HEALTH SCRUTINY COMMITTEE
DATE OF MEETING 23.03.17
TITLE OF AGENDA ITEM Maternal Health in Nottingham City

1 Purpose

The purpose of this report is to provide the Healthy Scrutiny Committee with an update on maternal health in Nottingham City. An integral part of this is to update on the national report '*Better Births, Improving outcomes of maternity services in England: A Five Year Forward View for maternity care'* which was published in 2016[1] and associated action in Nottingham City.

2 Action required

The Committee is asked to scrutinize the local strategic approach to maternal health in Nottingham City and consider actions to improve the health and wellbeing of mothers and babies.

The Consultant in Public Health and colleagues will outline how partners are working together across Nottingham City to improve the health and wellbeing of mothers and babies in order to inform discussion.

3 Background information

3.1 Introduction

Better Births: Improving Outcomes of Maternity Services in England (2016)

Baroness Cumberlege, chaired a review of maternity services in England which culminated in the publication of this report. She acknowledged that the quality and outcomes of maternity care have improved significantly in the 20 years since she oversaw the publication of *Changing Childbirth*. For example, there has been a 20% fall in stillbirth and neonatal mortality rates despite the increasing complexity of many women's health needs.

However the review also found evidence of opportunities for improvement in the safety and quality of maternity services across England and has made the following recommendations that must be delivered by 2020, in line with the *Five Year Forward View* timescale.

[1] https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf

1. **Personalised Care,** centred on the women, her baby and her family, based around their needs and their decisions, where they have genuine choice, informed by unbiased information.

2. **Continuity of Carer**, to ensure safe care based on a relationship of mutual trust and respect in line with the woman's decisions.

3. **Safer Care,** with professionals working together across boundaries to ensure rapid referral, and access to the right care in the right place; leadership for a safety culture within and across organisations; and investigation, honesty and learning when things go wrong**.**

4. **Better postnatal and perinatal mental health care**, to address the historic underfunding and provision in these two vital areas, which can have a significant impact on the life chances and wellbeing of the woman, baby and family.

5. **Multi-professional working**, breaking down barriers between midwives, obstetricians and other professionals to deliver safe and personalised care for women and their babies.

6. **Working across boundaries**, to provide and commission maternity services to support personalisation, safety and choice, with access to specialist care whenever needed.

7. **A payment system** that fairly and adequately compensates providers for delivering high quality care to all women efficiently, while supporting commissioners to commission for personalisation, safety and choice.

3.2 Progress in Nottingham and Transformation Programme Structure

In order to implement the recommendations outlined in *Better Births* a local Maternity Transformation Steering Group was established in 2016. The Steering Group has evolved to cover Nottingham City and Nottinghamshire County in order to be co-terminus with the Sustainability and Transformation Plan (STP) and develop a Local Maternity System (LMS), covering a population of 500,000 to 1.5 million, as recommended by the national guidance. Members include CCGs, providers of maternity services and public health.

In Nottingham City, a local maternity review was undertaken in 2013-14 and some progress toward the priorities outlined in *Better Births* has already been made. For example:

Personalised Care

- The launch of two birthing units in 2015 has increased choice for a midwifery-led birth.

- 'Pocket Midwife' app developed by NUH has improved access to locally targeted and free pregnancy information in a digital format.

- Close collaboration between Nottingham University Hospitals NHS Trust and East Midlands' Regional Clinical Network to develop care pathways for high risk pregnancy and foetal medicine.

- 'Partnership in Maternity' (our Maternity Service Liaison Committee) actively engages women across Nottinghamshire through quarterly surveys to capture women's experiences and of specific aspects of maternity care to support service development. The group takes into account the views of service users, in the commissioning and delivery of maternity services. The group draws upon their diverse skills and experiences to influence the development of services for pregnancy, labour, birth and the care of the family up to the end of the postnatal period. The ultimate aim is to improve services for the benefit of users.

Continuity of Carer

- The St Ann's Community Midwifery team undertook a pilot implementing a continuity of carer model which evaluated positively. Satisfaction was high among pregnant women who had antenatal appointments with the same midwife, or a midwife from the same midwifery team. Staff also evaluated the pilot positively. This pilot is being rolled out, with continuous evaluation, across more teams.

Safer Care

- Large numbers of women in Nottingham City are assessed by maternity services as having 'complex social factors', which carries an uplift payment in tariff for antenatal care. In 2016[2] an audit found that 1,605 pregnant women in Nottingham City (out of approximately 4200 births annually) were on complex social factors caseloads and required additional support in pregnancy. This

[2] 2015/16 case file audit undertaken by Public Health, Nottinghamshire County Council (August 2016)

includes pregnant teenagers, refugee/asylum seekers, women identified with substance misuse and those with mental health problems. Fewer women with a complex social factors access maternity services by 12 weeks and 6 days. The learning is being used to improve pathways and services; and will require a multi-professional, multi-agency approach to address improving early access to maternity services for these women.

- Regularly monitoring access to maternity services by 12 weeks 6 days, as per NICE guidelines, in the contract performance. The reasons for late access are subject to ongoing review, including by audit.

- Glucose Tolerance testing is offered in the community for women at risk of gestational diabetes.

Better Postnatal and Perinatal mental healthcare

- A steering group was established in 2016 in order to implement an improved pathway across Nottingham and Nottinghamshire, with clinical, provider and commissioning representation.

- The pathway will provide support for all women from preconception care (targeting women of child bearing age and women having mental health medication), antenatal care from a midwife and up to 1 year post-birth.

- Developing screening algorithm and tool for mental health to facilitate direct referral from midwives and health visitors to Improving Access to Psychological Therapies (IAPT).

- Improving information sharing to ensure women can be supported and treated in the right place, and all health professionals can escalate quickly to perinatal psychiatry and the Mother and Baby unit where required.

Multi-professional working and working across boundaries

- Developed pathways into maternity services for women with high risk pregnancy and foetal medicine.

- Developing improved pathways into perinatal mental health support and care pathways for women with complex social factors, including promoting earlier access, as described above.

- Women can access maternity services directly by telephoning the local midwifery team to increase access to a booking appointment by 12 weeks and 6 days.

3.3 Integrated Assessment Framework

The Improvement and Assessment Framework (IAF) in 2016/17 included four indicators for maternity services. Performance in Nottingham City CCG on stillbirths and neonatal deaths and for smoking in pregnancy are not at the expected standards and are an area of focus (data for stillbirths relates to 2014/15). Performance in the Care Quality Commission Survey of women's experience and choice is on par with rates nationally, and is regarded as 'good'.

3.4 Actions being taken to improve performance

Perinatal deaths (stillbirths and deaths within 28 days of birth)

The Secretary of State announced a national ambition to halve rates of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2030, with a 20% reduction seen by 2020.

In-conjunction with the CCG and Nottingham University Hospitals NHS Trust Nottingham City Public Health Team is undertaking a review of perinatal deaths, including stillbirths, to identify any themes and consider any actions that need to be taken to reduce the number of perinatal deaths. The review will report in April 2017.

In addition to this, providers have been asked to review their systems and processes against the recommendations outlined in *Saving Babies Lives* (2016). This was the 'care bundle' to prevent stillbirth and neonatal deaths published by the National Review team, which recommends best practice to be implemented in health surveillance, care and support to reduce the modifiable risk factors associated with still birth and neonatal deaths e.g. undetected poor foetal growth and smoking in pregnancy. This will be reviewed in May 2017.

Smoking at Time of Delivery

In Nottingham City in 2015/16 18.7% of mothers were smokers at the time of delivery which, as figure 1 illustrates, is higher than the regional and England average. In addition, local intelligence suggests that rates of maternal smoking vary significantly across the city with more mothers smoking in Bulwell and less in Wollaton.

2.03 - Smoking status at time of delivery 2015/16 — Proportion - %

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	↓	67,195	10.6*	10.6	10.7
East Midlands region	↓	5,833	13.7*	13.3	14.0
Derby	→	445	14.2	13.0	15.5
Derbyshire	↓	1,065	14.2	13.5	15.1
Leicester	→	583	11.4	10.6	12.3
Leicestershire	↓	705	10.0*	9.3	10.7
Lincolnshire	–	-	*	-	-
Northamptonshire	↓	1,168	13.9	13.1	14.6
Nottingham	–	800	18.7	17.5	19.9
Nottinghamshire	–	1,177	14.5	13.8	15.3
Rutland	–	-	*	-	-

Source: Calculated by KIT East from the Health and Social Care Information Centre's return on Smoking Status At Time of delivery (SSATOD)

Figure 1: Proportion of mothers smoking at the time of delivery
Source: Public Health Outcomes Framework

Nottingham City CCG has received £75,000 from NHS England to support local plans to address the high maternal smoking rates. This funding will be used to support the purchase of carbon monoxide monitors, health promotion resources and training for midwives both in the use of equipment and in engaging with women who may be smoking in pregnancy. Implementation of the agreed actions will be monitored by a sub-group of the Local Maternity System Meeting which meets bi-monthly, with representation from Public Health, the CCGs and providers.

Smoking in Pregnancy by Ethnicity[3]

Medway maternity data[4], 2014-15, shows that 53% of all the 4,203 live births were to 'any BME' identifying mothers (including White Other). 45% of live births were to White British mothers; 27% of these births were to British mothers who smoked. The largest BME pregnant smoker group were women who identified as Mixed Race accounting for 16.5% of the total pregnant smoker population.

As figure 2 illustrates, information on the smoking status at time of delivery by ethnicity is not well recorded. Further investigation would provide a more accurate representation of what proportion of pregnant smokers are from White British or BME groups and enable the targeting of interventions towards these groups.

[3] This information is taken from a Health Equity Audit undertaken in 2016
[4] Nottingham University Hospital's maternity data recording system

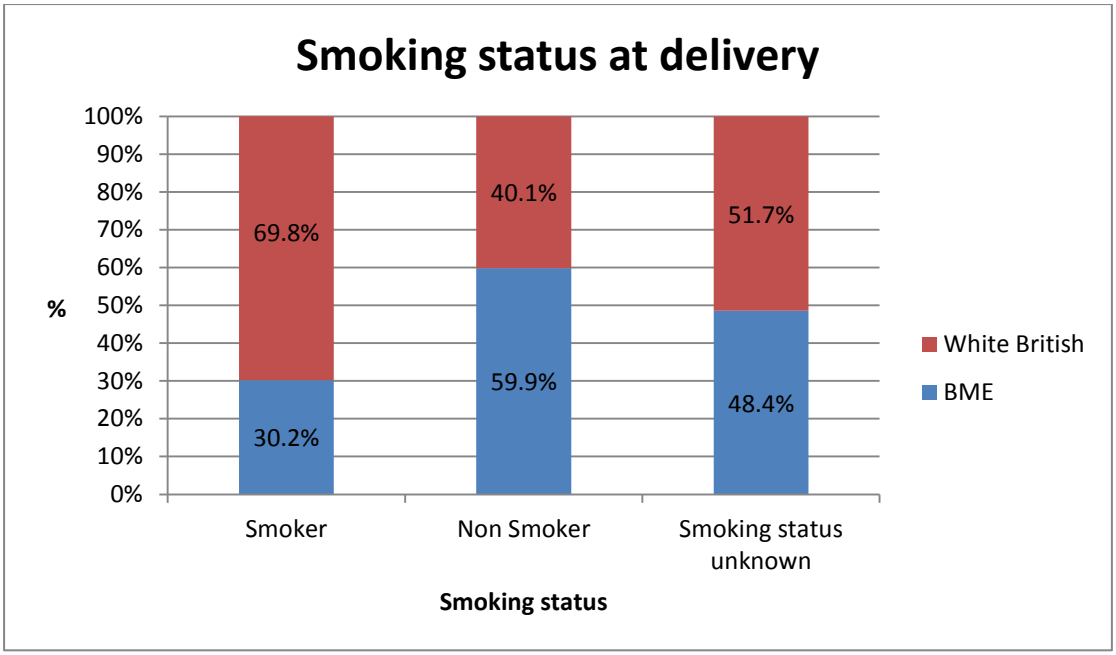

Figure 2: *Proportion of white British and BME pregnant women within Nottingham CCG, smoking status recorded at delivery.*
Source: Medway Maternity April 2014 - March 2015.

An analysis of the ethnicity data from both New Leaf stop smoking service and Medway maternity data from NUH shows that of all the pregnant women referred to the New Leaf programme, the uptake from White British mothers has been the least successful. 68% of mothers who were smokers at the time of delivery were White British but a lower proportion of pregnant smokers (63%) were accessing New Leaf compared to the non-pregnant female population (76%). This evidence suggests more work need to be carried out to further engage white British pregnant smokers with the New Leaf smoking cessation programme.

Equity of Access/Vulnerable women with complex social factors

Women with complex social factors are far less likely to seek antenatal care early in pregnancy or to stay in contact with maternity services. Delays in accessing maternity care often results in worse outcomes for both mother and baby. The four key groups (Table 1) highlighted in the recent Confidential Enquiry into Maternal and Child Health (1) reports as having poorer pregnancy outcomes were:

1) *Women who misuse substances (alcohol and/or drugs)* - maternal misuse of drugs during pregnancy increases the risk of low birth weight, premature delivery, perinatal mortality and Sudden Infant Death (SIDs) (1).Structural damage to the foetus is most likely during 4-12 weeks of gestation; drugs taken later can affect growth or cause intoxication or withdrawal syndromes (1). Alcohol is classed as a Teratogen which causes harm to the foetus by interrupting the correct coding of

amino acids which leads to the development of abnormal proteins and ultimately damages the frontal lobe of the brain. The function of the frontal lobe of the brain is executive function for example development of sensory processes and the development of fine motor skills.

A number of risks are associated with drinking alcohol during pregnancy, including:

- Increased risk of miscarriage.

- Risk of Foetal Alcohol Syndrome (FAS) whose features include: growth deficiency for height and weight, a distinct pattern of facial features and physical characteristics and central nervous system dysfunction.

- Risk of Foetal Alcohol Spectrum Disorders (FASD), Alcohol Related Birth Defects (ARBD) and Alcohol Related Neurodevelopment Disorder (ARND) – which do not show the full characteristics of FAS and develop at lower levels of drinking.

- Increased risk of learning disability (without either of the above conditions).

It is estimated that approximately 1% of deliveries are to women with drug misuse problems (2) and a similar number to problem alcohol users. A recent cross sectional study found a quarter of women reported drinking alcohol despite being aware they are pregnant report.

2) *Women who experience domestic abuse* - A number of studies suggest there can be an increased incidence of domestic violence during or shortly following pregnancy.

3) *Women who are recent migrants, asylum seekers or refugees, or who have difficulty reading or speaking English*- Black African women including asylum seekers and newly arrived refugees have a maternal mortality rate nearly six times higher than white women (1). In addition, it has been found that the proportion of infant deaths is disproportionately higher than amongst other ethnicities. It is estimated that births to African-Caribbean, non-EU and Asian (Pakistani, Indian, Bangladeshi) born women total around 10.2% of total births (1).

4) *Young women aged under 20* - Teenage mothers are at increased risk due to late presentation and the mother's lifestyle and diet. The proportion of births to women under-20 years in England was 5.2% during 2013.

Table 1 gives estimates the number/proportion of live births for the four main exemplar groups of women considered in the guideline on ‘Pregnancy and complex social factors’ (NICE clinical guideline 110).

Group	Percentage (estimate)	Number of births
Women who misuse substances (alcohol and/or drugs)	4.5%	30,200
Women who are recent migrants, asylum seekers or refugees, or who have difficulty reading or speaking English	10.2%	68,400
Young women aged under 20	6.1%	40,900
Women who experience domestic abuse	7.0%	47,000

Table 1: Breakdown of births in England by exemplar group
Source: NICE, 2010. Costing statement: Pregnancy and complex social factors (2)

It should be recognised that vulnerable women may experience a number of complex social factors at the same time.

In addition to the above, the national maternity pathway payment system also identifies that pregnant women with a learning disability, who are homeless and where there are safeguarding concerns will also require increased support.

Complex social factors in Nottingham City

Table 2 shows the number and percentage of pregnancies to women in Nottingham with complex social factors during 2014/15.

Complex social factor	**Number (%) of births** *(Number of births = 4886)*
Aged under 20 years	313 (6.4%)
Recent migrants, asylum seekers or refugees, or those who have difficulty reading or speaking English	319 (6.5%)
Experiencing domestic abuse	Data not available
Misuse substances (drugs or alcohol)	113 (2.3%)
Learning disability	35 (0.7%)
Homeless	Data not available
Mental health issues	864 (17.7%)

Table 2: Number (and percentage) of pregnancies to women with complex social factors (2014/15)
Source: NUH Medway Maternity data

The rise in fertility rates as in part, been due to increased migration. Ten countries joined the European Union in 2004, and another two in 2007. In 2013, 32.7% of Nottingham's births were to mothers born outside of the UK, a slight increase from 2012 (31.8%), and more than double the percentage in 2001 (14.5%)[x].

The Office for National Statistics (ONS) estimated that the City gained 5,190 people due to international migration in 2013/4 alone. The number arriving from the EU Accession countries was 2,690. The majority of these were from Poland (1,750) but there was a notable increase in migrant workers from Romania (320 - up from 83 the previous year). However, migration flows from Eastern Europe have slowed down in recent years (1) . Migrants from EU Accession countries were predominantly aged less than 35 years old.

In October 2014, there were 779 asylum seekers residing in Nottingham city who have been assessed as destitute and are in receipt of housing or financial support from UK Visas and Immigration (UKVI) (Formerly UKBA). This figure excludes asylum seekers who are not assessed as destitute, refugees, failed asylum seekers and unaccompanied minors. This data provided by the Home Office provides a point prevalence of the number of asylum seekers receiving support at any one time, and does not show the number of asylum seekers arriving in an area, or the number ceasing to receive support due to either positive or negative asylum decisions. This number has increased steadily over the last year. Numbers are expected to continue to rise: the Home Office anticipates a 10-15% rise over the course of 2015 in the number of asylum seekers requiring support. More detail is given in the Asylum seekers, refugee and migrant health (2015) chapter of the JSNA.

Women accessing maternity services from a BME heritage

There were 4203 births between April 2015 and March 2015. Table 3 shows the number of births from BME women and overall percentage of deliveries to women from BME communities. 8.9% of births were from women with a Pakistani heritage followed by 6.4% from White and Black Caribbean and 6% African heritage.

Mothers Ethnic Category	Values	Percentage of total deliveries
Pakistani	**377**	**8.9%**
White and Black Caribbean	**273**	**6.4%**
African	**253**	**6.01%**
Any other ethnic group	**165**	**3.9%**
Any other mixed background	**161**	**3.83%**
Any other Asian background	**136**	**3.2%**

Indian	**111**	**2.6%**
White and Asian	**71**	**1.69%**
Caribbean	**69**	**1.64%**
White and Black African	**54**	**1.2%**
Any other Black background	**48**	**1.14%**
Chinese	**35**	**0.83%**
Bangladeshi	**17**	**0.4%**

Table 3: Number and percentage of births from BME women in Nottingham City
Source: NUH Medway maternity data

The University of Nottingham is currently undertaking a piece of research to investigate 'interventions that improve maternity care for immigrant women in the United Kingdom (UK)'. A narrative synthesis systematic review is being undertaken that will effectively generate better understandings and recommendations for influencing policy and practice. The findings will be shared with relevant stakeholders to maximise transfer of the knowledge into practice. Public health and the CCG are both represented on the expert reference panel for this research.

4 List of attached information

None

5 Background papers, other than published works or those disclosing exempt or confidential information

None

6 Published documents referred to in compiling this report

Better Births https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf

Public Health Outcomes Framework http://www.phoutcomes.info/public-health-outcomes-framework

Nottingham City Pregnancy JSNA Chapter
http://jsna.nottinghamcity.gov.uk/insight/Strategic-Framework/Nottingham-JSNA/Adults/Pregnancy.aspx

7 Wards affected

All

8 Contact information

Helene Denness, Consultant in Public Health, Nottingham City Council
helene.denness@nottinghamcity.gov.uk

Lucy Anderson, Assistant Director of Quality Governance, Children and Learning Disabilities, Nottingham City Clinical Commissioning Group
lucy.anderson@nottinghamcity.nhs.uk

Sarah Quilty, Commissioning Lead- Childrens, Nottingham City Council
sarah.quilty@nottinghamcity.gov.uk

References

1. **Council, Nottingham City.** *Pregnancy Joint Strategic Needs Assessment.* Nottingham : Nottingham City Council, 2015.

2. **National Institute of Health and Care Excellence.** *CG110: Pregnancy and complex social factors: A model for service provision for pregnant women with complex social factors.* London : NICE, 2010.