Maternity: pregnancy, births and post-pregnancy

Summary

- There were 15,238 births in Hampshire in 2011. Over the last decade Hampshire's birth rate has gone up 13% from 13,320 in 2000, but childbearing among under 18 year olds is declining.
- Among the local authorities in Hampshire in 2011, Rushmoor had the highest birth rate (15.5 births per 1,000 women) and New Forest the lowest birth rate (9.1 births per 1,000 women). This reflects the younger age structure in Rushmoor and the older age structure in New Forest.
- There were an estimated 243,900 women of childbearing age (15-44 years) residing in Hampshire in 2011. Basingstoke and Deane (34,000), the New Forest (28,000) and Eastleigh (24,000) have the highest numbers of women of childbearing age.
- The total fertility rates (TFR) for 2011 give an average number of 1.99 children per woman in Hampshire, which is a decrease from 2.06 children per woman in 2010 but remains higher than the England value of 1.93. In all local authority areas the TFR is higher than the England value except in Fareham, Hart, the New Forest and Winchester. The General Fertility Rate (GFR) for Hampshire was 62.8 live births per thousand women aged 15–44, a decrease compared with 63.8 in 2010. Basingstoke and Deane had the highest GFR at 69.9 live births per thousand women aged 15-44, followed by Rushmoor (69.2) and Gosport (65.4). These three local authorities had GFRs higher than the England value.
- Babies born in Hampshire in 2011 were most likely to have a mother aged 25–34, with nearly two thirds of mothers (57%) in this age group. A further 22% of babies were each born to mothers aged under 25 and to mothers aged 35 and over. The birth rate among mothers aged 30–34 was the highest at 124.3 births per 1,000 women and was higher than the England rate of 112.2 births per 1,000 women.
- In 2011, 14.7% of births in Hampshire were to foreign born women, with 689 to women born in Asia and the Middle East and 852 to women born in EU[1] countries. Geographical variations show that Rushmoor, at 25.9%, had the highest proportion of births to foreign born women, slightly higher than the national rate (25.5%), followed by Basingstoke and Deane (18.9%) and Hart (17.1%), with Havant at 7.8% having the lowest proportion of births to foreign born women.
- Only 2.9% of all women giving birth in Hampshire gave birth at home. Nationally the homebirth rate was 2.5%. The highest rates of home births were in Test Valley (6.8%) and Winchester (4.9%). Havant reported the lowest home birth rate at 2.1%.
- The latest ONS Interim 2011-based birth projections (2013 to 2021) for Hampshire suggest that the previous rise in births may be starting to level off. The projections follow the general trend for England and the South East.
- Population projections of the numbers of childbearing women (15-44) across Hampshire's local authorities suggest that in general they will remain fairly stable.
- General fertility rate (GFR) projections for Hampshire show an ongoing increase till about 2015, followed by a decline. Rushmoor and Gosport will continue to experience high GFRs and Havant may have a sustained increase over a longer period.
- More women in Hampshire accessed maternity services early in their pregnancy in 2011, enabling better outcomes reaching 99.6% by the end of that year.
- Although there are no data on the Hampshire prevalence of maternal obesity, the South Central Strategic Health Authority (SHA) at 5.66% had the second highest overall rate of women with a BMI ≥35 at any point during pregnancy. This incurs increasing risk for both mother and baby.

[1]EU country of birth groupings represent the European Union as constituted in 2009. It includes the New EU countries - Estonia, Latvia, Lithuania, Czech Republic, Hungary, Poland, Romania, Slovakia, Malta, Bulgaria, Cyprus (EU), Cyprus (not otherwise stated), Slovenia, Czechoslovakia not otherwise stated

- In 2011/12 caesarean sections accounted for 23.2% of all deliveries in Hampshire, of which 9.7% were planned procedures. The national caesarean section rate was 25.0%. Using 2009/10 – 2011/12 pooled data, the directly standardised caesarean section rate was 125/100,000 for planned procedures, and 199/100,000 for emergency procedures in Hampshire. For planned procedures the rate was the highest in Winchester, East Hampshire, Hart and Havant, and for emergency procedures, Havant, Gosport and Eastleigh. Havant had a high rate both for planned and emergency procedures. This is not reflective of the population need or in the best interests of women and their babies.

Recommendations

- Focus on promoting the birth pathway through the 'Normalising Birth programme' using national resources such as the NHS Institute toolkit to help maternity services review and assess their current practice in promoting normal birth and reducing Caesarean section rates.
- Further develop the integration of maternity services with pre-conceptual, health visiting and school nursing services, as well as primary care, specialist services and the voluntary sector, to improve outcomes across the life course.
- Emphasise the contribution of both antenatal and postnatal care to long term health, as well as the actual birth event. This includes improving perinatal mental health pathways and services.
- Ensure appropriate support for and focus on reducing, the increase in high risk pregnancies.
- Address the low home birth rate in Hampshire.
- Address and highlight the ten key recommendations in response to the findings in the Centre for Maternal and Child Enquiries (CMACE) report Maternal obesity in the UK: Findings from a national project.
- Improve the intelligence to comprehensively describe demography, trends and maternity outcomes in Hampshire. Maternity data recording of country of origin needs to be available to inform commissioners.

Maternity: pregnancy, births and post-pregnancy

1. Introduction

This chapter focuses on maternities in Hampshire and provides an overview of need at county and district level.

2. Level of need in the population

2.1 Number of maternities and births

In 2011 in Hampshire there were 15,029 maternities, including 61 still births. This led to 15,238 live births which is the highest annual number of births over the past decade (an increase of 13%) (table 1).

Table 1: Number of Hampshire births 2000 to 2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. of births	13,320	12,900	12,780	13,258	13,692	13,537	14,195	14,468	14,677	14,641	14,972	15,238

Source: Office for National Statistics (ONS)

The number of births varies considerably across the county with higher numbers in Basingstoke and Deane, the New Forest and Eastleigh, relative to other local authority areas in Hampshire. In Basingstoke and Deane there were 2,367 births in 2011, over 50% higher than the number of births in Hart (1,023), demonstrating how number of births reflects both the absolute size of a local population and it's age structure. For example, Basingstoke and Deane (population 165,120) where the most births are seen, has a relatively young population, whilst Hart (population 91,189), has a much older population (table 2).

2.2 Stillbirths

The 2009/11 still birth rate across Hampshire is presented in table 3 and figure 1. Fareham has a stillbirth rate that is higher than the national rate. Hart also has a relatively high rate which is just below the England figure.

Table 2: Maternities and live births in Hampshire, 2011

Area of usual residence	Maternities	Maternity rate	Live births	Crude live birth rate
Basingstoke and Deane	2,333	68.9	2,367	14.0
East Hampshire	1,162	58.9	1,180	10.2
Eastleigh	1,524	62.5	1,547	12.3
Fareham	1,099	56.7	1,109	9.9
Gosport	1,022	64.5	1,036	12.5
Hart	1,005	60.6	1,023	11.2
Havant	1,330	63.1	1,344	11.1
New Forest	1,581	56.8	1,604	9.1
Rushmoor	1,450	68.7	1,462	15.5
Test Valley	1,287	62.2	1,310	11.2
Winchester	1,236	56.0	1,256	10.8
Hampshire	15,029	61.9	15,238	11.5
England	680,565	63.5	688,120	13.0

Source: Office for National Statistics (ONS)

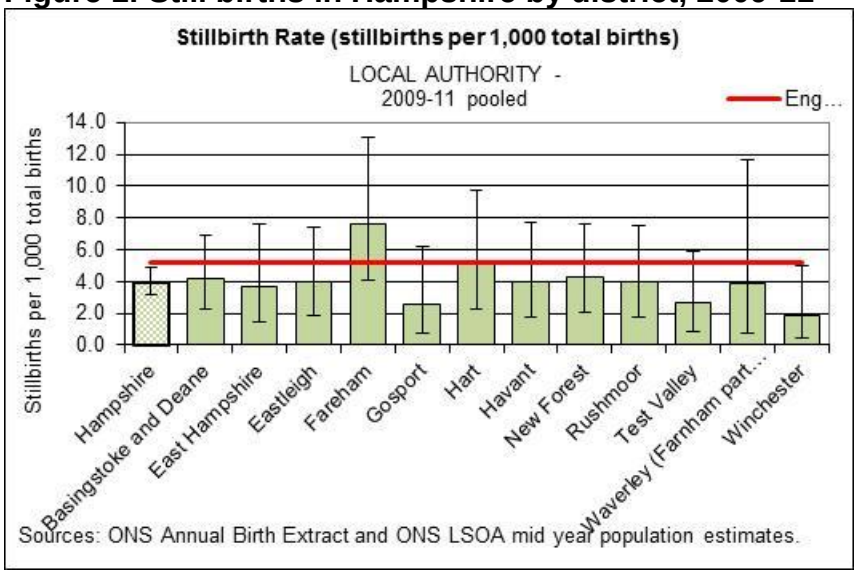
Rushmoor had the highest birth rate (15.5 births per 1,000 women) whilst the New Forest had the lowest birth rate (9.1 births per 1,000 women). This reflects the younger age structure of Rushmoor and the older age structure of the New Forest

Table 3: Stillbirths, crude rate per 1,000 births, 2009-11

Local Authority	Rate per 1,000 total births	95% Confidence interval	
		Rate LL	Rate UL
Basingstoke and Deane	4.2	2.3	6.9
East Hampshire	3.7	1.5	7.6
Eastleigh	4.0	1.9	7.4
Fareham	7.7	4.1	13.0
Gosport	2.5	0.7	6.2
Hart	5.0	2.2	9.7
Havant	4.0	1.8	7.7
New Forest	4.3	2.1	7.6
Rushmoor	4.0	1.8	7.5
Test Valley	2.6	0.9	5.9
Winchester	1.9	0.5	5.0
HAMPSHIRE	4.0	3.2	4.9
ENGLAND	5.2	5.0	5.3

Sources: ONS Annual Birth Extract and ONS LSOA mid-year population estimates. National Data: ONS Vital Statistics and ONS national mid-year population estimate

Figure 1: Still births in Hampshire by district, 2009-11



2.3 Population of childbearing women

Table 4 shows the distribution of women of childbearing age across Hampshire. Basingstoke and Deane (34,000), the New Forest (28,000) and Eastleigh (24,000) have the highest numbers of women of childbearing age (15 to 44).

Table 4: Proportion of childbearing women by Hampshire local authority area

District	2009		2010		2011	
	N (000s)	%	N (000s)	%	N (000s)	%
Basingstoke and Deane	33	13.9	33	13.9	34	14.0
East Hampshire	19	8.0	18	7.6	20	8.1
Eastleigh	24	10.1	24	10.1	24	10.1
Fareham	19	8.0	19	8.0	19	8.0
Gosport	16	6.7	16	6.7	16	6.5
Hart	17	7.1	17	7.2	17	6.8
Havant	20	8.4	20	8.4	21	8.7
New Forest	28	11.8	28	11.8	28	11.5
Rushmoor	21	8.8	20	8.4	21	8.7
Test Valley	21	8.8	20	8.4	21	8.5
Winchester	21	8.8	21	8.9	22	9.1
Hampshire	237.8	100.	237.2	100.	242.7	100.0
SOUTH EAST	1,656		1,655		1,680	
ENGLAND	10,530		10,521		10,725	

Source: ONS 2008-based Subnational Population Projections

2.4 Age of childbearing

Having a child at either extreme of childbearing age presents a greater risk for the mother and their babies. Older mothers have a greater chance of co-morbidities such as diabetes, high blood pressure or other chronic diseases and increased likelihood of stillbirths and multiple births. Younger mothers tend to have risky health behaviours and late access to maternity care. Babies born in Hampshire in 2011 were most likely to have a mother aged 25–34, with about two thirds of mothers

(57%) in this age group. A further 20% of babies were born to mothers aged under 25 and 22% to mothers aged 35 and over. The birth rate among mothers aged 30–34 was the highest at 124.3 births per 1,000 women, higher than the England rate of 112.2 births per 1,000 women.

The age at which women have their children has been increasing for some time and many women now have children in their late 30s and early 40s. Hart had the highest birth rate for women aged 40-44 (15.8 births per 1,000 women), followed by East Hampshire (15.1 births per 1,000 women). Rushmoor and Eastleigh have the highest birth rates for women aged over 45 (1.1 and 1.0 births per 1,000 women) respectively.

Childbearing among under 18 year olds is declining in Hampshire. New Forest and Winchester districts had the lowest birth rate for women aged under 18 (2.7 births per 1,000 women), while Gosport at 12.4 births per 1,000 women had the highest rate (tables 5 and 6). Information on teenage conceptions and maternities is covered in the chapter on *Sexual health.*

2.5 Fertility

Fertility rates, along with the size and age structure of the female population affect the number of births.

Total Fertility Rate (TFR): is the average number of live children a group of women would have, if they experienced the age-specific fertility rates of the year in question throughout their childbearing years. It provides an up-to-date measure of the current intensity of childbearing. Changes in timing of births may influence the TFR; for example if women are delaying childbearing to older ages the TFR may underestimate average family size. Increases in the numbers of foreign born women with high fertility rates may also influence the TFR. Fertility remains relatively stable in Hampshire compared to national figures (table 7). The fertility rate for 2011 give an average of 1.99 children per woman in Hampshire which is a decrease from 2.06 in 2010. Across Hampshire the TFR varies. In all local authority areas the TFR is higher than the England value (1.93) except in Fareham, Hart, the New Forest and Winchester.

General Fertility Rate (GFR): is the number of live births per thousand women aged 15–44. This age range is considered to be a woman's child-bearing years. The General Fertility Rate (GFR) for Hampshire in 2011 was 62.8 live births per thousand women aged 15–44, a slight decrease from 63.8 in 2010. Basingstoke and Deane had the highest GFR at 69.9 live births per thousand women aged 15-44, followed by Rushmoor (69.2) and Gosport (65.4). These three local authorities had GFRs higher than the England value.

2.6 Births by mother's country of birth

The childbearing picture for 2011 among women resident in Hampshire based on their country of birth is presented in table 8 with 14.7% of births to foreign born women. The number of births to women born in Asia and the Middle East was 689. Women born in EU[2] countries, however, made a greater contribution to the total number of Hampshire births in 2011 (852 births).

Table 5: Maternal age at birth in Hampshire, numbers, 2011

Area of usual residence	Age of mother at birth								
	Under 18	Under 20	20-24	25-29	30-34	35-39	40-44	45+	All ages
Basingstoke and Deane	27	101	344	612	779	453	73	5	2,367
East Hampshire	19	46	157	272	400	232	69	*	1,180
Eastleigh	21	65	245	415	484	267	66	5	1,547
Fareham	10	36	163	286	364	207	50	*	1,109
Gosport	19	75	244	308	255	126	28	-	1,036
Hart	13	25	102	202	387	245	59	*	1,023
Havant	23	86	303	411	322	166	*	*	1,344
New Forest	8	57	269	413	482	291	89	*	1,604
Rushmoor	15	54	292	448	417	199	48	*	1,462
Test Valley	12	58	210	336	403	252	*	*	1,310
Winchester	6	36	151	268	428	312	*	*	1,256
Hampshire	173	639	2,480	3,971	4,721	2,750	645	32	15,238
England	8,946	34,025	126,842	190,244	197,987	110,791	26,456	1,775	688,120

Source: Office for National Statistics (ONS)
** Denotes disclosure controlled to protect the confidentiality of individuals*
- Denotes nil

[2]EU country of birth groupings represent the European Union as constituted in 2009. It includes the New EU countries - Estonia, Latvia, Lithuania, Czech Republic, Hungary, Poland, Romania, Slovakia, Malta, Bulgaria, Cyprus (EU), Cyprus (not otherwise stated), Slovenia, Czechoslovakia not otherwise stated

Table 6: Maternal age at birth in Hampshire - rates/1000 women, 2011

Area of usual residence	Age of mother at birth								
	Under 18	Under 20	20-24	25-29	30-34	35-39	40-44	45+	All ages
Basingstoke and Deane	9.0	21.3	78.0	106.1	133.3	72.5	10.7	0.7	69.9
East Hampshire	8.1	12.7	61.0	111.4	136.8	64.5	15.1	0.8	59.8
Eastleigh	9.0	17.6	67.1	112.0	117.3	59.9	13.9	1.0	63.4
Fareham	5.0	11.0	61.6	104.5	133.8	58.0	11.2	0.6	57.2
Gosport	12.4	29.9	99.8	116.5	103.6	45.8	9.2	-	65.4
Hart	8.0	10.0	52.4	92.4	141.7	70.0	15.8	0.8	61.6
Havant	10.1	23.2	89.8	128.4	108.1	48.9	*	*	63.7
New Forest	2.7	11.8	67.7	107.5	119.2	57.1	14.7	0.4	57.6
Rushmoor	8.3	18.3	91.2	121.5	110.6	52.9	12.8	1.1	69.2
Test Valley	5.3	16.5	76.2	123.6	128.3	63.0	*	*	63.3
Winchester	2.7	9.2	37.0	94.6	131.8	82.0	*	*	56.9
Hampshire	7.1	16.3	70.8	111.0	124.3	62.2	12.8	0.6	62.8
England	9.4	21.0	71.2	103.9	112.2	62.7	13.5	0.9	64.2

Source: Office for National Statistics (ONS)
** Denotes disclosure controlled to protect the confidentiality of individuals*
- Denotes nil

Rushmoor had the highest proportion of births to foreign born women (25.9%), against a national rate of 25.5%. This was followed by Basingstoke and Deane (18.9%) and Hart (17.1%); with Havant at 7.8% having the lowest proportion of births to foreign born women. Rushmoor is the only local authority in Hampshire where births born to mothers born in Asia and the Middle East exceeded those to mothers whose country of origin was in the EU, possibly reflecting the 2009 Home Office arrangements on Gurkha[3] settlement in the UK.

The increasing number of births to women born in the EU does not necessarily imply that they have higher fertility than UK born women; it may be that there are more of these women living in Hampshire/ UK than previously. A common misconception is that areas with high proportions of births to foreign born mothers tend to have the

[3] Gurkhas are Nepalese soldiers in the British Army

highest fertility rates. However, there is no clear cut relationship between the proportion of births to foreign born mothers and the level of fertility in an area. We do not currently have robust routine data to be able to ascertain whether there are differences in the fertility levels of UK born and foreign born women at local authority level.

Table 7: Fertility rates in Hampshire, 2011

Area of usual residence	GFR[4]	TFR[5]
Basingstoke and Deane	69.9	2.11
East Hampshire	59.8	2.01
Eastleigh	63.4	1.94
Fareham	57.2	1.90
Gosport	65.4	2.02
Hart	61.6	1.92
Havant	63.7	2.05
New Forest	57.6	1.89
Rushmoor	69.2	2.04
Test Valley	63.3	2.09
Winchester	56.9	1.85
Hampshire	62.8	1.99
England	64.2	1.93

Source: Office for National Statistics (ONS)

[4] The General Fertility Rate (GFR) is the number of live births per 1,000 women aged 15–44. The GFRs have been calculated using mid-2011 population estimates based on the 2011 Census.

[5] The Total Fertility Rate (TFR) is the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan.

Table 8: Births by mother's country of birth, 2011

Area of usual residence of mother	All live births	Mothers born within UK	Mothers born outside United Kingdom							
			Total	% of all live births	EU		Rest of EU (Non EU)	Middle East & Asia	Africa	Rest of World
					New EU*	Total EU				
Basingstoke and Deane	2,367	1,920	447	18.9	127	183	22	133	74	35
East Hampshire	1,180	1,008	172	14.6	44	85	13	44	19	11
Eastleigh	1,547	1,356	191	12.3	35	69	8	67	29	18
Fareham	1,109	1,004	105	9.5	14	33	9	30	16	17
Gosport	1,036	924	112	10.8	20	37	~	39	15	18
Hart	1,023	848	175	17.1	33	64	5	46	39	21
Havant	1,344	1,239	105	7.8	18	39	11	28	18	9
New Forest	1,604	1,408	196	12.2	47	88	6	43	32	27
Rushmoor	1,462	1,083	379	25.9	40	84	9	176	75	35
Test Valley	1,310	1,129	181	13.8	47	90	~	50	18	19
Winchester	1,256	1,082	174	13.9	36	80	7	33	30	24
Hampshire	15,23	13,001	2,23	14.7	461	852	97	689	365	365
South East	107,1	83,381	23,7	22.2	5,377	8,53	989	7,81	4,283	2,127
England and Wales	723,718	539,269	184,429	25.5	37,057	55,037	7,527	68,496	38,504	14,865

Source: Office for National Statistics
~ Number suppressed to protect the confidentiality of individuals
**The 'New EU' constitutes the twelve countries (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia) which have joined the European Union since 2004. The twelve countries which have joined the European Union since 2004 are included in both the New EU and the Total EU column.*

2.7 Home births

In 2011, only 2.9% of births were at home. After relative stability between 2000 and 2004, there was a gradual rise in Hampshire's home birth rate, followed by a decline. Nationally the homebirth rate is 2.5%. Table 9 shows home birth rates by local authority across Hampshire. In 2011, the highest rates of home births were in Test Valley (6.8%) and Winchester (4.9%). Havant reported the lowest home birth rate at 2.1%.

Table 9: Percentage of home births by local authority area

District	Year											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Basingstoke and Deane	1.8	1.6	2.2	2.1	2.4	2.6	3.9	2.7	2.9	3.3	3.1	2.5
East Hampshire	3.2	2.9	1.5	2.6	2.3	3.9	5.3	4.2	3.7	3.3	2.3	2.4
Eastleigh	3.3	4.7	3.9	4.1	5.2	5.9	5.0	4.5	5.8	4.7	3.5	3.1
Fareham	1.9	2.1	1.9	1.9	1.3	2.7	4.5	3.5	2.8	2.3	2.2	2.2
Gosport	2.3	1.7	2.4	2.5	1.7	3.1	2.0	2.2	2.8	1.9	1.8	2.3
Hart	3.4	3.0	3.2	2.3	3.3	3.6	2.9	3.4	3.5	4.2	2.7	3.4
Havant	2.7	2.9	2.3	1.8	2.6	3.4	5.2	4.4	3.8	2.9	2.5	2.1
New Forest	2.6	2.1	3.1	2.7	3.3	3.3	3.4	4.4	3.8	3.8	3.3	2.2
Rushmoor	2.3	2.2	2.3	2.6	2.1	2.3	2.2	3.2	3.2	3.2	3.6	3.0
Test Valley	2.2	1.4	2.6	2.8	2.3	3.1	2.5	3.6	4.4	4.6	5.1	6.8
Winchester	3.5	3.8	4.2	6.3	4.7	7.4	6.1	6.4	5.8	6.1	4.9	4.9
Hampshire	2.7	2.7	2.8	2.9	2.9	3.6	3.9	3.8	3.8	3.4	2.9	2.9
ENGLAND	2.1	2.0	2.1	2.2	2.2	2.5	2.7	2.8	2.8	2.7	2.4	2.5

Source: BirthChoiceUK

2.8 Maternal mortality

A maternal death is defined as 'the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes". They are very rare and were documented at a UK level on a triennial basis by the CMACE[6], replaced by Mothers and Babies - Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE-UK) since January 2013. The findings of the 2006-08 triennium report showed the dramatic reduction in maternal mortality in the UK over the past 60 years. The current 3-year rolling average UK maternal mortality rate is 11.39/100,000 pregnancies. The women who died over this period tended to be older and more obese, had lifestyles which put them at risk of poorer health and were more socially disadvantaged when compared with the general pregnant population. There appeared to be a growing proportion of mothers with more medically complex pregnancies.

In Hampshire there were less than five maternal deaths between 2007 and 2009, so no valid statistical conclusion can be drawn from these small numbers. Maternal deaths are investigated thoroughly at a local level and recommendations made to ensure safe clinical practice and improved organisation of services following the learning that comes from these incidents.

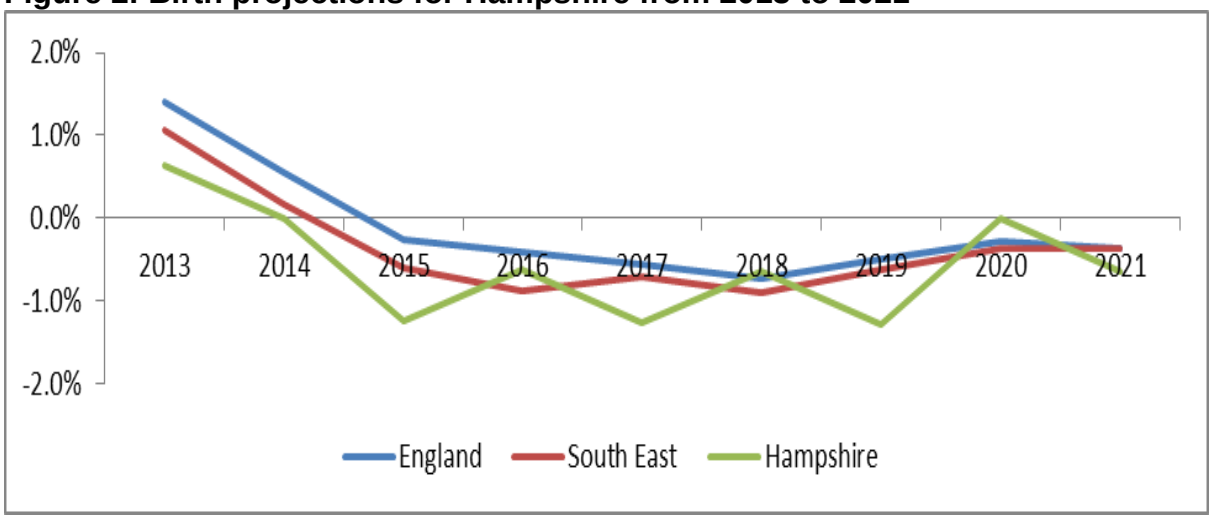
[6] Centre for Maternal and Child Enquiries (CMACE) Confidential Enquiries into Maternal Deaths in the United Kingdom -Saving Mothers' Lives

3. Projected service use and outcome in 3-5 years and 5-10 years

3.1 Birth projections for Hampshire

Knowing how the number of births is likely to change in the future helps to plan health service access, supported by appropriate access to education. The ONS Interim 2011-based birth projections (2013 to 2021) for Hampshire suggest that the previous rise in births may be starting to level off. It is hard to predict what future birth numbers will be due to changing fertility rates and the size and age structure of the female population. Although the projections account for some of the new housing developments, these can only be estimates. Birth projections in Hampshire follow the general trend for England and the South East but suggest greater fluctuation due to the smaller numbers. Figure 2 illustrates birth projections for Hampshire alongside those for England and the South East of England.

Figure 2: Birth projections for Hampshire from 2013 to 2021

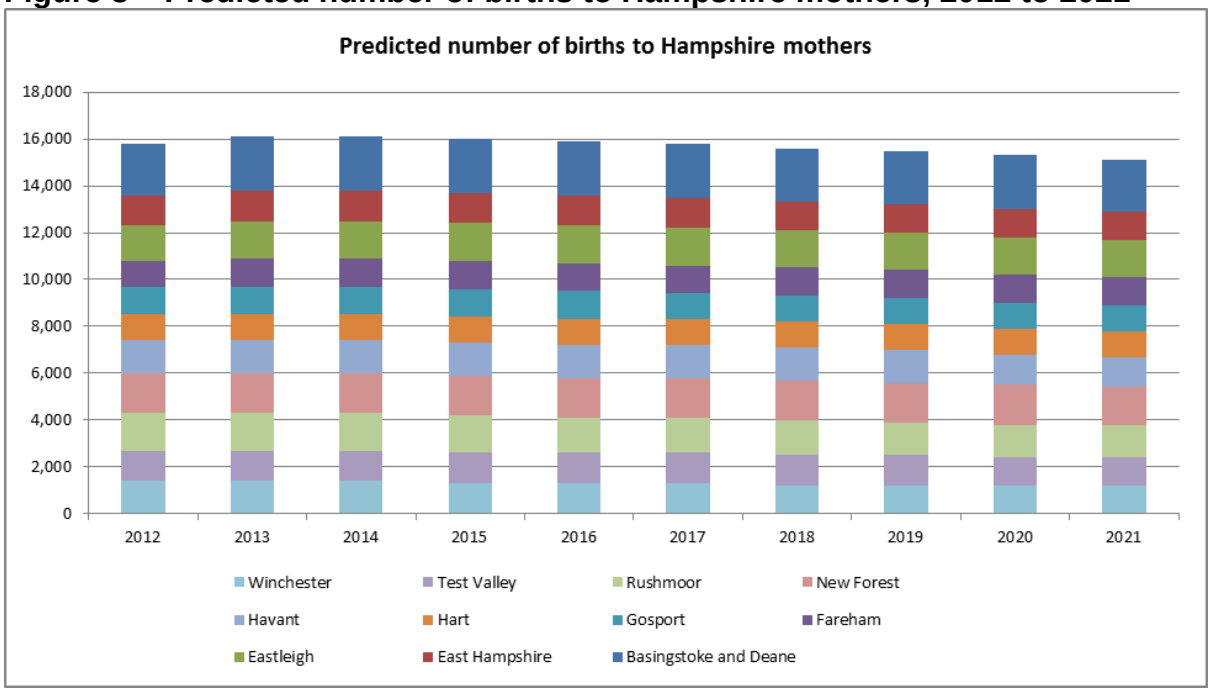


Source: ONS Interim 2011-based Subnational Population Projections

3.2 Birth projections by local authority

At a district level there is even greater uncertainty in any birth projections due to the smaller geographical areas and populations. However projections suggest that the number of births in most local authority areas will remain fairly stable in the coming years (figure 3).

Figure 3 – Predicted number of births to Hampshire mothers, 2012 to 2021

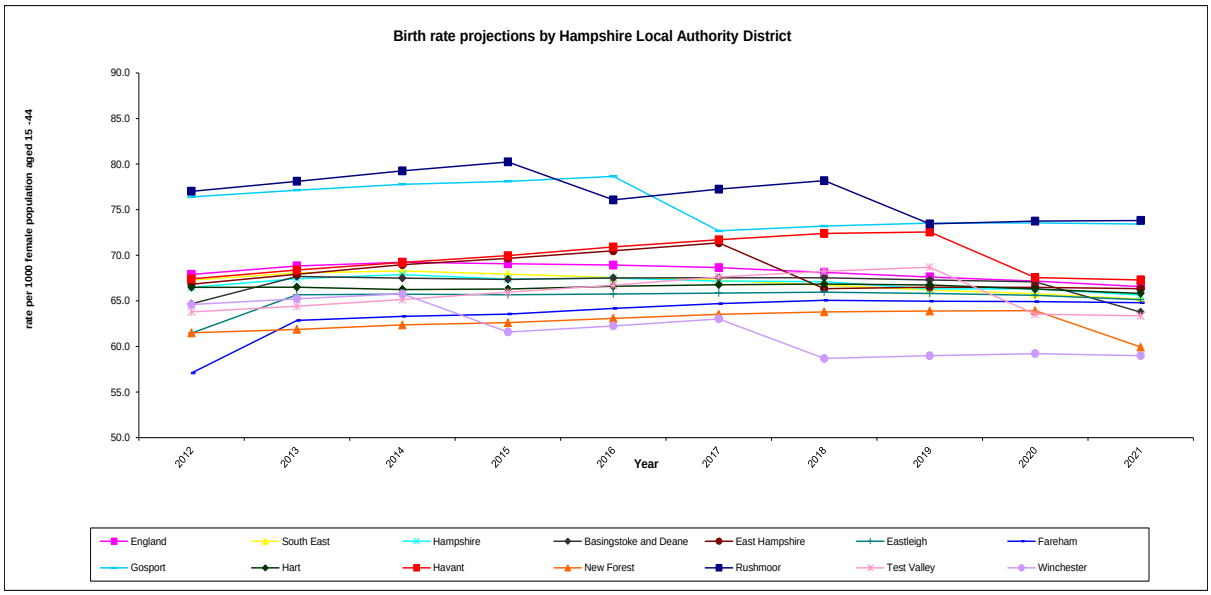


Source: ONS Interim 2011-based Subnational Population Projections

3.3 General Fertility Rate (GFR) projections

General fertility rate projections for Hampshire (figure 4) show an increase until about 2015, followed by a decline. Rushmoor and Gosport appear to continue to experience high GFRs, whereas the increasing GFR appears to be sustained over a relatively longer period in Havant.

Figure 4: Predicted general fertility rates by local authority area, 2012 to 2021



Source: ONS Interim 2011-based Subnational Population Projections

Changing birth rates are also influenced by migration. A recent HPA report[7] on the health needs of migrants in the south east of England, highlights the important role migration plays in birth projections and challenges facing maternity and child health services. 85% of migrants are between 15-44 years. In Hampshire this may be attributed to the inward migration of foreign born women of reproductive age from EU countries and recent changes to immigration rights of Nepali Gurkhas. Women born outside the UK tend to have a higher TFR than UK born women. In 2011 the estimated TFR for foreign born women was 2.28 children per woman, compared with 1.89 for UK born women[8].

Looking to the future, the contribution of foreign born women to the numbers of births in Hampshire is not straightforward to assess, since assumptions need to be made about future levels of in-migration, out-migration and fertility. The impact of the economic environment on future fertility represents a further 'unknown'. Theories on the direct impacts of economic recession on fertility are inconsistent. For example, some people may choose to delay childbearing or limit family size due to financial uncertainty. Conversely, others may choose to start or expand a family if they are unable to gain satisfactory employment. These impacts may vary by age and other characteristics[9].

3.4 Population projections of childbearing women

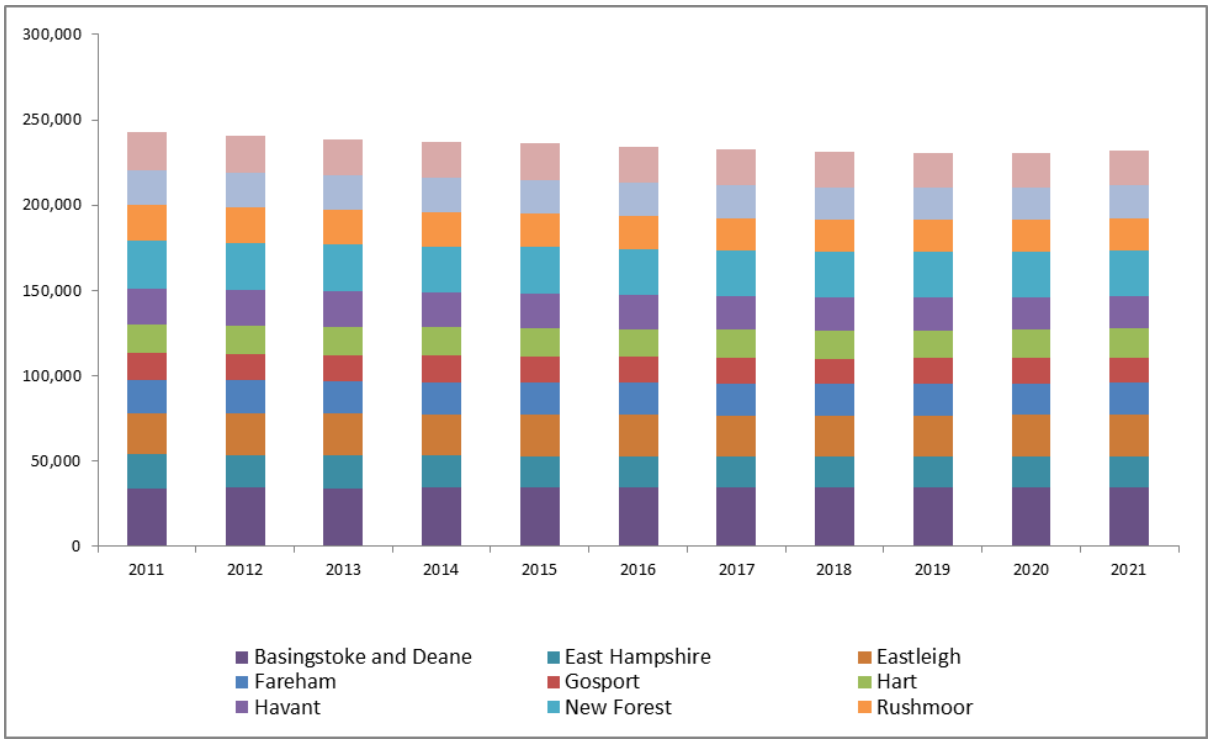
Population projections of the numbers of childbearing women (15-44) in Hampshire's local authority areas suggest that in general they will remain fairly stable (figure 5).

[7] Health Protection Agency, Department of Health. Understanding the health needs of migrants in the South East region: A Report by the South East Migrant Health Study Group on behalf of the Department of Health. Health Protection Agency, 2010

[8] Source: Office for National Statistics, Birth registrations and Annual Population Survey, 2011 cited in http://www.ons.gov.uk/ons/dcp171766_283876.pdf

[9] www.ons.gov.uk/ons/rel/vsob1/parents.../faq-births-and-fertility.pdf

Figure 5: Population projections of childbearing women in Hampshire, 2011 – 2021



Source: ONS Interim 2011-based Subnational Population Projections

4. Current services in relation to need

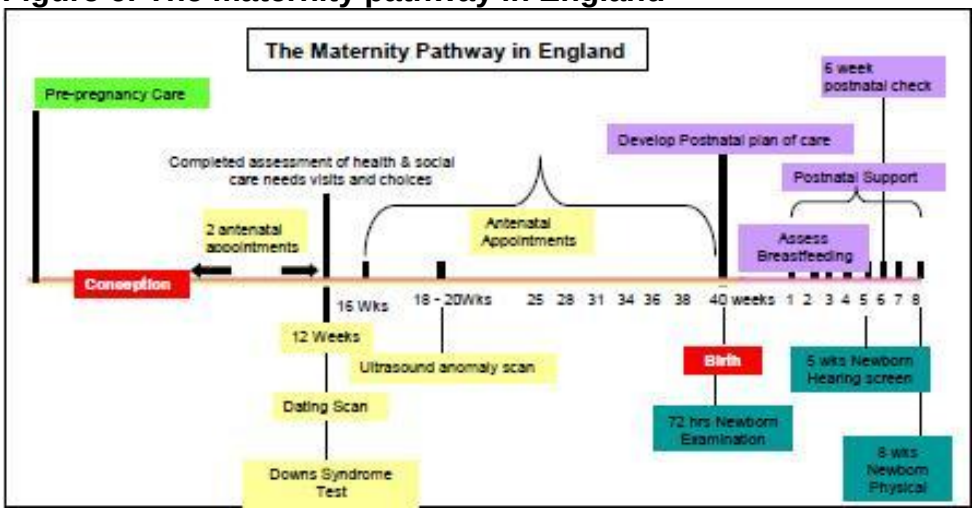
4.1 Maternity services

Maternity services are provided by acute hospitals to care for women from when they become pregnant to around 10 days after the birth when the midwife hands care over to the health visitor. It is important to note maternity services differ from many other healthcare services in England as their aim is to keep healthy women well and prevent avoidable problems to mother and fetus/baby. The components of maternity services are typically divided into the three stages of pregnancy: antenatal, intrapartum (birth) and post natal care. In addition, neonatal care can be seen as an extension of maternity care as the baby has not yet been discharged home (figure 6).

4.2 Maternity assessment

In England, women should be able to access maternity services for a full health and social care assessment of needs, risks and choices by 12 completed weeks of their pregnancy. The assessment informs a personalised approach to maternity care to optimise the outcome of the pregnancy. Decreasing the proportion of women accessing maternity services late reduces health inequalities faced by vulnerable and socially excluded groups of women. Data for the percentage (over 97%) of pregnant women in Hampshire accessing maternity services within 12 weeks (table 9) compares well with the national figure of 70.5% (340,767). Migrants tend to feature as late presentations for 12-week bookings in maternity services (HPA Migrant Health Report).

Figure 6: The maternity pathway in England



Source: Shaping the Future - A Sustainable Maternity Workforce for South Central. August 2010

Table 9: Access to Midwifery, 2011/12

	Number (%) of women who have been seen by a midwife or maternity health professional for health and social care assessment of needs, risks and choices by 12 weeks and 6 days of pregnancy	Number of women who have seen a midwife or a maternity healthcare professional, for health and social care assessment of needs, risks and choices at any time during pregnancy
Q1 - 2011/12	3506/ 3,596 (97.5%)	4065
Q2 - 2011/12	3532/ 3,821 (92.4%)	4114
Q3 - 2011/12	3372/ 3,760 (89.7%)	3932
Q4 - 2011/12	3651/ 3,664 (99.6%)	4171

Source: Department of Health: Unify2 data collection - IPMR

Older mothers, increasing numbers of obese women becoming pregnant, assisted conception leading to higher rates of multiple births and impacts on neonatal services, women with complex conditions needing extra care during pregnancy and childbirth, and increasing ethnic diversity, leading to communication and other social and clinical challenges all impact on maternity service delivery.

4.3 Smoking during pregnancy and at delivery

Smoking while pregnant has significant detrimental health effects on both mother and baby. Adverse outcomes include increased risk of miscarriage, fetal growth restriction and perinatal death. The chapter on Lifestyles deals specifically with the issue of *Smoking during pregnancy and at delivery*.

4.4 Maternal obesity

Obesity at any time of life is a significant health risk; during pregnancy it carries significant additional risks for both mother and baby. There are no local data on the prevalence of maternal obesity in Hampshire. However, a Centre for Maternal and Child Enquiries (CMACE) study[10] considered maternal obesity (BMI ≥35). The UK prevalence rate of women with a BMI ≥35 at any time during pregnancy is 4.99% - 1 in 20 pregnancies. The South Central Strategic Health Authority (SHA) at 5.66% had the second highest overall rate of women with a BMI ≥35 at any point during pregnancy. Key findings from the recent *Centre for Maternal and Child Enquiries (CMACE) Maternal obesity in the UK* review include:

- Babies of women with a pregnancy BMI ≥35 have an increased risk of perinatal mortality compared with those of the general maternity population in the UK. Obese women are approximately twice as likely to have a stillborn baby as women with a healthy BMI.
- Approximately 20% of the singleton babies were large for their gestational age (LGA), defined by weight ≥90th percentile for gestation, which is twice as high as expected in the general population of births. LGA babies were more common among each increasing BMI group, with one third of women with a BMI ≥50 having a LGA baby, compared to 16% born to women with a BMI 35-39.9.
- While the effects of low birth weight are well known, the literature on the effects of high birth weight is sparse. With increasing obesity rates, high birth weight has become a potential concern and has been associated in the medical literature with an increased likelihood of becoming an overweight child, adolescent, and subsequently an obese adult.
- Neonatal unit admissions (within 48 hours of birth) correlated directly with maternal BMI. Among babies born at term (37-42 weeks' gestation), the neonatal unit admission rate was 4.2%, 5.9% and 9.9% for those born to mothers with a BMI 35-39.9, BMI 40-49.9 and BMI ≥50, respectively.

4.5 Perinatal mental health

Postnatal depression (PND) is often unrecognised but at least one in ten new mothers experiences PND[11]. PND is usually assessed by health visitors, using the Edinburgh Postnatal Depression Scale questionnaire within the first two months after the birth. Prevalence of PND is difficult to assess. However, using the NICE benchmarking tool[12] and 2011 births data, table 10 estimates number of women affected in Hampshire.

Table 10: estimated number of women in Hampshire affected by postnatal depression and other birth-related mental disorders in 2011

Numbers of births 2011	15,238
Suffering depression in the postnatal period (10%)	1,524
Mental disorder requiring referral for psychological therapies (80 per 1,000 deliveries)	1,220

[10] Centre for Maternal and Child Enquiries (CMACE). Maternal obesity in the UK: Findings from a national project. London: CMACE, 2010

[11] Mind website - http://www.mind.org.uk/help/diagnoses_and_conditions/post-natal_depression

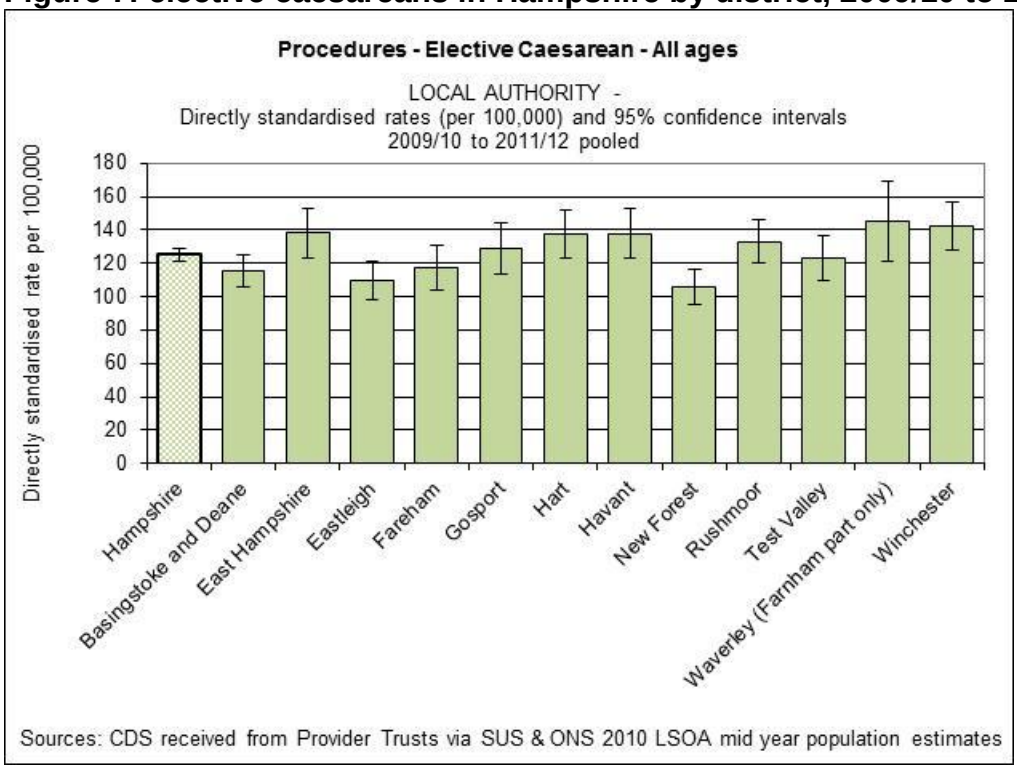
[12] National Institute of Clinical Excellence Commissioning Guide for Antenatal and Postnatal Mental Health (2008)

Mental disorder requiring referral to a specialist perinatal mental health service (40 per 1,000 deliveries)	610
Psychotic episode requiring in-patient admission (0.2%)	30
Non-psychotic depression requiring in-patient admission (0.2%)	30
Pre-existing serious mental illness complicating and affecting birth (0.2%)	30

4.6 Caesarean section rates

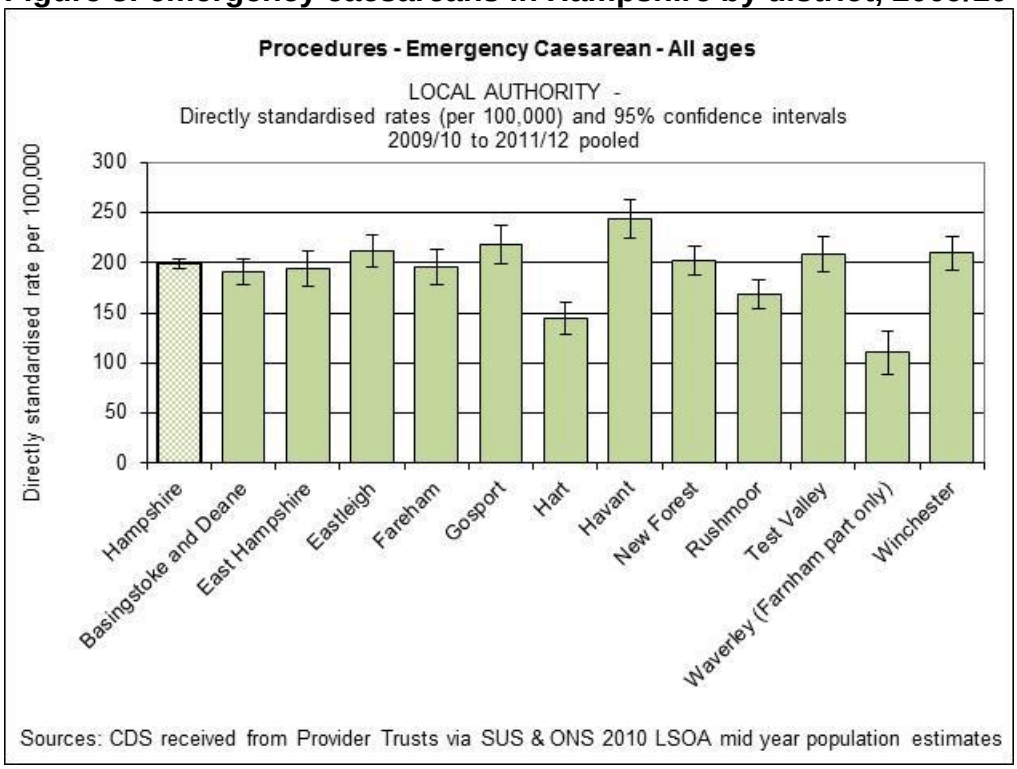
In Hampshire the directly standardised caesarean section rate was 125/100,000 for planned procedures, and 199/100,000 for emergency procedures. For planned procedures the rate was the highest in Winchester, East Hampshire, Hart and Havant and for emergency procedures, Havant, Gosport and Eastleigh, had the highest rates (see figures 7 and 8).

Figure 7: elective caesareans in Hampshire by district, 2009/10 to 2011/12



The caesarean section rate as a percentage of all deliveries for Hampshire is 23.2%, of which 9.7% were elective caesarean sections. The national caesarean section rate was higher at 25.0% in 2011/12. There is no agreed optimum rate. About 40% of caesarean sections are elective and planned and 60% are carried out as an emergency.

Figure 8: emergency caesareans in Hampshire by district, 2009/10 to 2011/12



5. User and provider views

5.1 Women's experiences of maternity care in England: Key findings from the 2010 NHS trust survey

The 2010 Care Quality Commission (CQC) survey was conducted between April and August 2010, based on responses of women who gave birth in February 2010 and had recently used maternity services. It relates directly to care provided by the acute hospital trust. The survey covered different aspects of the care they received during their pregnancy, labour and birth and in the weeks following the birth. Each NHS acute trust received scores out of 10. A higher score is better.

Results of each NHS acute trust from which Hampshire women access maternity services are detailed in table 11. Overall, women reported improvements in their care since the 2007 survey. However, the survey highlights the need for changes in postnatal care in particular support for breast feeding and the early detection of significant emotional or psychological changes experienced during the postnatal period.

Table 11: CQC Summary scores by main NHS acute Trusts, 2010

Aspects of the care received	Portsmouth Hospitals NHS Trust	Winchester and Eastleigh Healthcare	Basingstoke and North Hampshire NHS Foundation Trust	Southampton University Hospitals	Frimley Park Hospital NHS Trust	Western Sussex Hospitals NHS Trust	Poole Hospital NHS Foundation Trust	Salisbury NHS Foundation Trust	Royal Surrey County Hospital NHS Foundation Trust	The Royal Bournemouth and
Care during pregnancy (antenatal care) - [Questions on: Choice of home birth, Reason for dating scan, Reason for Down's syndrome screening, Reason for 20 week scan]	8.4	8.8	8.4	8.9	8.5	8.5	8.6	8.8	8.5	9.4
Labour and birth - [Questions on: Moving during labour, Pain relief during labour and birth, Time taken for stitches, Skin to skin contact]	7.4	7.5	7.9	7.3	7.9	8	7.4	8.2	8	N/A
Staff during labour and birth - [Questions on: Confidence and trust, Partners or companions made welcome, Being left alone, Clear communication, Involvement in decisions, Overall care]	8.2	8.5	8.9	8.7	9.1	8.9	8.6	9	8.8	9.5
Care in hospital after the birth (postnatal care) - [Questions on: Length of hospital stay, Information and explanations, Kind and understanding care	6.7	7	7.6	7.6	7.4	7.3	7.2	8	7.7	7.7
Feeding the baby during the first few days -[Questions on: Consistent advice, Active support]	5.9	5.4	6.3	6.5	6.4	6.3	6.1	7	6.2	6.2

Source: Care Quality Commission (CQC) survey of women's experiences of maternity services 2010

	Score better than scores for other trusts
	Score about the same as scores for other trusts
	Score worse than scores for other trusts

5.2 Maternity Service Liaison Committees

Maternity Service Liaison Committees (MSLCs) are a forum for maternity service users, providers and commissioners of maternity services to come together to design services that meet the needs of local women, parents and families. The MSLC is an independent advisory group whose role is to inform and influence the provision of maternity care to meet the local population needs. They used to be statutory but where MSLCs do not exist or do not work well, clinical commissioning groups (CCGs) may need to find new and innovative ways to include a user perspective as part of their overall patient and public involvement strategies.

In Hampshire there are three local committees:

- North Hampshire MSLC
- West Hampshire MSLC
- Portsmouth and South East Hampshire MSLC

They also work together as a core Hampshire MSLC which meets three times a year.

6. Evidence of what works

- National Institute for Health Research Service Delivery and Organisation (NIHR SDO) programme - 'Birthplace in England' research programme, 2011, 2012
- NICE public health guidance 3 - Prevention of sexually transmitted infections and under 18 conceptions, 2007
- NICE public health guidance 11 - Maternal and child nutrition, 2008
- NICE public health guidance 26 - Quitting smoking in pregnancy and following childbirth, 2010
- NICE guidance - Smoking cessation - acute, maternity and mental health services, *in progress*
- NICE public health guidance 27 - Weight management before, during and after pregnancy, 2010
- NICE clinical guideline 45 - Antenatal and postnatal mental health, 2007
- NICE clinical guideline 62 - Antenatal care, 2008
- NICE clinical guideline 110 - Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors, 2010
- NICE quality standards 22 - Antenatal care, 2012
- NICE guidance - Antenatal and postnatal mental health: clinical management and service, *in progress*

7. Recommendations

- Focus on promoting the birth pathway through the 'Normalising Birth programme' using national resources such as the NHS Institute toolkit to help maternity services review and assess their current practice in promoting normal birth and reducing Caesarean section rates.
- Further develop the integration of maternity services with pre-conceptual, health visiting and school nursing services, as well as primary care, specialist services and the voluntary sector, to improve outcomes across the life course.
- Emphasise the contribution of both antenatal and postnatal care to long term health, as well as the actual birth event. This includes improving perinatal mental health pathways and services.
- Ensure appropriate support for and focus on reducing, the increase in high risk pregnancies.
- Address the low home birth rate in Hampshire.
- Address and highlight the ten key recommendations in response to the findings in the Centre for Maternal and Child Enquiries (CMACE) report Maternal obesity in the UK: Findings from a national project.
- Improve the intelligence to comprehensively describe demography, trends and maternity outcomes in Hampshire. Maternity data recording of country of origin needs to be available to inform future service commissioning.