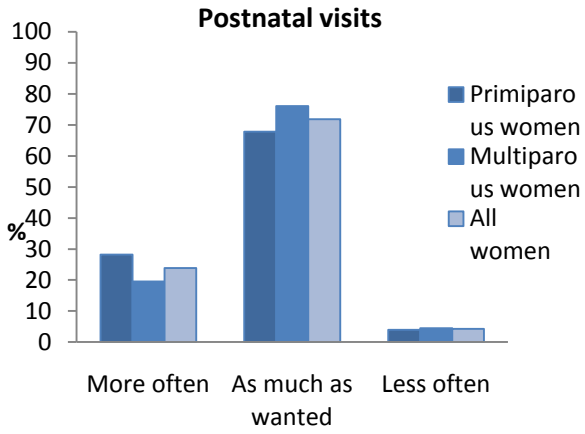
contact with either a midwife or maternity support worker provided further information or support on an average of one occasion (median 1), more often for first time mothers. The mean and median numbers of postnatal home visits in different parts of England by midwives and maternity support workers combined is shown in Figure 13.

Figure 13. Numbers of postnatal home visits (mean and median) by midwives and maternity support workers combined in different regions



Concerning the number of visits overall most women thought they had sufficient home visits from midwives and maternity support workers (Figure 14). A quarter (24%) would have liked visits more often, most were satisfied (72%) and a small proportion (4%) would have liked fewer visits. First time mothers were more likely to say they would have liked more visits (28% compared with 20%) and not to say they saw the midwife as much as they wanted (68% compared with 76%).

Figure 14. Proportions of women with different views about the number of postnatal home visits



Variation in the timing of the last contact with a midwife or maternity support worker may reflect flexibility in the provision of postnatal help and support. On average, first time mothers were seen up to 19.3 days (median 14) following the birth, compared with 16.3 days for the experienced mothers (median 12 days), though contact for some mothers may have finished somewhat earlier than this. The median for different regions varied between 11 days (South East Coast) and 14 days for East Midlands, West Midlands, London, the North West, South West and Yorkshire and Humberside.

Physical and mental health after childbirth are both important aspects of maternal wellbeing in the postnatal period. Women were asked about the postnatal checks carried out by GPs or family doctors at 4-6 weeks following childbirth. A large proportion of women reported having these (85%), with little difference between first time mothers and women who had previously given birth. Of the remainder, 1% did not give a reason, a small proportion did not wish to have the check (2%) or did not have one for other reasons (6%). However, some women (6%) reported that a postnatal check of their health had not been offered at all.

3.15 Support for infant feeding

A key aspect of postnatal care in hospital and at home is the provision of support for infant feeding. In pregnancy just over two thirds of women had planned to breastfeed (68% overall). This was more common among women who were first time mothers (75% compared with 61%), though the same proportion of both groups (74%) reported that their midwife had discussed infant feeding with them during pregnancy. During the first few days 63% of women reported feeding their baby breast milk exclusively, a further 17% used breast milk and formula milk. At the time of the survey when babies were more than three months old the rate for exclusive breastfeeding was 32%, with a further 16% of mothers partially breastfeeding at this time.

Analysis of data from the 2006 survey and open text responses to both surveys suggest that the role of the midwife is an influential one in successfully breastfeeding[12]. The responses to a question about the support from health professionals show the extent to which this occurred for the women in the survey. While small proportions of women did not want advice, practical help or encouragement (1-3%) (Table 25), over a third of women felt they were always given these and a further substantial proportion (40% or more) felt that they received these to some extent.

[12] Henderson and Redshaw (2010) Midwifery factors associated with successful breastfeeding. Child: Care, Health and Development. Accepted for publication.

Table 25. Help with infant feeding from midwives and others providing care

	Primiparous women		Multiparous women		All women	
Consistent advice**	No.	%	No.	%	No.	%
yes, always	911	35.2	1,019	39.8	1,965	37.5
yes, generally	1,044	40.4	1,028	40.1	2,104	40.2
no	585	22.6	352	13.7	953	18.2
don't know	36	1.4	36	1.4	73	1.4
didn't want this	11	0.4	126	4.9	139	2.7
Practical help**	No.	%	No.	%	No.	%
yes, always	906	35.2	911	35.7	1,858	35.6
yes, generally	1,179	45.8	991	38.8	2,201	42.2
no	425	16.5	424	16.6	860	16.5
don't know	36	1.4	40	1.6	76	1.5
didn't want this	27	1.0	187	7.3	217	4.2
Active support and encouragement**	No.	%	No.	%	No.	%
yes, always	1,002	38.9	1,022	40.0	2,062	39.5
yes, generally	1,084	42.1	982	38.4	2,099	40.2
no	417	16.2	369	14.4	795	15.2
don't know	49	1.9	50	2.0	103	2.0
didn't want this	21	0.8	132	5.2	156	3.0

*** Difference by parity*

In addition, women were asked about sources of help and advice about infant feeding and could give multiple responses to the question. A small number of women reported not needing any help or advice at all (5%). Those who had previously given birth were more likely to report not needing any help or advice (30%) compared with new mothers (6%), and to have used less of all the types of support available. While two-thirds (68%) of women did seek help and advice about infant feeding from health professionals, many also relied on partners, friends or family (38%). Peer group or parent group support was important for some women (10%).

3.16 Sources of information and use of postnatal services

Women were asked about their preferences for postnatal contact with health professionals (Table 26).

Table 26. Preference for location or method of seeing or contacting midwife or maternity support worker for postnatal care

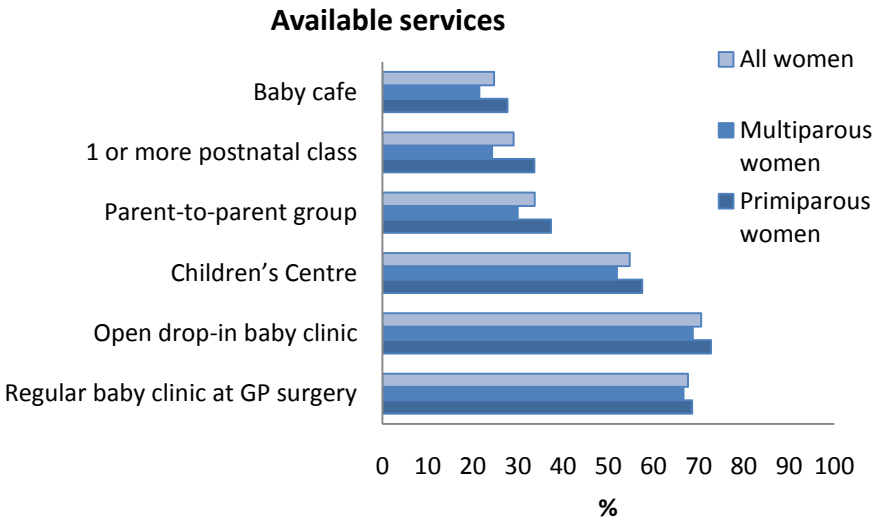
Locations or method	Primiparous women		Multiparous women		All women	
	No.	%	No.	%	No.	%
Home	2,283	87.6	2,279	87.8	4,623	87.4
Regular clinic based at GP surgery**	816	31.3	666	25.7	1,513	28.6
Children's Centre*	298	11.4	232	8.9	540	10.2
Open drop-by baby clinic**	640	24.6	500	19.3	1,161	22.0
By phone**	695	26.7	584	22.5	1,292	24.4

*** Difference by parity More than one response is possible*

While a large proportion of women would like visits at home (87%), many would also like other options: more than one in five would like a clinic based at a GP's surgery (29%), an open drop-in baby clinic (22%) and to be able to contact staff by telephone (24%). Fewer women referred to the 'Children's Centres' option (10%).

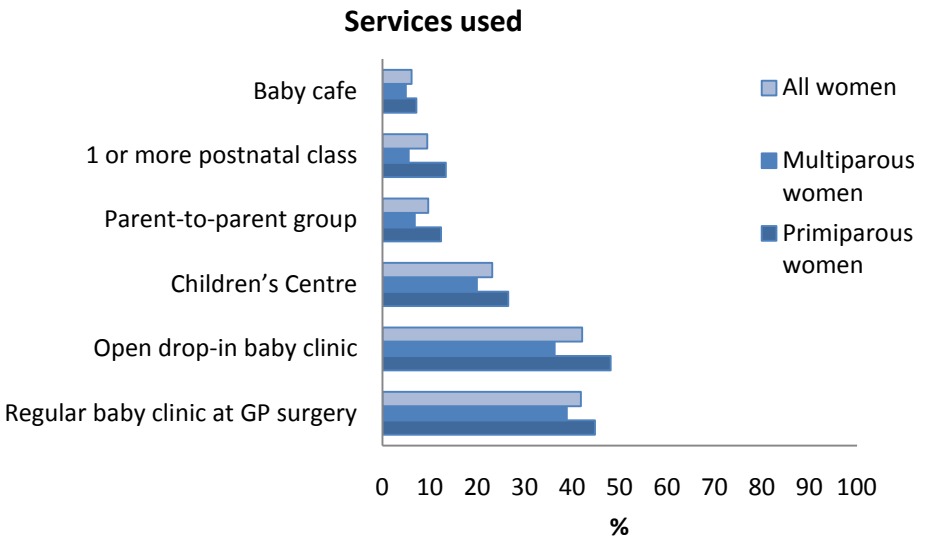
In the broader context of continuing postnatal support in the early months with a young baby, women were asked about different services that were available to them and about those that they had used (Figures 15a and 15b). Women indicated the availability of a range of support services in the postnatal period: at least of two-thirds of women reported that regular baby clinics (68%) and open drop-in clinics (71%) were available to them; more than half were aware of Children's Centres (52%); a third (34%) that parent-to-parent groups were available and a quarter or more that postnatal classes (29%) and a baby café (25%) were possible options at this time.

Figure 15a. Proportions of women with different postnatal support services available



Actual use or take-up of these services by the women in the study was at somewhat lower rates (Figure 15b). Most commonly women reported using baby clinics based at the GP surgery (42%) or the drop-in baby clinics (42%), a total of 23% used a Children's Centre, and smaller proportions used parent-to-parent groups (10%) and postnatal classes (10%). First time mothers were more likely to report all of the services listed as available and were more likely than women who had previously given birth to have used them in the months since the birth of their recent baby.

Figure 15b. Proportions of women using different postnatal support services



The kind of services described are sources of support and information about many topics, including infant care and development, breastfeeding and maternal health, with which women can engage directly with health professionals, user group postnatal supporters and with other women in a similar situation. Among other possible sources of information and support are online parenting websites and women were asked about those they had used.

Table 27. Parenting websites used in the postnatal period

Sites	n	%
Babycentre	712	13.4
Bounty	382	7.2
Netmums	221	4.1
Mumsnet	167	3.1
Pampers	160	3.0
Boots Mother and Baby	84	1.6
Cow & Gate	75	1.4
National Childbirth Trust/NCT	42	0.8
Hipp Baby Club	35	0.7
Emma's Diary	26	0.5
Babyexpert	21	0.4
Askbaby	16	0.3
Other sites	262	4.9

More than a third of women (41%) had used one or more parenting websites since their baby was born (Table 27), more commonly first-time mothers (48% primiparous women compared with 33% multiparous women). There were also significant differences by age and IMD, with older women and those living in less deprived areas being more likely to utilise these. There were also differences in relation to ethnicity, with Asian and Black women being less likely to access such sites. This was a similar pattern of use to that found with access to

pregnancy information websites. The sites listed included both commercial and non-commercial sites.

3.17 Father and partner engagement

Most women reported that their partners were positive about the pregnancy when they first heard (83%) and a further proportion had mixed feelings (14%). A very small proportion was unhappy or had no particular feelings (3%) and a small number were altogether unaware of the pregnancy (0.3%). Most of the partners were men; however, 13 women (0.2%) reported having a same sex partner. A total of 11.4% of women were living as single parents at the time of the study, a quarter of whom shared accommodation with other family members.

Substantial proportions of partners were engaged in the pregnancy, labour and birth as reflected in their presence when the pregnancy was confirmed, during antenatal care and labour (Table 28). Over half were present when the pregnancy was confirmed and for one or more antenatal checks, a third for antenatal classes and almost all for one or more ultrasound scans and for labour itself.

Table 28. Father or partner present for specific aspects of pregnancy and birth

	No.	%
Pregnancy test or when pregnancy confirmed	3,171	59.9
One or more antenatal checks	3,229	61.0
One or more ultrasound scans	4,657	88.0
One or more antenatal education classes	1,759	33.3
For Labour	4,724	89.3

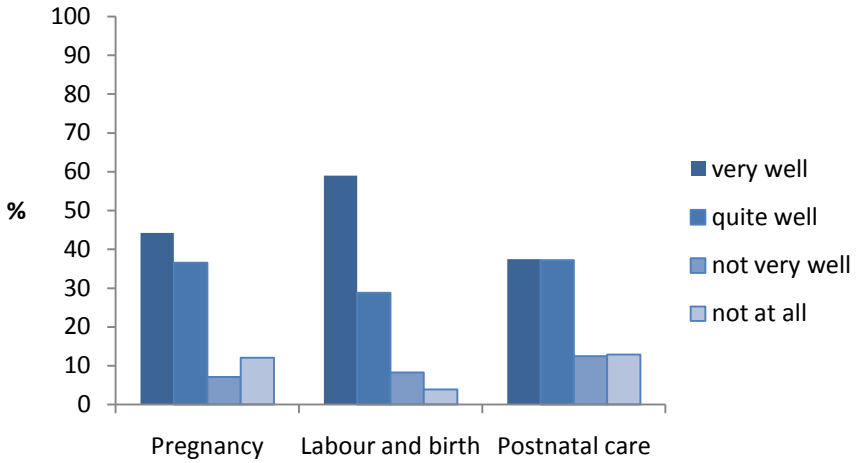
Some individual women have a preference for having a significant other person rather than their partner present during labour and birth; for women from some ethnic groups this may also be considered more culturally appropriate. There were significant differences between some groups on this point: having a partner present during labour was most common for White women (91%) and less so for Asian women (84%) and Black women (70%).

A question was specifically asked about partner involvement in obtaining information about pregnancy and birth and in decision-making at this time. A third or more of partners were reported to have sought out information about pregnancy (40%) and about labour and birth (38%), and more than half participated in making decisions with regard to antenatal screening (56%) and those required during labour (53%).

Partners have a valuable support role to play during pregnancy, labour and birth and after the baby is born. During labour particularly they may function as advocates for their partner.

Effective communication at this time is critical to a sense of wellbeing and in a practical way can enable women's needs to be better recognised. Responses to a structured survey question indicate that three quarters or more of women reported that midwives and doctors communicated with their partners 'very' or 'quite well' about pregnancy (81%), about labour and birth (88%) and postnatally (75%) (Figure 16), with the most positive responses reflecting good communication during labour and birth.

Figure 16. Perception of communication by doctors and midwives with husband or partner at different points in time



Women were asked about father or partner involvement in infant care since the baby was born. Many fathers seem to be involved in direct care as shown by changing the baby's nappy or helping when the baby cries (65% and 72% 'a great deal'). Fewer, though still more than half of partners, bath the baby 'a great deal' (58%) and more play with the baby (80%). Greater proportions are involved in these kinds of activities if the data about partners being involved 'a bit' are combined with 'a great deal'. Many fathers and partners help with childcare and this is reflected in looking after the baby when the baby's mother is out or at work: more than half (55%) are reported to do this 'a great deal', and 18% 'a bit'. Fewer partners (18%) were involved at all in postnatal activities, such as classes, though this probably reflects availability of classes, as well as time constraints.

The women in the study were also asked about paternity or parental leave, whether their partners had been able to take this and for how long. Over two-thirds of women reported that their partners had taken paternity or parental leave (71%), for some this was not applicable (18%), possibly because they were, for example, students or unemployed or because they were single parents and for some women following the birth (12%) their partner was unable

to take leave. For those partners and fathers able to take paternity or parental leave the median was 20 days (4 working weeks) and ranged from 1-40 days (0-8 weeks).

3.18 Experience of maternity care overall

Some overarching questions relating to the experience of care in general, that is across different stages and aspects of care, were included near the end of the survey.

Women were asked about information giving and information to support their decision-making and choices (Table 29).

Table 29. Proportions of women given information and involved in decisions about their care

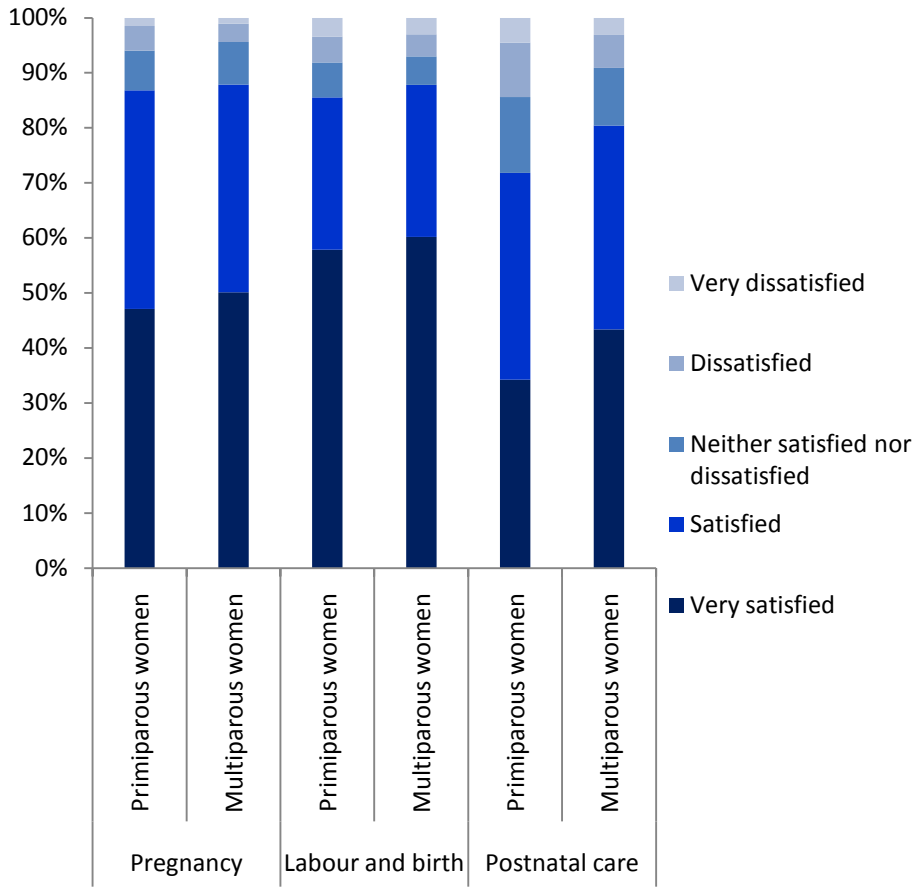
Areas of involvement	Primiparous women		Multiparous women		All women	
Given information about choices for maternity care	No.	%	No.	%	No.	%
Yes	1,519	58.9	1,551	60.4	3,120	59.7
Yes, to some extent	864	33.5	803	31.3	1,692	32.4
No	197	7.6	215	8.4	417	8.0
Given enough information to help you decide about own care						
Yes	1,592	61.9	1,664	64.7	3,307	63.3
Yes, to some extent	770	29.9	674	26.2	1,467	28.1
No	210	8.2	232	9.0	449	8.6
Able to participate in decision -making about own care						
Yes	1,570	60.9	1,611	62.8.9	3,230	61.9
Yes, to some extent	788	30.6	726	28.3	1,540	29.5
No	218	8.5	227	8.9	451	8.6
Given information at the right time to decide about own care**						
Yes	1,529	59.6	1,647	64.5	3,225	62.0
Yes, to some extent	805	31.4	670	26.2	1,499	28.8
No	233	9.1	238	9.3	478	9.2

*** Difference by parity*

Many felt they were given information about choices in maternity care and enough information to help them decide (60% and 63%), though for a further proportion (32% and 28%) this was only to some extent. Similar proportions of women felt they were definitely involved in decision-making about their care and about the appropriate timing of that information-giving (62% and 62%) and a further proportion to some extent (30% and 29%). Little difference was evident by parity, though more women who had previously given birth felt that they were given information at the right time to help them decide about their own care (65% compared with 60%).

A general question was asked about satisfaction with the maternity care that women received. Women were largely positive about their care during pregnancy, labour and birth and afterwards in the postnatal period (Figure 17).

Figure 17. Women's perception of pregnancy care



High rates of satisfaction with pregnancy care and with labour and birth were reported (88% and 87% satisfied or very satisfied). A slightly lower rate was reported for postnatal care (76% satisfied or very satisfied). Nevertheless, while some women were less positive about care in the postnatal period, only 12% were actually dissatisfied with this aspect of their care. First time mothers were significantly more critical of this phase of care than women who had previously given birth.

3.19 Outcomes for different groups of women

A range of outcomes were selected for preliminary multivariate analyses. The aim was to explore the experience of specific groups of women in relation to accessing care and the quality of maternity care received. The groups used in the logistic regression analyses were: BME women compared with White women; BME women born outside the UK compared with White women born in the UK; women living in areas with the highest (most deprived) quintile

of deprivation (IMD) compared with women in the other four quintiles; women who left school at 16 years or less compared with those who attended for longer and single women compared with women living with partners. Outcomes and potential confounders are as outlined in Appendix C. Significant findings for the different groups after adjustment are shown with odds ratios and 95% confidence intervals in Tables 30-33.

The findings show that for BME women the first antenatal contact and booking were later, they were less likely to be aware of all the possible options for place of birth, and less likely to say they were given enough information about the choices for maternity care. During labour and birth they were more likely to report having greater numbers of midwives provide care, and were less likely to report having confidence and trust in the staff or that staff communicated with them well at that time. Compared with White women, BME women were more likely to say they were not treated with respect by postnatal staff, to perceive their postnatal stay as too short, to have fewer postnatal home visits and to indicate that they would have liked more postnatal midwifery contact once home. However, they were also more likely to have a longer postnatal stay and to have postnatal contact going on for longer. Overall women in the BME group were more likely to report being satisfied with pregnancy care though less likely to do so in relation to labour and delivery and postnatal care.

Table 30. Outcomes for Black and Minority Ethic women

	OR	95% CI
First contact by 12 weeks	0.65	0.48, 0.86
Booking before 10 weeks	0.78	0.64, 0.96
Aware of 4+ options for place of birth	0.74	0.60, 0.91
Staff communicated well about care during labour and birth	0.67	0.55, 0.82
Had trust in staff providing care during labour and birth	0.70	0.57, 0.88
>=3 midwives providing care during labour and birth	1.26	1.02, 1.55
Postnatal care - treated with respect by staff	0.60	0.44, 0.83
Thought postnatal hospital stay was too short	1.31	1.01, 1.71
Would have liked more postnatal contact with midwife	1.90	1.53, 2.34
Given enough information to help decide about own care	0.69	0.57, 0.85
Postnatal hospital stay >=3 days	1.28	1.04, 1.58
Postnatal care - saw midwife at home only 1-2 times	1.24	1.03, 1.50
Last contact with midwife when baby aged >=15 days	1.94	1.63, 2.31
Satisfied with care during pregnancy	1.56	1.15, 2.11
Satisfied with care during labour and birth	0.74	0.57, 0.96
Satisfied with care after birth	0.70	0.56, 0.88

When compared with White women born in the UK, for Black and Minority Ethnic women born outside the UK (Table 32) the findings are generally similar to those reported in the previous table, with later initial and booking contact, poorer information provision and a similar experience with staff, both in relation to interaction and contacts. In addition they were less likely to be offered antenatal education classes, and to say they were treated with respect by midwives antenatally.

Table 31. Outcomes for Black and Minority Ethnic women born outside the UK

	OR	95% CI
First contact by 12 weeks	0.37	0.29, 0.50
Booking before 10 weeks	0.59	0.48, 0.72
Offered antenatal classes	0.70	0.56, 0.89
Aware of 4+ options for place of birth	0.49	0.39, 0.62
Antenatal care - treated with respect by midwives	0.35	0.23, 0.64
Staff communicated well about care during labour and birth	0.65	0.53, 0.81
Had trust in staff providing care during labour and birth	0.61	0.49, 0.76
Postnatal care - treated with respect by staff	0.53	0.38, 0.73
Thought postnatal hospital stay was too short	1.40	1.06, 1.84
Would have liked more postnatal contact with midwife	2.96	2.38, 3.68
Given enough information to help decide about own care	0.68	0.55, 0.84
Postnatal hospital stay >=3 days	1.32	1.03, 1.69
Postnatal care - saw midwife at home only 1-2 times	1.43	1.15, 1.78
Last contact with midwife when baby aged >=15 days	2.44	1.98, 3.01
Satisfied with care during pregnancy	1.44	1.01, 2.05
Satisfied with care during labour and birth	0.57	0.51, 0.89

Fewer significant findings were evident in relation to women who were single parents, women who had fewer years of full time education and those living in the most deprived areas (Tables 33-35). All the women in these groups were also less likely than those with which they were compared to be aware of the different options for where they could give birth.

Table 32. Outcomes for women who are single parents

	OR	95% CI
First contact by 12 weeks	0.48	0.37, 0.63
Booking before 10 weeks	0.75	0.61, 0.92
Aware of 4+ options for place of birth	0.70	0.56, 0.86
Given enough information to help decide about own care	0.73	0.60, 0.88

Compared with women with partners, single women contacted a health professional and had pregnancy care booking later, and were less likely to feel they had received enough information to make choices about maternity care.

Women with fewer years of full-time education were similarly later to make initial contact. They were also more likely to have more than just one or two home visits by a midwife.

Table 33. Outcomes for women completing full-time education aged 16 years or less

	OR	95% CI
First contact by12 weeks	0.75	0.60, 0.94
Aware of 4+ options for place of birth	0.65	0.56, 0.75
Postnatal care - saw midwife at home only 1-2 times	0.85	0.72, 1.00

The women living in the most deprived areas as measured by IMD were less likely to always have trust and confidence in staff caring for them during labour and birth, though they were more likely to feel treated with respect by postnatal staff, to stay longer, to have more

postnatal home visits and to have contact with the midwife for longer than two weeks after the birth.

Table 34. Outcomes for women in the highest quintile on the Index of Multiple Deprivation

	OR	95% CI
Aware of 4+ options for place of birth	0.68	0.56, 0.82
Had trust in staff providing care during labour and birth	0.76	0.61, 0.95
Postnatal care - treated with respect by staff	1.48	1.06, 2.07
Postnatal hospital stay >=3 days	1.43	1.12, 1.83
Postnatal care - saw midwife at home only 1-2 times	0.68	0.54, 0.84
Last contact with midwife when baby aged >=15 days	1.78	1.46, 2.17

A range of issues are evident in the analyses carried out on different groups of women that are common to disadvantaged groups more generally. Differences in access to care, to information and in the way women experience interactions with staff reflect a need for care that focuses on the individual woman and her family at the same time as addressing the information needs of the child-bearing population more broadly, especially in relation to the choices available.

3.20 Change over time

In making comparisons over time with earlier surveys it is possible to see changes in both the care provided and women's views of that care. Some questions changed between the different surveys in 1995, 2006 and 2010 or were not used. A comparison of respondent characteristics for the different surveys is shown in Appendix D. Key items available are listed in Tables 36-38.

Table 35. Proportions of women reporting on key aspects of care during pregnancy (%)

	1995	2006	2010
% Saw a health professional before 12 weeks gestation	82	87	90
% First contact was with a midwife	22	13	20
% Booked by 10 weeks	-	35	63
% Booked later than 18 weeks	-	4	8
% Had screening for Down's syndrome	62	62	76
% Had dating scan	-	86	90
% Had anomaly or '20 week' scan	-	97	99
% Had overnight stay in hospital during pregnancy	-	21	19
% Had midwife only antenatal care	-	49	57

Based on the survey responses, the proportion of women seeing a health professional before 12 weeks' gestation has increased over time as has early booking, though the proportion of women booking late, that is after 18 weeks, has also increased. More women are having dating and anomaly scans and more are having midwife only care during the antenatal period. The median number of antenatal checks reduced from 13 to 10 appointments for primiparous women and from 12 to 9 for multiparous women between 1995 and 2006, but has not further reduced since then.

Care during labour and birth as described by the women responding shows some variation and change (Table 37). The proportion of women starting labour naturally has altered little, the use of continuous fetal monitoring during labour has increased during the last three years and unassisted vaginal births have declined slightly; however the proportion of women giving birth in less conventional positions has increased over time. The caesarean section rate is slightly higher than in 2006 and the rate for vaginal birth after caesarean section is lower. Rates for forceps and ventouse are similar to previous findings.

Table 37. Proportions of women reporting on aspects of care during labour and birth

	1995	2006	2010
% Starting labour naturally	65	68	67
% Had continuous fetal monitoring	53	41	53
% Had different types of delivery:			
Unassisted vaginal	71	65	63
Ventouse	5	7	6
Forceps	6	5	7
Caesarean section	17	23	25
% Had a vaginal birth after caesarean (VBAC)	31	35	30
% Had a midwife deliver the baby	54	70	63
% Delivered standing, squatting or kneeling	6	15	14

Postnatal hospital stays have reduced considerably since 2006 (median 3 days compared with 1.4 days in 2010). In 2006 64% of women stayed 2 days or less and in 2010 the proportion was 71%, with 63% of primiparous women and 78% of multiparous women going home after two days or sooner. Fewer women in successive surveys knew the midwife who came to visit them postnatally (Table 38). However, the number of home visits (median 4) did not change over this period and the variability in timing of the last postnatal contact with a midwife increased (median 11 days in 1995, 13 days in 2006 and 14 days in 2010), ranging from one day to more than three months after the birth in 2010. This may reflect more individualised care and flexibility in relation to need.

Table 38. Proportions of women reporting on aspects of postnatal care (%)

	1995	2006	2010
% Had met midwife saw at home before	80	78	67
% Having 1-2 midwives visit at home	60	55	58
% Having PN check	95	90	85

Responses in terms of satisfaction with care shows that most women were satisfied ('very' and 'quite satisfied' combined) with all aspects of their care in 2006 (86% for pregnancy care, 87% for labour and birth and 80% postnatal care). Little difference is evident between satisfaction with these aspects of care as measured in 2006 and more recently in 2010 when

88% of women were satisfied with their pregnancy care, 87% with care for labour and birth and at 76%, slightly less for postnatal care.

4. Conclusion

This report is based on data collection and analysis of items of current interest, particularly those relating to access, choice and information and responses from women receiving care in different geographical areas of England.

The findings provide a broad picture of women's recent experience of care and their views of that care. The analyses are presented by parity and overall to facilitate an appreciation of the way that previous experience of pregnancy, childbirth and early parenting can impact on women's subsequent experiences. Where appropriate, further analyses have been carried out to explore some of the relationships between key factors and some findings are presented on outcomes for specific groups using multivariate techniques.

Most women were positive about most of their maternity care. As this and successive national maternity surveys have shown, all women wish to be treated as individuals, with kindness and respect, by skilled staff. However, the experience of women in different regions, women from different groups and women with different clinical needs varied. Pregnancy and childbirth represent a time of opportunity when health professionals in seeing women and their families directly, have a chance to better support, inform and intervene. Listening to women's views and understanding their different perspectives on this important life event, which for many is a major life transition, provides critical feedback on services, the way that maternity care is organised, key public health issues and also what is really valued about the care that is delivered.

Appendix A. Scope of the survey

Section A. **Dates and your baby**	Date and time of birth Singleton or multiple Gestation Birth weight
Section B. **Antenatal care**	Pregnancy confirmation Planned pregnancy and reactions Access to health professionals Information about choices The booking appointment Contact with health professionals Timing and method of contact Tests and scans: explanations, offer and uptake Preferences for contact and care Health problems affecting pregnancy Antenatal education availability and uptake Perceptions of care
Section C. **Your labour and the birth of your baby**	Prior worries about labour and birth Options for place of birth Place of birth Length of labour Induction Monitoring Methods of pain relief Transfers in labour Mode of delivery Timing and reasons for caesarean section Episiotomy and tears Contact with health professionals Continuity of carer Early contact with baby Presence of partner or companion Being left alone Perceptions of care Comments on labour and delivery care
Section D. **Babies born at home**	Planned birth at home Information for home birth Transfer

Section E. **Care in a maternity unit after the birth**	Duration of stay Perceptions of care Comments on postnatal care
Section F. **Feeding your baby**	Plans in pregnancy Feed type first few days and currently Support and advice with feeding from health professionals Other support
Section G. **Babies needing specialist care**	If baby was cared for in a neonatal unit Reasons for admission Information about neonatal care Contact with baby Duration of stay If baby still in neonatal unit Overnight stays for parents
Section H. **Care at home after the birth**	Access to postnatal care and information Contacts with different health professionals Continuity of carer Age of baby at last contact with midwife Help and advice about infant care baby Perceptions of care Sources of support Maternal health and wellbeing Postnatal check Talked over the labour and birth with health professional Satisfaction with care received Information about choices for care
Section J. **Father and partner involvement**	Reactions to the pregnancy Antenatal involvement Health professional communication Postnatal involvement with the baby Paternity/parental leave
Section K. **Previous pregnancies and childbirth**	Previous pregnancies Number of births Fetal or maternal health problems in pregnancies Previous caesarean section
	Age

Section L. **You and your household**	Age on leaving full-time education Members of household Employment status Ethnicity Country of birth Help in understanding English Physical problem or disability Mental health problem or learning disability Open text about any aspect of maternity care

Appendix B.

Summary of respondent and non-respondent characteristics

	Respondents (n=5332)		Non-respondents (n=4526)	
Mother's age (years)	n	%	n	%
<=19	179	3.4	365	8.1
20-24	729	13.7	1,148	25.4
25-29	1,376	25.8	1,320	29.2
30-34	1,740	32.6	1,008	22.3
35-39	1,068	20.0	547	12.1
>=40	240	4.5	138	3.0
Marital status				
Married	,278	61.5	2,141	47.3
Sole registration	193	3.6	373	8.2
Joint registration (same address)	1,550	29.1	1,409	31.1
Joint registration (different address)	311	5.8	603	13.3
Index of multiple deprivation (quintiles)				
1st (least deprived)	1,055	19.8	471	10.4
2nd	1,041	19.5	563	12.4
3rd	1,131	21.2	774	17.1
4th	1,013	19.0	1,095	24.2
5th (most deprived)	1,091	20.5	1,623	35.9
Strategic Health Authority (SHA)				
North East	230	4.3	212	4.7
North West	642	12.0	615	13.6
Yorkshire and Humberside	509	9.5	477	10.5
East Midlands	407	7.6	369	8.2
West Midlands	501	9.4	548	12.1
East of England	643	12.1	424	9.4
London	915	17.2	947	20.9
South East Coast	443	8.3	300	6.6
South Central	509	9.5	288	6.4
South West	533	10.0	346	7.6
Country of birth				
UK	4,180	78.4	3,184	70.3
Not UK	1,152	21.6	1,342	29.7
Mother's socioeconomic position (NS-SEC)[1]	**n=499**		**n=433**	
Higher managerial, administrative and professional occupations	53	10.6	22	5.1
Lower managerial, administrative and professional occupations	152	30.5	71	16.4
Intermediate occupations	83	16.6	47	10.9
Small employers and own account workers	17	3.4	15	3.5
Lower supervisory and technical occupations	19	3.8	12	2.8
Semi-routine occupations	44	8.8	60	13.9
Routine occupations	12	2.4	26	6.0
Students	5	1.0	14	3.2
Not stated or inadequately classified	21	4.2	39	9.0
Not classifiable for other reasons	93	18.6	127	29.3

[1] *NS-SEC available for a 10% sample of respondents and non-respondents*
http://www.ons.gov.uk/about-statistics/classifications/current/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html

Summary of postal and online respondent characteristics

	Postal respondents (n=4939)		Online respondents (n=392)	
	n	%	n	%
Mother's age (years)				
<=19	171	3.5	8	2.0
20-24	678	13.7	51	13.0
25-29	1,269	25.7	107	27.3
30-34	1,603	32.4	137	34.9
35-39	992	20.1	76	19.4
>=40	227	4.6	13	3.3
Marital status				
Married	3,025	61.2	253	64.5
Sole registration	177	3.6	16	4.1
Joint registration (same address)	1,447	29.3	103	26.3
Joint registration (different address)	291	5.9	20	5.1
Index of multiple deprivation (quintiles)				
1st (least deprived)	980	19.8	75	19.1
2nd	964	19.5	77	19.6
3rd	1,039	21.0	92	23.5
4th	949	19.2	64	16.3
5th (most deprived)	1,007	20.4	84	21.4
Strategic Health Authority (SHA)				
North East	211	4.3	19	4.8
North West	597	12.1	45	11.5
Yorkshire and Humberside	477	9.7	32	8.2
East Midlands	379	7.7	28	7.1
West Midlands	475	9.6	26	6.6
East of England	602	12.2	41	10.5
London	820	16.6	95	24.2
South East Coast	408	8.3	35	8.9
South Central	473	9.6	36	9.2
South West	498	10.1	35	8.9
Mother's ethnic background				
White	4,208	86.1	279	79.9
Mixed	64	1.3	35	10.0
Asian or Asian British	372	7.6	14	4.0
Black or Black British	196	4.0	6	1.7
Chinese and other	48	1.0	15	4.3
Country of birth				
UK	3,932	79.6	248	63.3
Not UK	1,008	20.4	144	36.7
Mother's socioeconomic position (NS-SEC)[1]	**n=459**		**n=40**	
Higher managerial, administrative and professional occupations	49	10.7	4	10.0
Lower managerial, administrative and professional occupations	143	31.2	9	22.5
Intermediate occupations	79	17.2	4	10.0
Small employers and own account workers	16	3.5	1	2.5
Lower supervisory and technical occupations	16	3.5	3	7.5
Semi-routine occupations	42	9.2	2	5.0
Routine occupations	12	2.6	0	0.0
Students	4	0.9	1	2.5
Not stated or inadequately classified	17	3.7	4	10.0
Not classifiable for other reasons	81	17.6	12	30.0

[1] NSSEC available for a 10% sample of respondents and non-respondents
http://www.ons.gov.uk/about-statistics/classifications/current/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html

Appendix C.

Outcomes and potential confounding factors used for adjustment in regression analyses

Antenatal care

1. Timing of first contact by 12 weeks
2. Timing of booking appointment by 10 weeks
3. Offered antenatal classes
4. Number of options aware of for place of birth: all 4 vs. fewer

Adjusted for parity, IMD, mother's age, single parenthood, age on leaving full-time education, BME, born in the UK

Women's perceptions

5. Being treated with respect by midwives during antenatal care: most of the time vs. rest
6. Being treated with respect by doctors during antenatal care: most of the time vs. rest
7. Staff communicated very well about care during labour and birth: very well vs. rest
8. Always had confidence in staff providing care during labour and birth: always vs. rest
9. Being treated with respect by staff during postnatal care: agree vs. rest
10. Perception of postnatal stay as too short: yes vs. no
11. More postnatal contact with midwife needed: yes vs. no
12. Given information about your choices for maternity care: yes vs. rest
13. Given enough information to help you decide about your care: yes vs. rest

Adjusted for parity, IMD, mother's age, single parenthood, age on leaving full-time education, BME, UK-born

Service

14. Number of midwives that provided care during labour and birth: >=3 midwives vs. fewer *(Additional adjustment for duration of labour for this outcome)*
15. Length of postnatal stay: >=3 days vs. fewer days
16. Postnatal contact with midwife: 1-2 vs. more
17. Last PN contact: >=15 days vs. fewer

Adjusted for parity, mother's age, and type of delivery

Overall satisfaction with maternity care

18. Satisfaction with care during pregnancy: very satisfied and satisfied vs. rest
19. Satisfaction with maternity care during labour and birth: very satisfied and satisfied vs. rest
20. Satisfaction with maternity care after birth: very satisfied and satisfied vs. rest

Adjusted for parity, IMD, mother's age, age on leaving full-time education, BME, UK-born.

Appendix D.

Comparison of respondent characteristics in the 2010 and previous surveys

	Audit Commission 1995		NMS 2006		Health Care Commission 2007		NMS 2010	
Age (years)	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
<=19	88	**3.7**	115	**3.9**	742	**3.0**	153	**2.9**
20-24	391	**16.3**	452	**15.4**	3,300	**13.3**	697	**13.2**
25-29	791	**32.9**	702	**23.9**	5 ,54	**23.2**	1,312	**24.9**
30-34	787	**32.7**	959	**32.7**	7,981	**32.2**	1,747	**33.2**
35-39	292	**12.1**	601	**20.5**	5, 473	**22.1**	1,087	**20.6**
>=40	57	**2.4**	105	**3.6**	1, 520	**6.1**	272	**5.2**
All respondents	2,406	**100.0**	2,934	**100.0**	24, 770	**100.0**	5,268	**100.0**
Parity								
Primiparous	1, 015	**42**	1 165	**41.0**	12, 605	**48.1**	2,610	**50.1**
Multiparous	1,387	**58**	1.679	**59.0**	13, 620	**51.9**	2,603	**49.9**
All respondents	2,402	**100.0**	2 844	**100.0**	26, 225	**100.0**	5,213	**100.0**
Ethnic background								
White	2 210	**91.9**	2 552	**87.4**	22, 534	**87.1**	4,487	**85.7**
Mixed	-	**-**	40	**1.4**	431	**1.7**	99	**1.9**
Asian or Asian British	75	**3.1**	201	**6.9**	1, 302	**3.7**	386	**7.4**
Black or Black British	53	**2.2**	105	**3.6**	963		202	**3.9**
Chinese or other ethnic group	51	**2.2**	21	**0.7**	644	**3.7**	63	**1.2**
All respondents	2,389	**100.0**	2,919	**100.0**	25, 875	**100.0**	5,237	**100.0**