

National Review of Maternity Services: Assessment of Quality in Maternity Services

This document supports the report of the National Maternity Review and provides analytical data. In support of this data a number of charts and diagrams are shown to illustrate findings. If you struggle to view; read, or understand, any of this information please contact the [National Maternity Review](#)

The purpose of this pack is to aid the assessment of quality in existing maternity services

- The Quality Working Group of the Maternity Review was asked to make an assessment of existing service quality, and how it varies. A detailed quantitative assessment was undertaken, looking at data across the three quality domains: safety, experience and effectiveness. To supplement the analysis and better understand the factors that can help to foster a strong learning culture, qualitative information from the front line was also sought (see Annex D).
- This pack brings together a compendium of available data¹ about existing maternity services. The information includes both routinely collected data and initiatives such as MBRRACE-UK and the RCOG Clinical Indicators Project. The information is presented across 160 pages. Background information on data sources including limitations and methodologies are included in Annex A. Additional charts are included in annexes for CQC Maternity Survey indicators (Annex B) and safety, reporting and learning culture indicators (Annex C).
- The following structure has been used to structure this pack:
 - Overall Themes
 - Outcomes
 - Antenatal Care
 - Labour and Birth
 - Postnatal Care
 - Workforce

¹Analysis was performed during the period from August to November 2015 using the most up to date version of data sources available at this time. Subsequent updates to data sources are therefore not reflected in this pack.

The data is supplemented by an evidence review conducted by the National Perinatal Epidemiology Unit

There are five distinct parts to the NPEU evidence review:

- **A review of the evidence on safety of place of birth in the UK** *by summarising and synthesising the evidence on safety of place of birth focusing in particular on the findings of the Birthplace in England national prospective cohort study of planned place of birth.*
- **A further analysis of the Birthplace data** *to add to the evidence on safety of place of birth by extending the analysis of the Birthplace prospective cohort study data to use individual patient data and conduct a statistically more robust analysis to replicate the analysis that NICE carried out relating to comparisons of perinatal and maternal outcomes in planned FMU and AMU births.*
- **A review of the evidence of the effectiveness of consultant labour ward cover** *by conducting a systematic review of the evidence of the effectiveness of 168 hour per week consultant labour ward cover as a model of the delivery of intrapartum care in large units.*
- **A review of the evidence on choice of place of birth** *by conducting a systematic review of the evidence about factors which influence women's choices in relation to planned place of birth.*
- **Background context** *by providing an international context with information on the delivery and outcomes of maternity care in two European countries; one with similar maternal and perinatal outcome metrics and one with metrics which are amongst the best in Europe.*

The indicators look across the maternity pathway through the three domains of quality – patient safety

	Antenatal	Labour and Birth	Postnatal
Safety	<p><u>Staff Survey: Midwife Responses</u></p> <p><u>HSCIC Maternity Statistics Compendium</u></p> <ul style="list-style-type: none"> <u>Midwife and staffing levels</u> <p>Patient Safety Thermometer (1 indicator)</p> <p>ONS Characteristics of Birth (2013)</p>	<p><u>STEIS – Serious incident reporting</u></p> <p><u>NRLS – Safety incidents</u></p> <p><u>NHS Staff Survey</u></p> <p><u>Safe Staffing</u></p> <p><u>Workforce Statistics</u></p> <ul style="list-style-type: none"> <u>Midwife numbers</u> <p><u>CQC Inspection Ratings</u></p> <ul style="list-style-type: none"> <u>Safety</u> <p><u>Staff Survey: Midwife Responses</u></p> <p><u>CAS – Patient Safety Alerts</u></p> <p><u>CQC Intelligent Monitoring</u></p> <p>NPEU Evidence review</p> <ul style="list-style-type: none"> Birth place safety Consultant ward presence <p>Patient Safety Thermometer (6 indicators)</p> <p>ONS Characteristics of Birth (2013)</p>	<p><u>Staff Survey: Midwife Responses</u></p> <p><u>HSCIC Maternity Statistics Compendium:</u></p> <ul style="list-style-type: none"> <u>Midwife and staffing levels</u> <p><u>NHS Outcomes Framework:</u></p> <ul style="list-style-type: none"> <u>Admission of full-term babies to neonatal care</u> <p>Patient Safety Thermometer (4 indicators)</p> <p>Perinatal Mental Health</p>

Data sources underlined have been covered within the slides.

The indicators look across the maternity pathway through the three domains of quality – clinical effectiveness

	Antenatal	Labour and Birth	Postnatal
Clinical effectiveness	<p><u>HSCIC HES Maternity Statistics:</u></p> <ul style="list-style-type: none"> <u>Gestational age at first antenatal assessment</u> <p><u>Staff Survey: Midwife Responses</u></p> <p><u>Smoking at time of delivery</u></p> <p><u>NHS England Statistical Work Areas</u></p> <ul style="list-style-type: none"> <u>Bed Occupancy rates</u> <p><u>NHS England Maternity and Breastfeeding Statistics:</u></p> <ul style="list-style-type: none"> <u>Seen during pregnancy</u> <p><u>NHS Outcomes Framework</u></p> <ul style="list-style-type: none"> <u>Neonatal mortality and stillbirths</u> <p>HSCIC HES Maternity Statistics</p> <ul style="list-style-type: none"> Teenage Conceptions 	<p><u>HSCIC HES Maternity Statistics:</u></p> <ul style="list-style-type: none"> <u>Complications by type (National included)</u> <u>Method of onset (National included)</u> <u>Method of delivery</u> <u>Place of delivery</u> <u>Caesarean (Elective to Emergency ratio)</u> <p><u>RCOG Clinical Indicators Project 2011-12:</u></p> <ul style="list-style-type: none"> <u>Various HES indicators adjusted for clinical risk factors and patient characteristics</u> <p><u>NHS Staff Survey:</u></p> <ul style="list-style-type: none"> <u>Midwife Responses:</u> <p><u>CQC Maternity Outliers</u></p> <p><u>CQC Inspection Ratings:</u></p> <ul style="list-style-type: none"> <u>Effectiveness</u> <p>CQC Intelligent Monitoring</p> <ul style="list-style-type: none"> Never Events <p>HSCIC HES Maternity Statistics</p> <ul style="list-style-type: none"> Type of anaesthetics/analgesic used before or during delivery Person conducting delivery <p>ONS Characteristics of Birth (2013)</p>	<p><u>National Neonatal Audit Programme:</u></p> <ul style="list-style-type: none"> <u>4 indicators selected for outlier analysis</u> <p><u>RCOG Clinical Indicators Project 2011-12:</u></p> <ul style="list-style-type: none"> <u>Maternal readmissions</u> <u>Neonatal readmissions</u> <p><u>NHS England Maternity and Breastfeeding Statistics:</u></p> <ul style="list-style-type: none"> <u>Breastfeeding known initiated and not initiated</u> <p><u>Staff Survey:</u></p> <ul style="list-style-type: none"> <u>Midwife Responses</u> <p><u>NHS England Statistics:</u></p> <ul style="list-style-type: none"> <u>Maternity bed occupancy rates</u> <p><u>Perinatal Mental Health data</u></p>

Data sources underlined have been covered within the slides.

The indicators look across the maternity pathway through the three domains of quality – patient experience

	Antenatal	Labour and Birth	Postnatal
Patient Experience	<p><u>CQC: National Maternity Survey 2013</u></p> <p><u>NPEU: Safely delivered: a national survey of women's experience of maternity care 2014</u></p> <p><u>NCT and WI: Support Overdue: Women's experiences of maternity service survey 2012</u></p> <p><u>NAO: Maternity Services in England 2013</u></p> <p>Friends and Family Test Q1</p>	<p><u>CQC: National Maternity Survey 2013</u></p> <p><u>NPEU: Safely delivered: a national survey of women's experience of maternity care 2014</u></p> <p><u>NCT and WI: Support Overdue: Women's experiences of maternity service survey 2012</u></p> <p><u>NAO: Maternity Services in England 2013</u></p> <p><u>CQC Inspection Rating:</u></p> <ul style="list-style-type: none"> • <u>Caring</u> • <u>Responsive to patients' needs</u> <p>Friends and Family Test Q2 and Q3</p>	<p><u>CQC: National Maternity Survey 2013</u></p> <p><u>NPEU: Safely delivered: a national survey of women's experience of maternity care 2014</u></p> <p><u>NCT and WI: Support Overdue: Women's experiences of maternity service survey 2012</u></p> <p><u>NAO: Maternity Services in England 2013</u></p> <p>Friends and Family Test Q4</p>

Data sources underlined have been covered within the slides.

These indicators look across the maternity workforce data sources

- CQC Maternity Services Survey (2013) – Patient experience of staff
- CQC Intelligent Monitoring – Births to midwife ratio and ratio of band 7 to band 5/6 midwives
- NHS Staff Survey (2014) – Indicators comparing midwives to other nurses and all staff
- HSCIC NHS National Workforce Data (2014)
- NHS Safe Staffing Data (2015)
- Maternity Services in England: National Audit Office Report by the Auditor and Comptroller General (2013)
- GMC Trainee Doctor Survey 2015 – Response of Obstetrics and Gynaecology Specialty

Overall Themes

- A large amount of data is collected routinely, which clearly requires significant staff time and effort. However, much of it is difficult to interpret and of questionable significance. Data quality is poor: the status of over 10% of births was not recorded in HES.¹
- Initiatives are under way to provide better, more relevant information, but these are not yet available in a format that permits integration with other information. The approach to confidentiality is not consistent with established national audits in other clinical fields.
- The information that is available does not permit confidence that maternity services are consistently provided to a consistent high level of quality. Whilst there are good examples, much variation is apparent.
- Safety is the highest concern. Almost half of CQC inspections of maternity services result in assessments either 'inadequate' (7%) or 'requires improvement' (41%).²
- There is significant variation in numbers of reported clinical incidents against national rates, including Serious Incidents and those causing harm³. This is indicative of differences in reporting and learning culture e.g. a large number of units appear to be under-reporting incidents. Some units with high reported incident rates show evidence of a strong learning culture; however opportunities to improve are being missed elsewhere.⁴

¹Source: Hospital Episode Statistics (The Information Centre for health and social care). See slide 148 for more information.

²Source: CQC Inspection ratings 2013-15. See slides 39-43 and 133 for more information.

³Source: NHS England NRLS and STEIS. See slides 44-51 and 138 for more information.

⁴ See Annex D – Findings from Qualitative work

Overall Themes (Continued)

The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project¹ showed that in 2011-12 accounting for clinical risk factors and socio-demographic differences:

- There was 2.5 fold variation in the proportion of spontaneous labours that resulted in emergency caesarean sections for first-time mothers, with proportions varying between 7% and 17% from lowest to highest deciles.²
- There was 4.2 fold variation in the proportion of elective caesarean sections for first-time mothers, with proportions varying between 1.2% and 5% from lowest to highest deciles.²
- The proportion of instrumental deliveries resulting in third and fourth degree perineal tears varied² between lowest and highest deciles, from 3% to 11% in first-time mothers, and from 0.4% to 4.6% in others.²

¹Source: *The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12*, see : [RCOG Clinical Indicators Project Website](#) and the *2013 Patterns of Maternity Care in Hospitals 2011/12 report* for more information.

²Variation exists between the mean values for the ranked top and bottom 10% of trusts included within RCOG's 2011-12 Clinical Indicators Project, which used 2011-12 HSCIC HES data.

Outcomes

- There is marked geographical variation in neonatal mortality and stillbirth prevalence, with higher numbers in those areas with more deprived populations and higher proportions of older or younger mothers.¹
- There is still marked geographical variation after adjustment for age and deprivation, suggesting potential variation in service outcome.²
- Perinatal mortality is higher in England than in some other European countries, but this must be interpreted with caution due to differences in reporting methods.³
- Overall, the outcomes that we are able to measure provide a limited picture, but there is clear variation in the occurrence of neonatal deaths and stillbirths, as well as other adverse outcomes.
- Taken with the marked variation in capacity to generate learning from adverse incidents, it is clear there is scope for significant improvement in poor outcomes.

¹Source: NHS Outcomes Framework, MBRRACE-UK Perinatal Mortality Surveillance Report 2015, HSCIC Indicator Portal NHS Outcomes Framework Indicator 1c. See slides 13 and 132-133 for more information.

²Source: MBRRACE-UK Perinatal Surveillance Report. Data are adjusted for socio-demographic factors, sex and multiplicity (and gestational age for neonatal rates only).

³Source: WHO and World Bank, Wang et al, 2013, Global, regional, and national levels of neonatal, infant and under-5 mortality during 1990- 2013: 10 a systematic analysis for the Global Burden of Disease Study 2013, The Lancet . See slide 20 for more information.

Overall outcomes in maternity are measured in terms of neonatal mortality and stillbirth rates, and admissions to specialist care

Measures from the NHS Outcomes Framework

Domain 1 Preventing people from dying prematurely

1c Neonatal mortality and stillbirths (Overarching Indicator)

Reducing deaths in babies and young children

1.6i Infant mortality (Improvement Indicator)

Domain 5 5. Treating and caring for people in a safe environment and protecting them from avoidable harm

Improving the safety of maternity services

5.5 Admission of full-term babies to neonatal care (Improvement Indicator)

The NHS Outcomes Framework states that it is the joint responsibility of the NHS, public health and social care services to improve outcomes for current cohorts by improving health behaviours.¹

Just over three-quarters of neonatal deaths occur in the early neonatal period (0 to 7 days). Factors affecting neonatal death include the availability of skilled birth attendance and postnatal care utilisation.²

Definitions:

Stillbirth: A baby delivered at or after 24 weeks gestational age showing no signs of life, irrespective of when the death occurred.³

Neonatal death: A live born baby who died before 28 completed days after birth.³

Extended perinatal death: A stillbirth or neonatal death.⁴

¹Source: DH The NHS Outcomes Framework 2015/16 Technical Appendix.

²Source: [NHS Outcomes Framework November 2014 Publication](#)

³Source: NHS Outcomes Framework Technical Specification. Other definitions exist, including those based on different gestational age and weight thresholds. This can result in the reporting of different rates across different sources.

⁴Source: MBRACE-UK - Perinatal Mortality Surveillance Report 2015

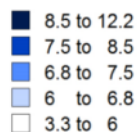
While the neonatal mortality and stillbirth rate has reduced in recent years, notable geographical variation remains

Neonatal mortality and stillbirth rates show notable variation¹ across Local Authorities (chart right) with no obvious geographic pattern (map below)

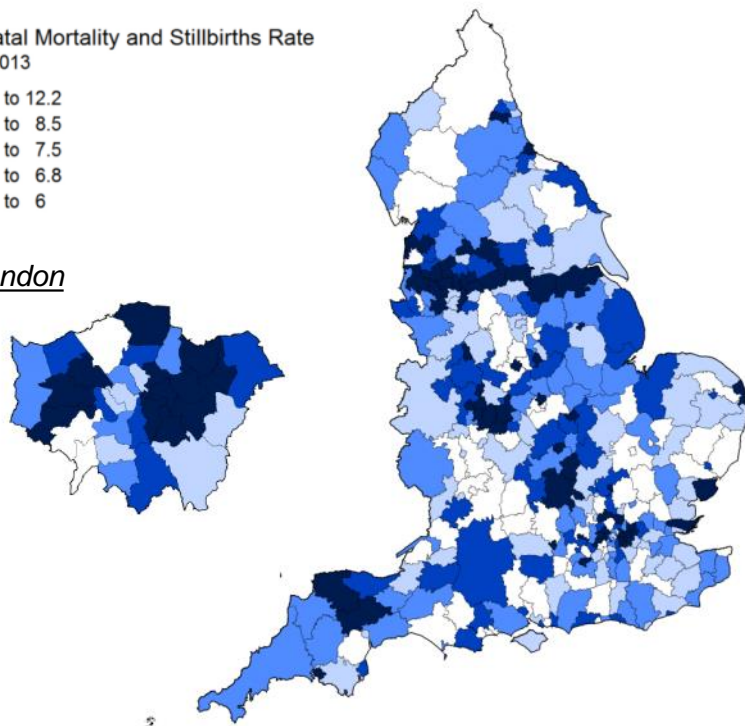
While there have been reductions in neonatal mortality and stillbirth rates nationally (chart bottom right) the neonatal rate is one of the highest amongst OECD high income countries

Geographic variation in neonatal mortality and stillbirths rate (3 year aggregate 2011 to 2013)¹

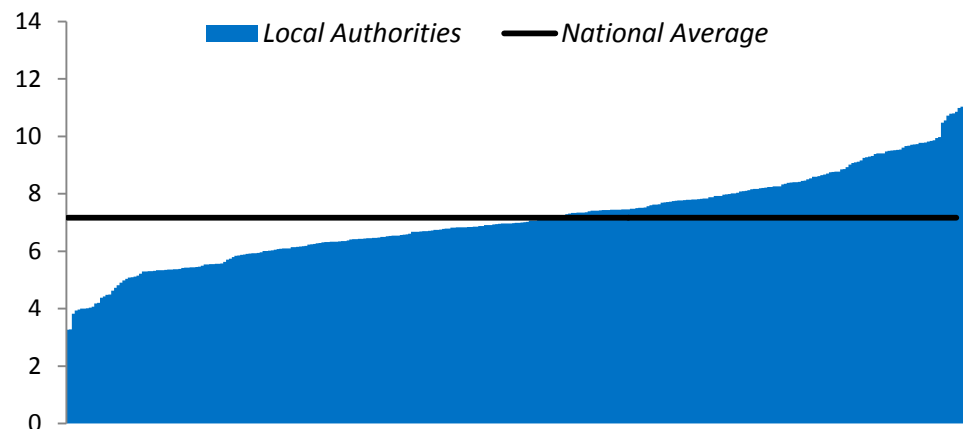
Neonatal Mortality and Stillbirths Rate
2011-2013



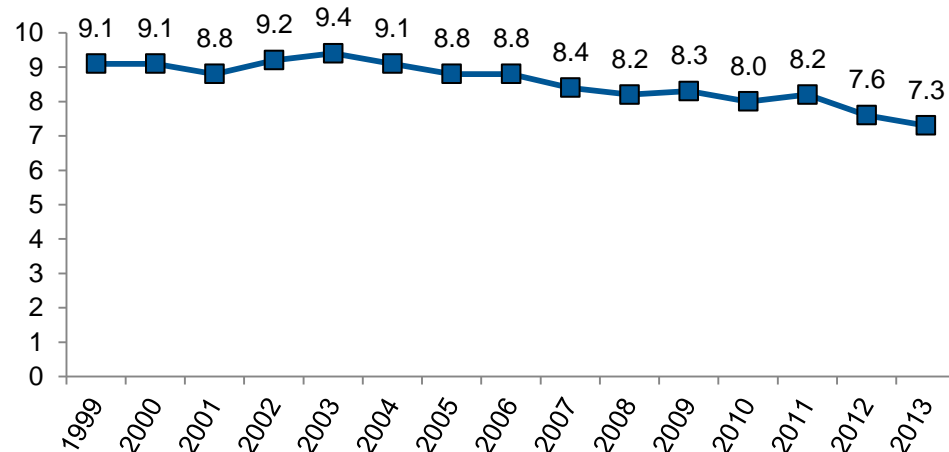
London



Local Authority level variation in neonatal mortality and stillbirth rates per 1000 births (3 year aggregate 2011-2013)¹



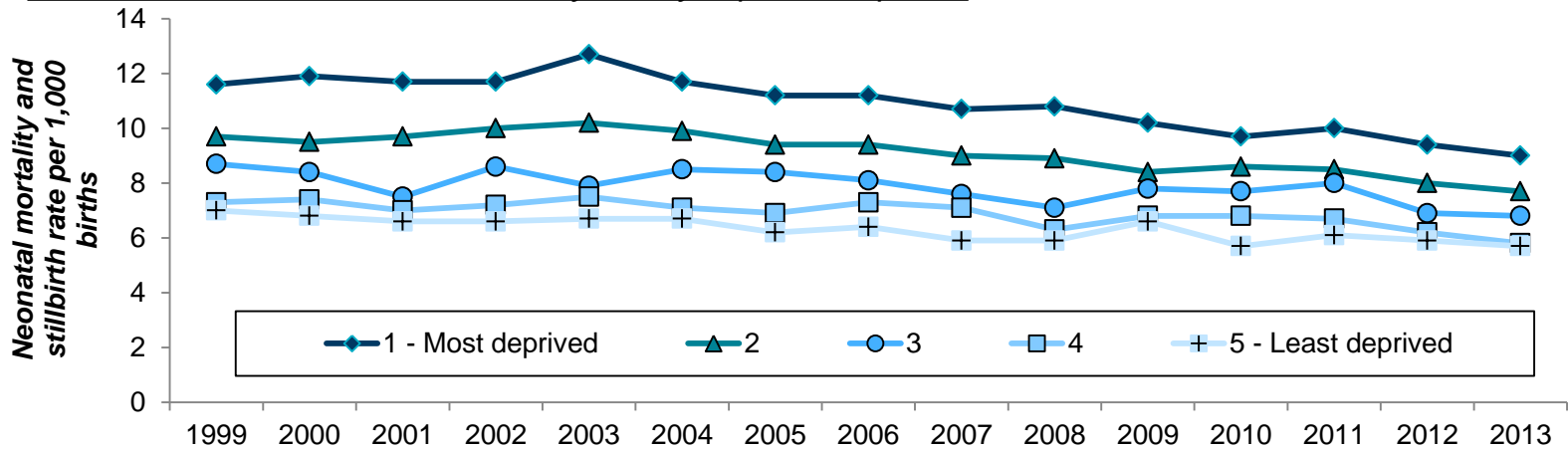
National trend in neonatal mortality and stillbirth rate¹



¹ Based on crude unadjusted rates; some variation may be due to differences in the socio-demographic composition of Local Authority populations .

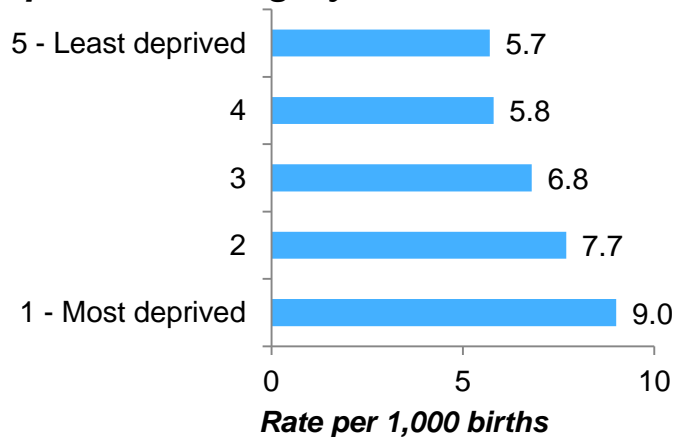
Overall mortality rates are declining, however neonatal mortality and stillbirths rates are highest in the under 20s; over 40s; and mothers from more deprived areas.

Trend in still birth and neonatal mortality rate by deprivation quintile



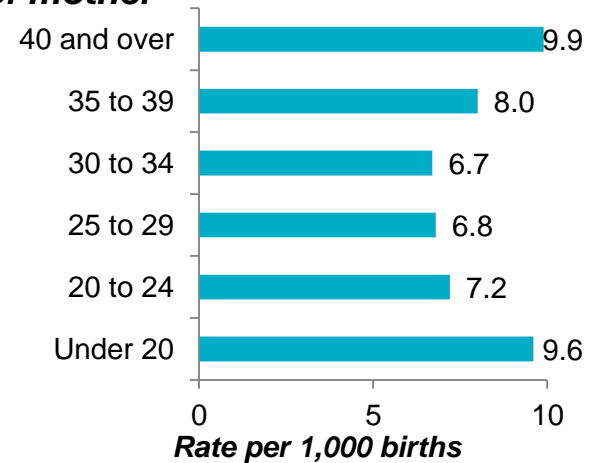
Still birth and neonatal mortality rate by deprivation quintile (2013)

Deprivation category



Still birth and neonatal mortality rate by mothers age (2013)

Age of mother



Research by MBRRACE-UK indicates that the risk of perinatal mortality is 57% higher for mothers living in poverty

Which babies are most at risk?

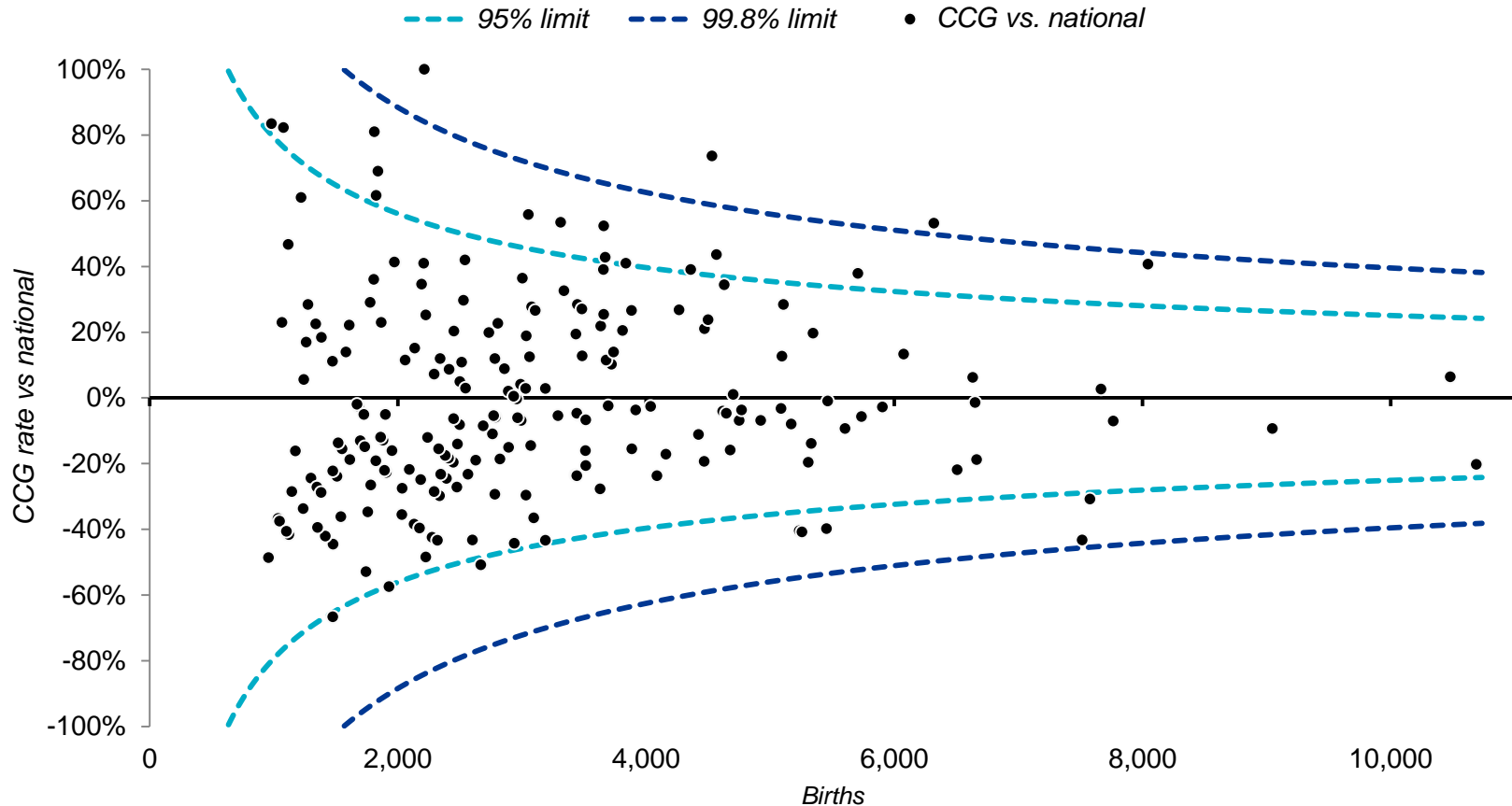


MBRRACE-UK analysed UK perinatal deaths for births from January to December 2013 and found that:

- In 2013 there were 4,722 extended perinatal deaths¹ (3,286 stillbirths and 1,436 neonatal deaths) occurring in the UK to babies born at 24 weeks gestational age or greater.
- **The extended perinatal mortality rate was 6.0 per 1,000 total births**, comprising 4.2 stillbirths per 1,000 total births and 1.8 neonatal deaths per 1,000 live births.
- There are “systematic differences in how clinicians certify babies born at 22+0 to 23+6 weeks gestational age”, e.g. the neonatal death rate of babies born at this gestation ranged from 11% to 28% across Operational Delivery Networks in England.
- “Engagement of Trusts and Health Boards in the process of reporting data on stillbirths and neonatal deaths was inconsistent.”

¹Excludes terminations of pregnancy

Crude Clinical Commissioning Group (CCG) level extended perinatal mortality rates show large variation some of which may not be explained by socio-demographic differences alone¹



Points show individual CCGs; black line shows mean; light and dark blue dotted lines show 5/100 and 2/1000 expected levels respectively, if variation random.

¹Crude rates, data excludes January (2013) births for England and Isle of Man due to unavailability of NN4B data. The above chart represents the Maternity Review Quality work-stream's analysis of MBRRACE-UK data only and does not reflect the presentation used by MBRRACE-UK.

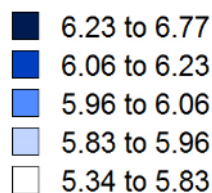
MBRRACE-UK did not show mortality rates in this manner in their own analysis and instead used their own methodology.

Source: MBRRACE-UK - Perinatal Mortality Surveillance Report 2015

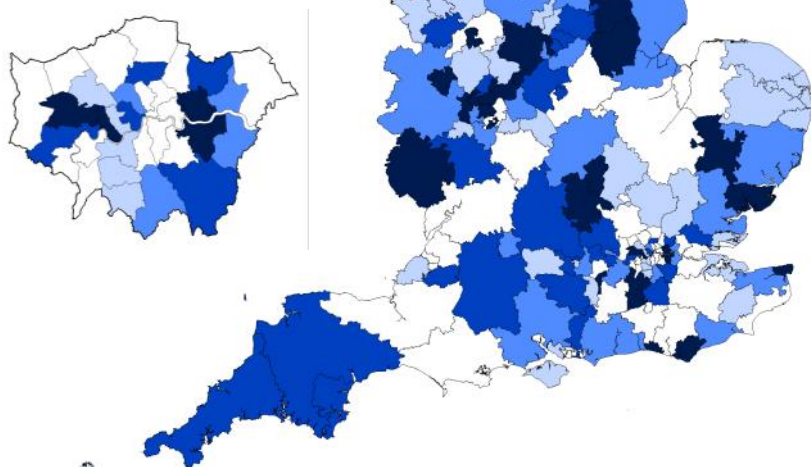
When extended perinatal mortality¹ rates are adjusted for socio-demographic factors, sex and multiplicity, variation is reduced but is still present

We know extended perinatal mortality rates are influenced by factors such as poverty, ethnicity and the age of the mother. Even when we take these risk-factors into account, there are still differences across England in the numbers and rates of babies who die.

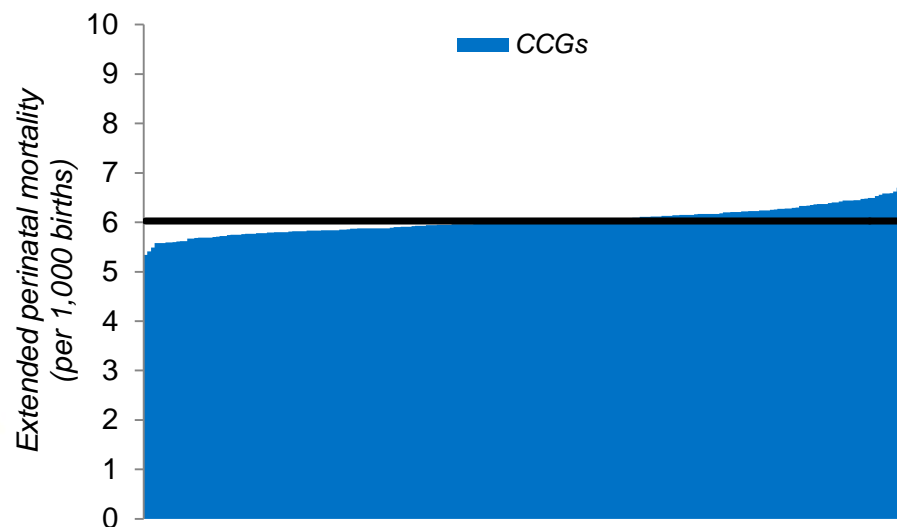
Geographic variation in extended perinatal mortality rate (per 1,000 births) 2013



London



CCG level variation in extended perinatal mortality rate (per 1,000 births) 2013

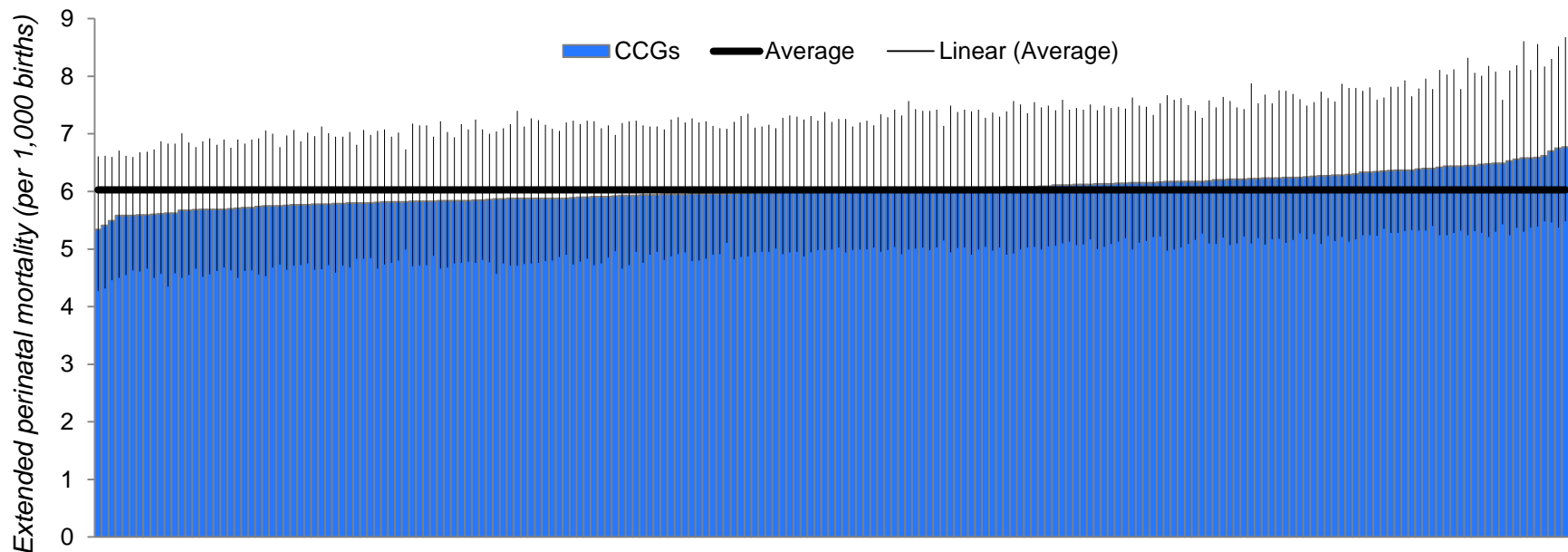


Across England, stabilised and adjusted perinatal mortality rates varied from 5.3 to 6.8 per 1,000 total births at CCG level. The 'average' value derived from this data source may differ from the 'true' national average.

¹Extended perinatal mortality: stillbirths and neonatal deaths up to 28 days after birth.

Source: MBRRACE-UK Perinatal Mortality Surveillance Report 2015 - Stabilised and Adjusted rates (Data excludes January 2013 births for England and Isle of Man due to unavailability of NN4B data.) See slides 132-133 for more information on the methodology used by MBRRACE-UK to calculate stabilised and adjusted rates.

Variation remains after adjustment and stabilisation¹. Confidence intervals indicate the uncertainty in extended perinatal mortality at CCG level due to small numbers of deaths occurring



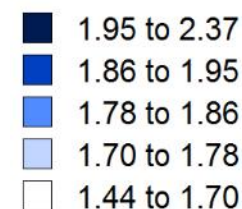
Confidence intervals are included to highlight the level of uncertainty around a given rate. They are not intended for identification of statically significant differences between CCGs. There is a lack of discriminatory power in the CCG level indicator based on one year of mortality data alone.

¹This methodology was developed by MBRRACE-UK to compare organisations more fairly. The 'stabilised' rate allows for the effects of chance variation due to small numbers. Mortality rates are also 'adjusted' to account for key factors known to increase the risk of perinatal mortality. These were limited to factors collected for all births: deprivation (using index of multiple deprivation), baby's ethnicity, baby's gender, multiplicity and gestational age at birth.

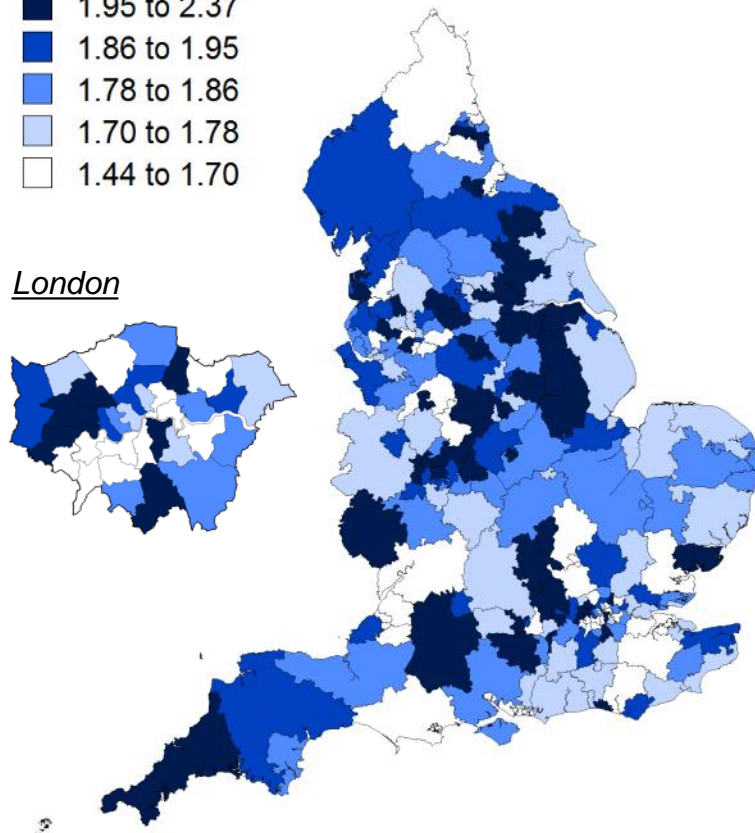
Stabilised and adjusted neonatal mortality rates and stillbirth rates show variation at CCG level but must again be interpreted with caution due to small numbers

Maps show the some similarity in the geographical pattern stabilised & adjusted mortality rates for stillbirths and neonatal death at CCG level. However small numbers mean that caution is required in interpreting this as confidence intervals are wide.

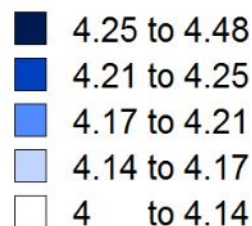
Neonatal mortality rate (per 1,000 births) 2013



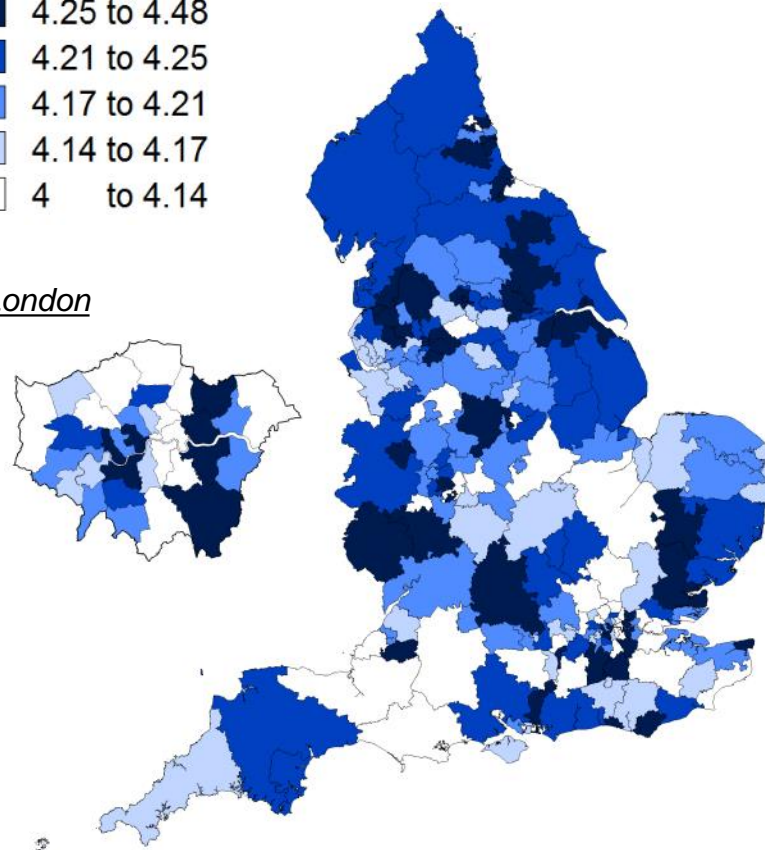
London



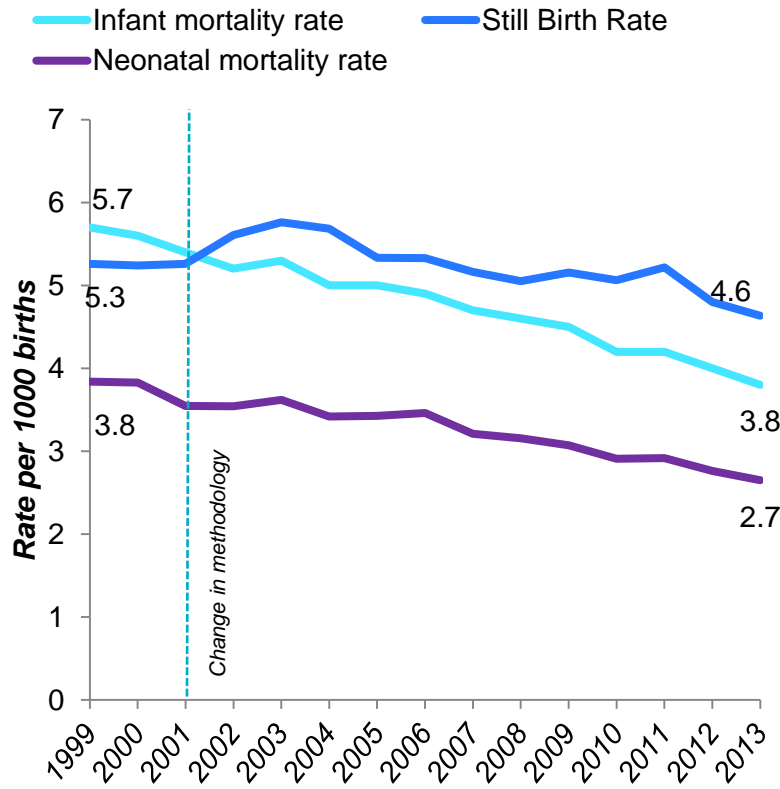
Stillbirth rate (per 1,000 births) 2013



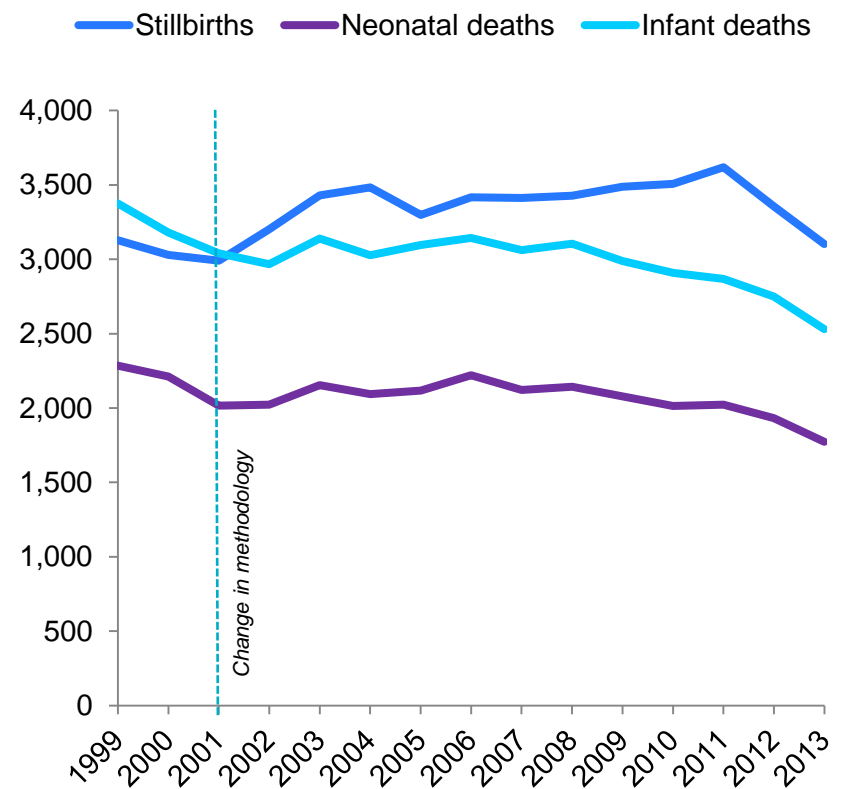
London



Stillbirth rates show less of an overall downward trend than neonatal and infant mortality rates¹



The majority of infant deaths occur during the neonatal period. Stillbirths outnumber all infant deaths¹



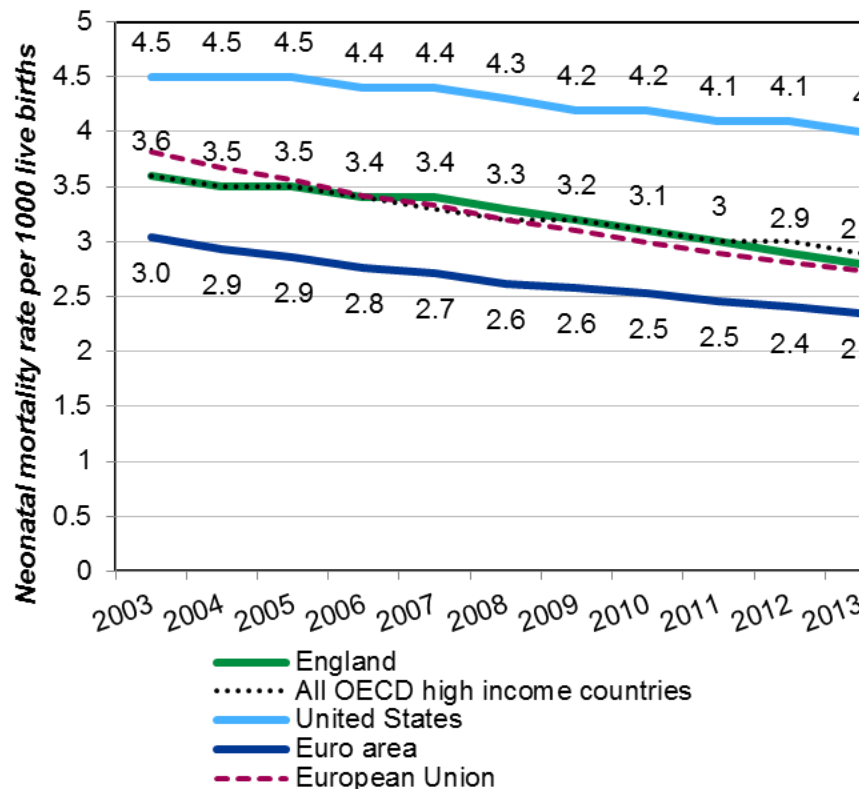
¹A change in methodology was introduced in 2001 to more fully capture births registered late. Changes in rates between 2000 and 2001 should therefore be interpreted with caution. See [ONS Birth Statistics Metadata](#) for more information.

When comparing neonatal mortality rates with other countries the UK appears to perform poorly, however:

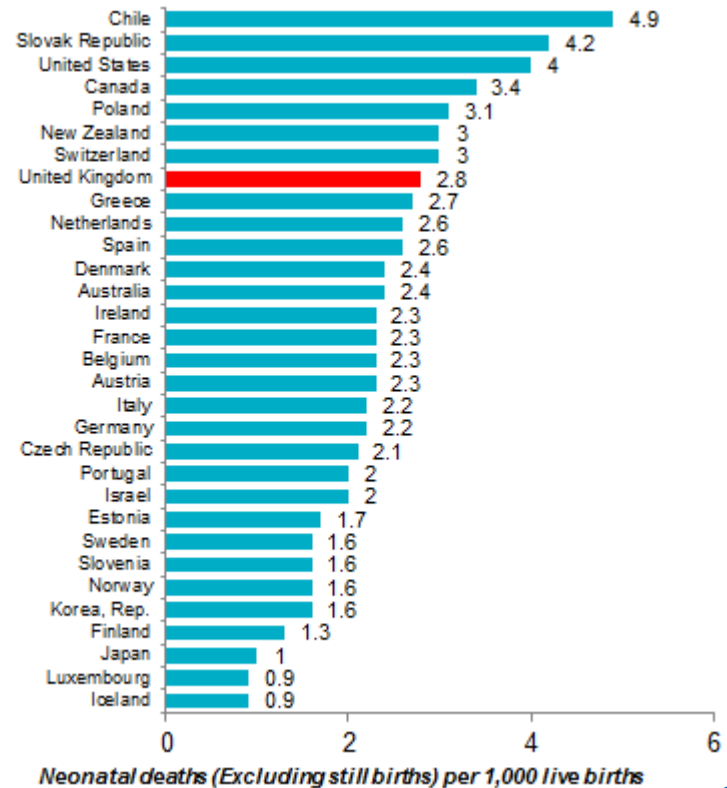
International comparisons require much caution in interpretation as often comparisons are not like for like e.g.

- There are differences between countries in how they register live births at <24 weeks and non-surviving premature infants (whether they are reported as live births or not); and there are also differences in the definitions of fetal deaths.

Neonatal mortality rate per 1,000 live births time series for 2003 to 2013

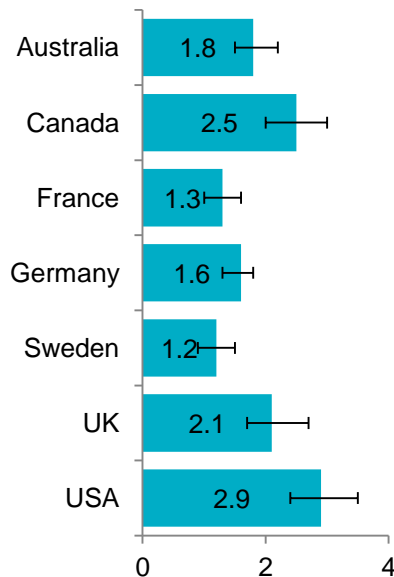


Neonatal deaths in OECD high income countries per 1,000 live births in 2013

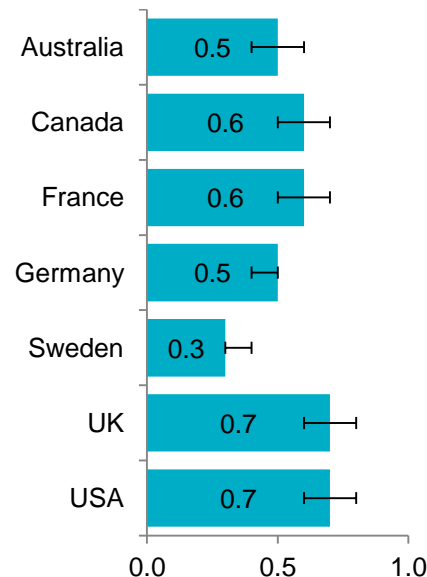


UK has higher mortality rates for early neonatal, late neonatal and post neonatal periods when compared to France, Germany and Sweden. However, this may be due to differences in definitions and reporting methods¹

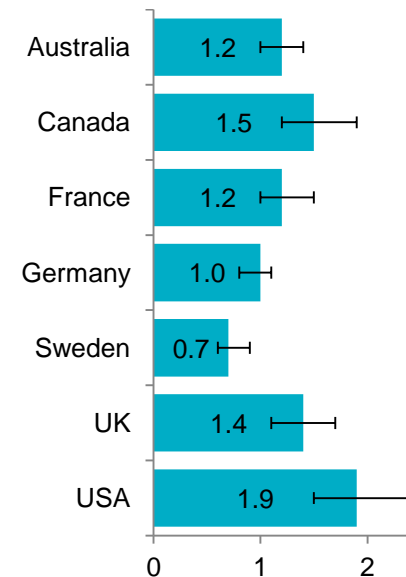
Early neonatal (0-6 days)
mortality rate per 1,000 live
births



Late neonatal (7-28 days)
mortality rate per 1,000 live
births



Post-neonatal (28-364 days)
mortality rate per 1,000 live
births



¹Variation between countries may also be caused by socio-demographic and socio economic factors such as age, deprivation and ethnicity. Countries may also exhibit differing levels of variation in socio-demographic factors.

Source: Wang et al, 2013, Global, regional, and national levels of neonatal, infant and under-5 mortality during 1990- 2013: a systematic analysis for the Global Burden of Disease Study 2013, The Lancet.

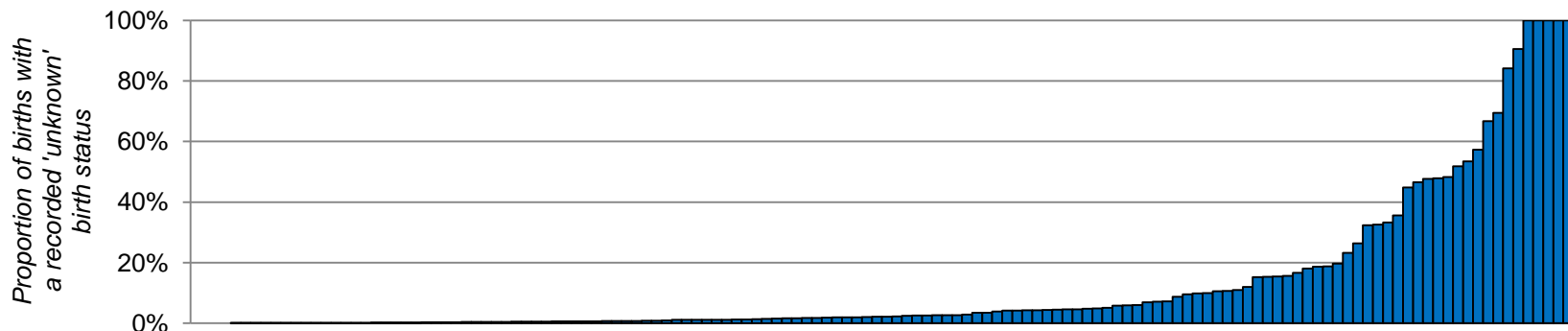
There are challenges with the quality of the data – in 2014/15 the status of over 10% of births was not recorded in HES and many trusts record a high proportion of ‘unknown’ birth status

Hospital Episode Statistics – Numbers of stillbirths and stillbirth rates for 2013-14 and 2014-15¹

Year	Live births	Total stillbirths	Stillbirth: ante-partum	Stillbirth: intra-partum	Stillbirth: indeterminate	Not known	Grand Total	Stillbirth rate per 1000 births	Intrapartum stillbirth rate per 1,000 births	Antepartum stillbirth rate per 1,000 births
2013-14	549,236	3,119	2,566	194	359	94,821	647,178	4.7	0.3	4.0
2014-15	549,073	2,287	1,732	179	376	83,017	634,377	3.2	0.3	2.7

Hospital Episode Statistics – Trust level variation in proportion of births recorded with an ‘unknown’ status²

HES includes information regarding stillbirths. However data quality issues exist as the status of some births is not known. A high level of variation exists between the proportion of births recorded with a status as ‘unknown’ among trusts (chart below). Some trusts have 0% for 2013-14 recorded as unknown (left-hand side), whereas in some trusts 100% of 2013-14 births had a status recorded as ‘unknown’ (right-hand side). Some ‘unknown’ status births may have been stillbirths.



¹2014-15 figures are provisional and therefore subject to change so should only be used as an initial indication.

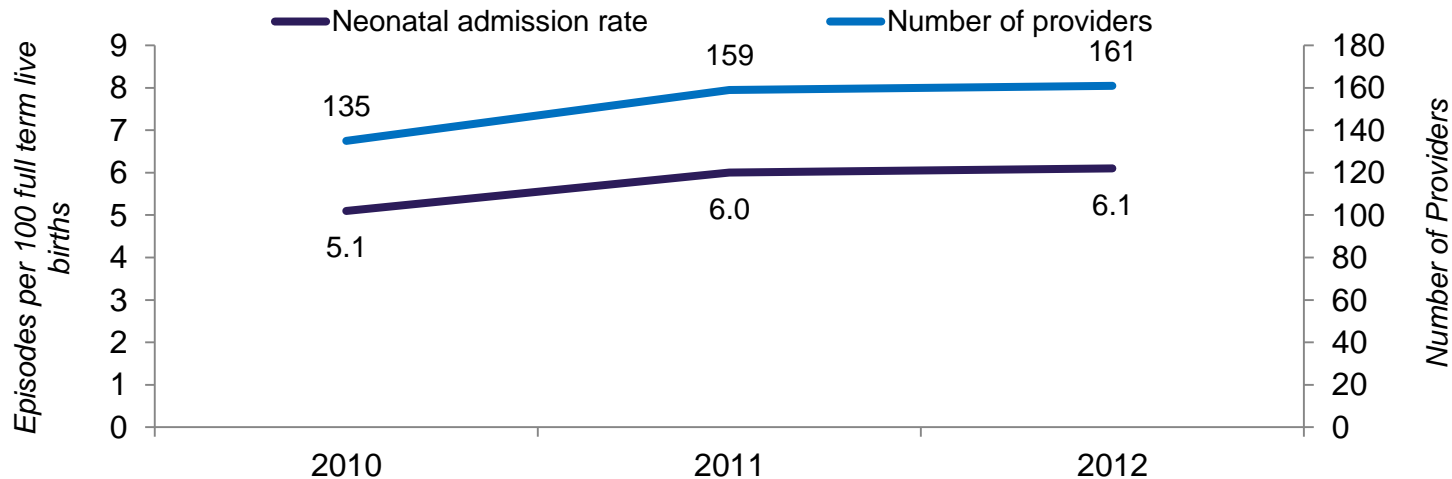
²Figures relate to 2013-14 annual HSCIC HES data, trusts with fewer than 100 total births have not been included.

Source: Hospital Episode Statistics (The Information Centre for health and social care) See slide 148 for more information.

Data quality issues mean it is difficult to draw conclusions about admissions of full-term babies to neonatal care¹

- Babies may be admitted to neonatal care for a variety of reasons. Some may be unavoidable but others will reflect failures in care. Confidential enquiries (CEMD and CESDI) have consistently found **50% of deaths are associated with substandard care²**.
- The indicator shows the number of full-term babies (gestation > 36 weeks) admitted within 28 days of birth to a neonatal unit, as a percentage of all full-term births.
- There was an increase in rate from 2010 to 2011, which may be in part due to the increase in number of trusts whose data were included, and not as the result of changes in care.

Number of admissions to neonatal units within 28 days, per 100 full term live births, and number of providers whose data was included, 2011-2013



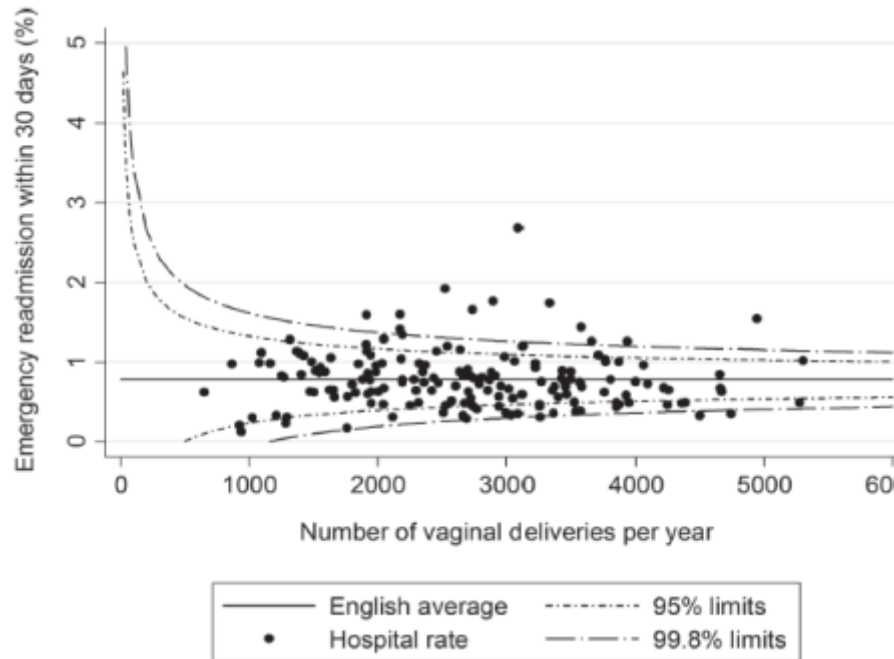
¹Some trusts submit data for babies receiving neonatal care in an NNU unit alone, and others include neonatal care received outside of the NNU as well. Some neonatal admissions are unavoidable and are not indicative of poor levels of care. Only neonatal admissions that could be linked to a Primary Care Trust (PCT) are included in the numerator

Source: Office for National Statistics (ONS) and (2) National Neonatal Research Database

²HSCIC Neonatal Admissions Quality Statement

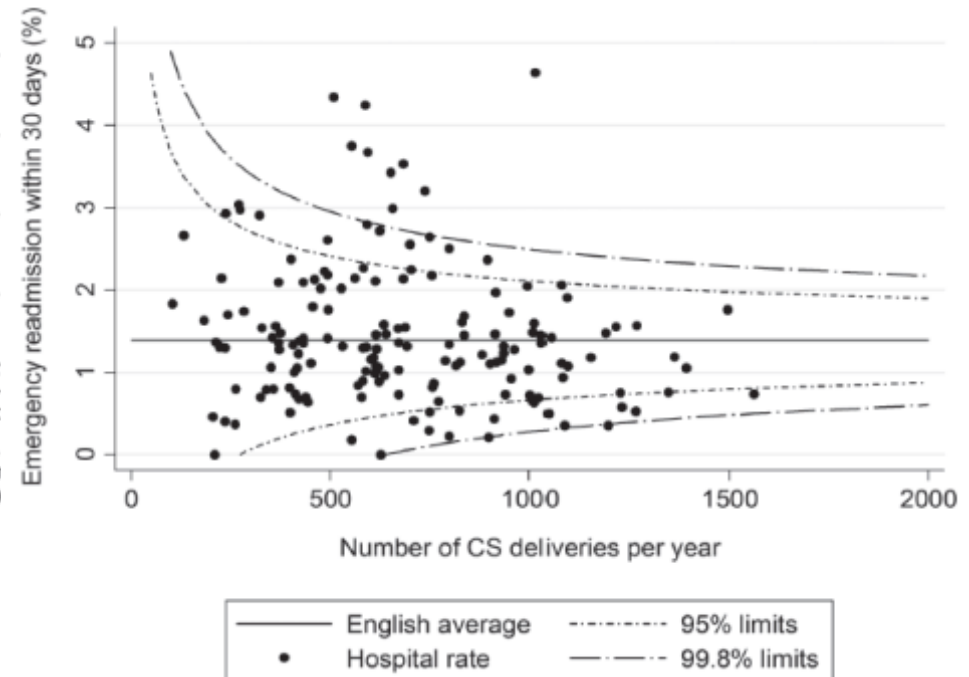
The rate of emergency readmission within 30 days of delivery among vaginal deliveries varied from 0.3% in the bottom decile of hospitals to 1.6% in the top decile^{1,2}

Rates of emergency maternal readmission within 30 days of delivery among vaginal deliveries²



The rate of emergency readmission to hospital within 30 days of delivery among c-section deliveries varied from 0.3% in the bottom decile of hospitals to 3.4% in the top decile^{1,2}

Rates of emergency maternal readmission within 30 days of delivery among c-section deliveries²



1. Variation exists between the mean values for the ranked top and bottom 10% of trusts included within RCOG's 2011-12 Clinical Indicators Project which used 2011-12 HSCIC HES data. See slides 66-70 for more information.

2. Rates are adjusted for maternal characteristics and clinical risk factors

Source: RCOG Clinical Indicators Project 2011-12. See [The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12](#), see the [RCOG Clinical Indicators Project Website](#) and the 2013 Patterns of Maternity Care in Hospitals 2011/12 report for more information.

Antenatal Care

- The majority of women report a positive experience of antenatal care; however there are some issues to be addressed:
 - Almost all women received antenatal care and 91% had a booking appointment by 12 weeks, but only 2 out of 3 women report having a named midwife^{1,2}. (Caution is needed when drawing conclusions from survey questions relating to the concept of a named midwife due to unclear definitions.)
 - Almost 7 out of 10 women report not being given a choice of where their antenatal check-ups would take place².
 - Choice of birth place is not always offered. 18% of respondents to the CQC Maternity Survey reported that they had been offered no choice². 25% of respondents to the NPEU Safely Delivered survey were unaware of all four possible choices¹.
 - 3 out of 10 women do not feel they are provided with sufficient information to choose where to have their baby¹.
 - Almost 1 in 5 women report not being asked about their emotional and mental health state at the time of booking, or about past mental health problems and family history¹.

¹Source: NPEU Safely Delivered: a national survey of women's experience of maternity care 2014

²Source: CQC Maternity Survey 2013. See slide 144-147 for more information.

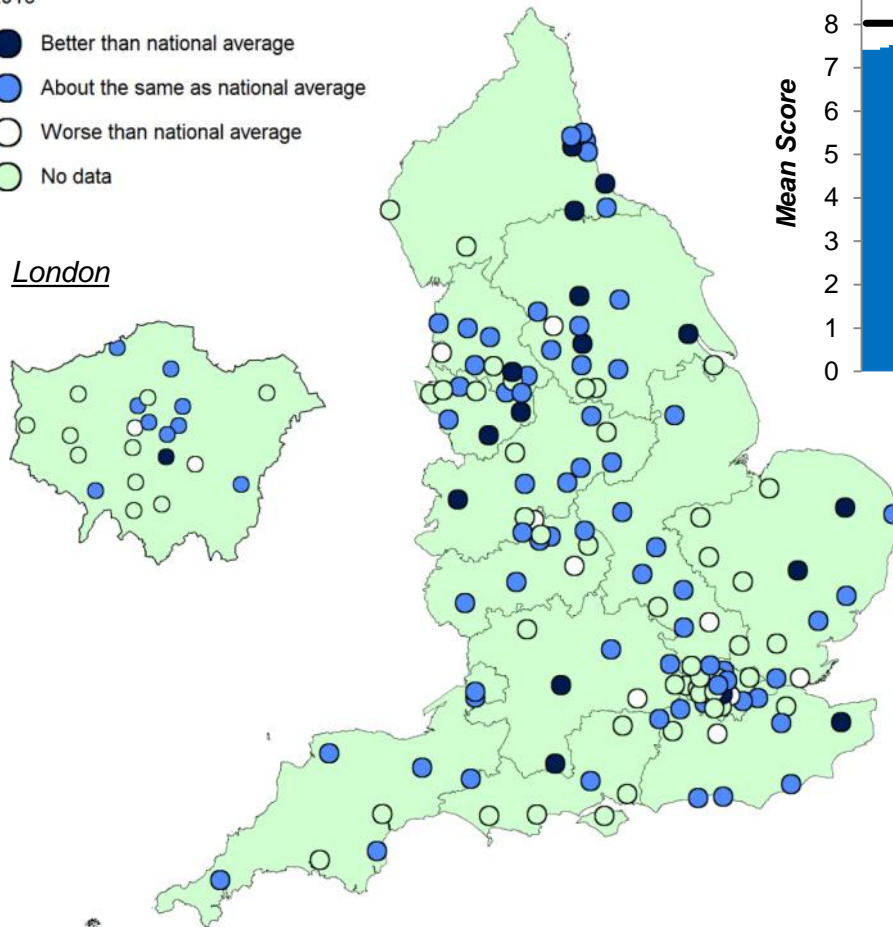
There is little variation in trusts' maternity survey scores for patients' experience of antenatal check-ups, with only 10 trusts having scores significantly lower than the national average¹

Geographic variation in maternity survey scores for antenatal check-ups

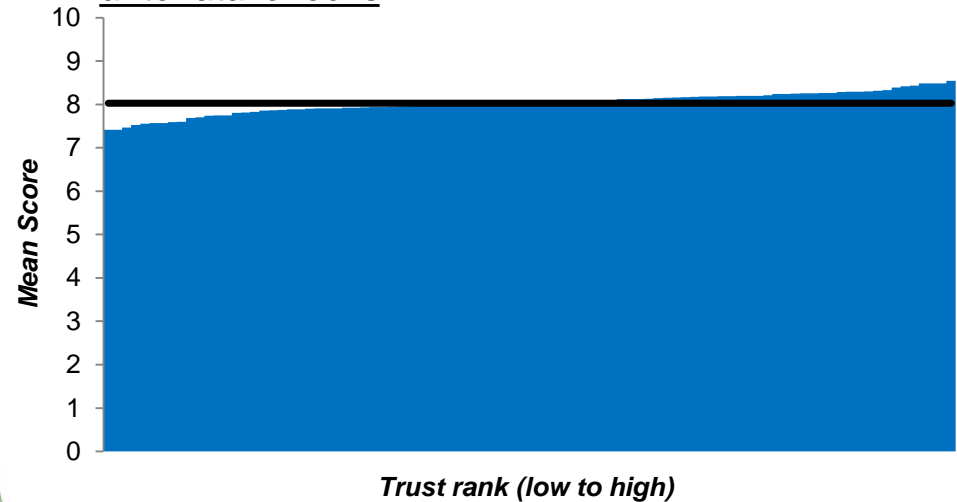
Antenatal Check-Ups
2013

- Better than national average
- About the same as national average
- Worse than national average
- No data

London



Trust level variation in maternity survey score for antenatal checks



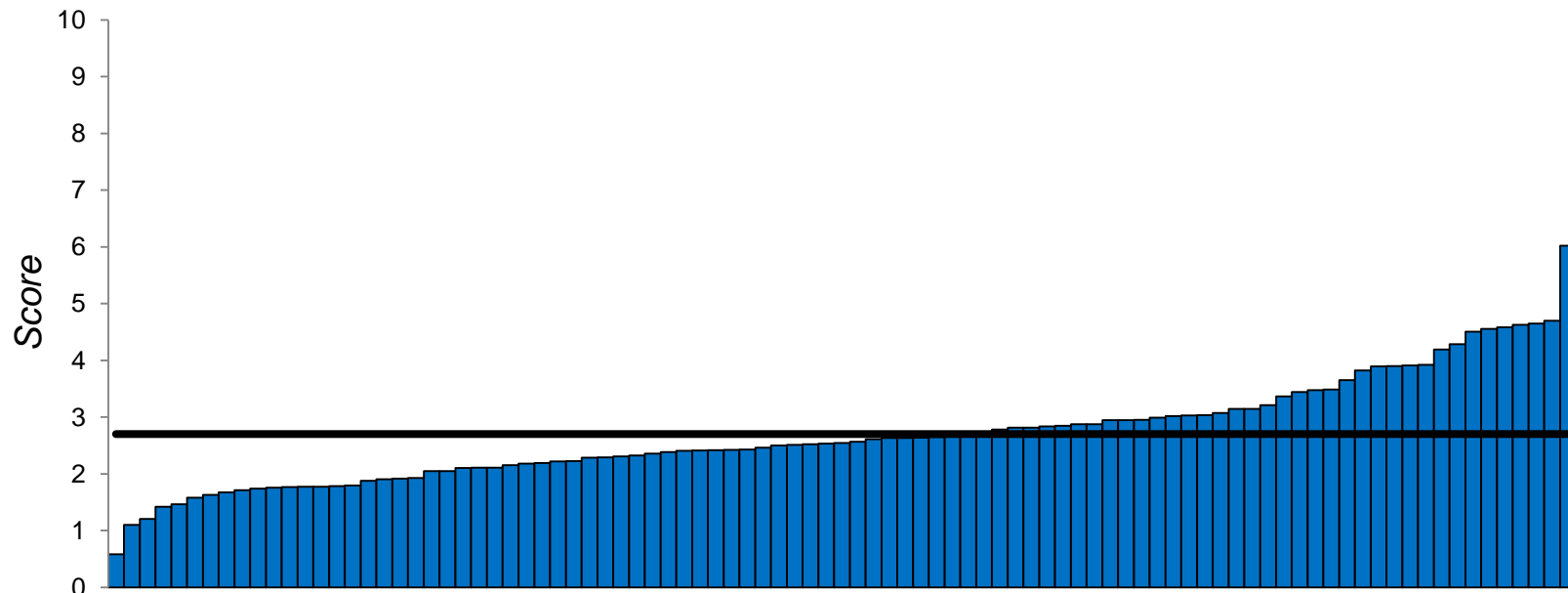
Above: Composite scores for maternity survey questions around patient experience of antenatal check-ups show only small variation from 7.4 out of 10 to 8.5 out of 10.

Left: There is no obvious geographical pattern to trust performance for this indicator (*White spots on the map indicate locations of providers who are performing significantly worse from the national average for patient experience of antenatal care. Those performing significantly better are highlighted by dark blue spots.*)

Antenatal check-ups: B7. During your pregnancy were you given a choice about where your antenatal check-ups would take place?

Question B7 demonstrated the highest variance out of the questions forming the composite score for antenatal check-ups in the CQC Maternity Survey

- The highest trust score is approximately 10.4 times larger than the lowest trust score.
- The score for the trust in the 90th percentile was 1.74 times larger than for the 10th percentile.



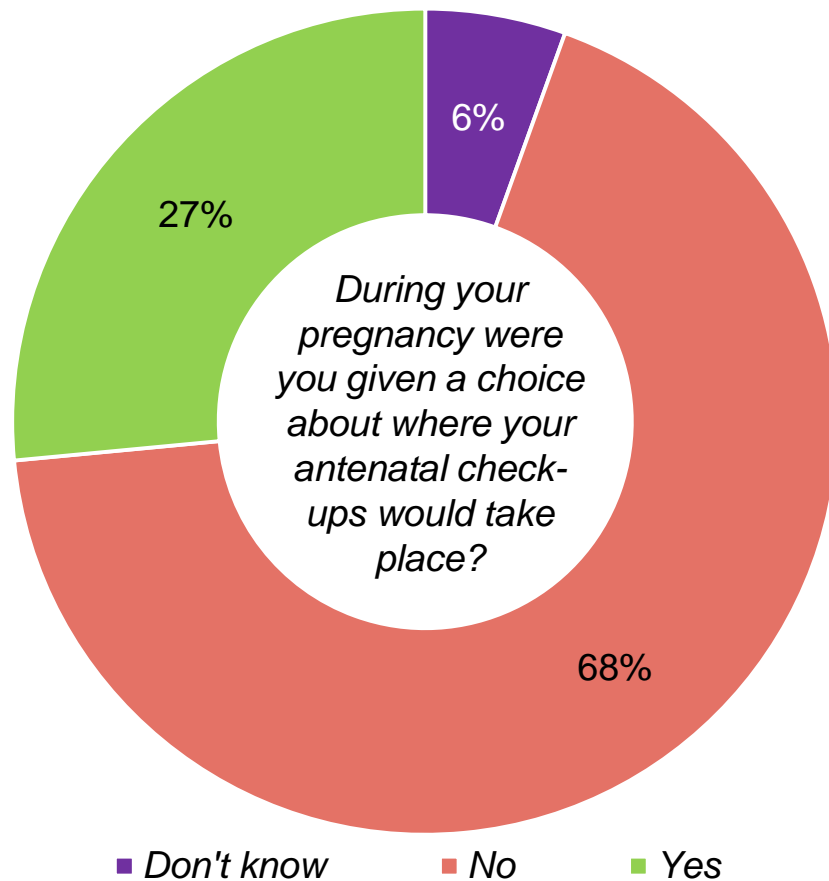
Most women have several antenatal appointments but only two thirds of women have a named midwife

The median number of antenatal checks for women was 8 for multiparous women and 9 for primiparous women, with 95% of all women seeing a midwife one or more times during pregnancy.

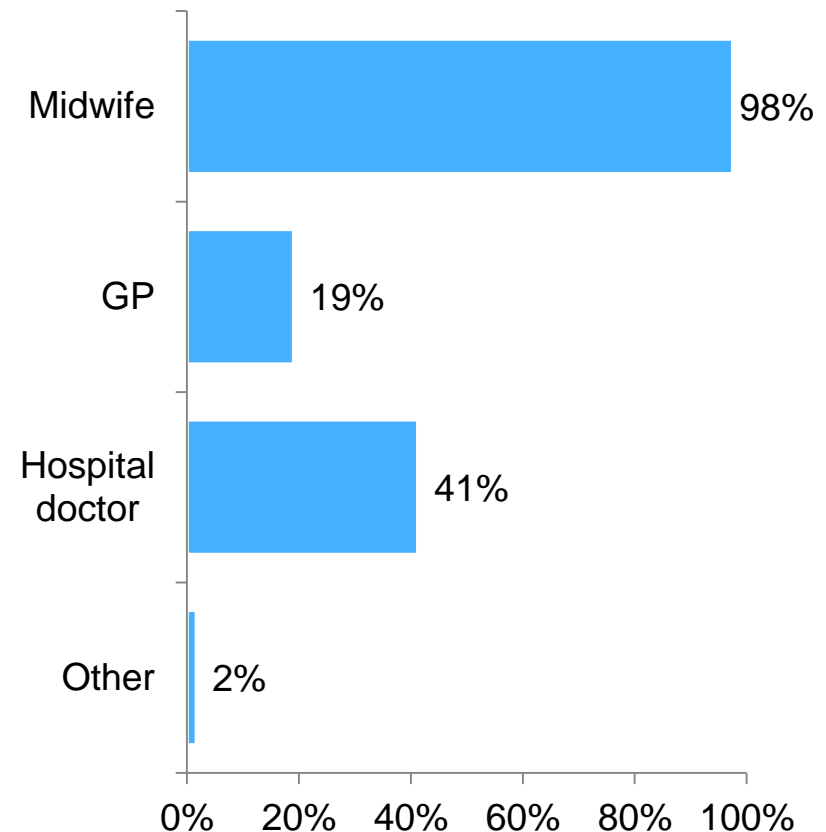
68% of women reported having a named midwife (and their contact details) who was responsible for all care during pregnancy and after birth. 35% of women saw the same midwife for all of their checks with 44% seeing one or two midwives during pregnancy. 19% of women saw five or more different midwives.

81% of women reported being screened for Downs' Syndrome, 17% did not want screening and 1% reported being offered no screening. Dating and anomaly ultrasound scans were reported by 95% and 99% of women respectively.

Almost seven out of ten women were not given a choice of where their antenatal check-ups would take place



98% of women saw a midwife for at least one of their antenatal check ups, with 63% of them indicating they did not see the same midwife every time



Treatment by staff during the antenatal period is generally good but there is room for improvement in information provision and some women are not asked about mental health problems

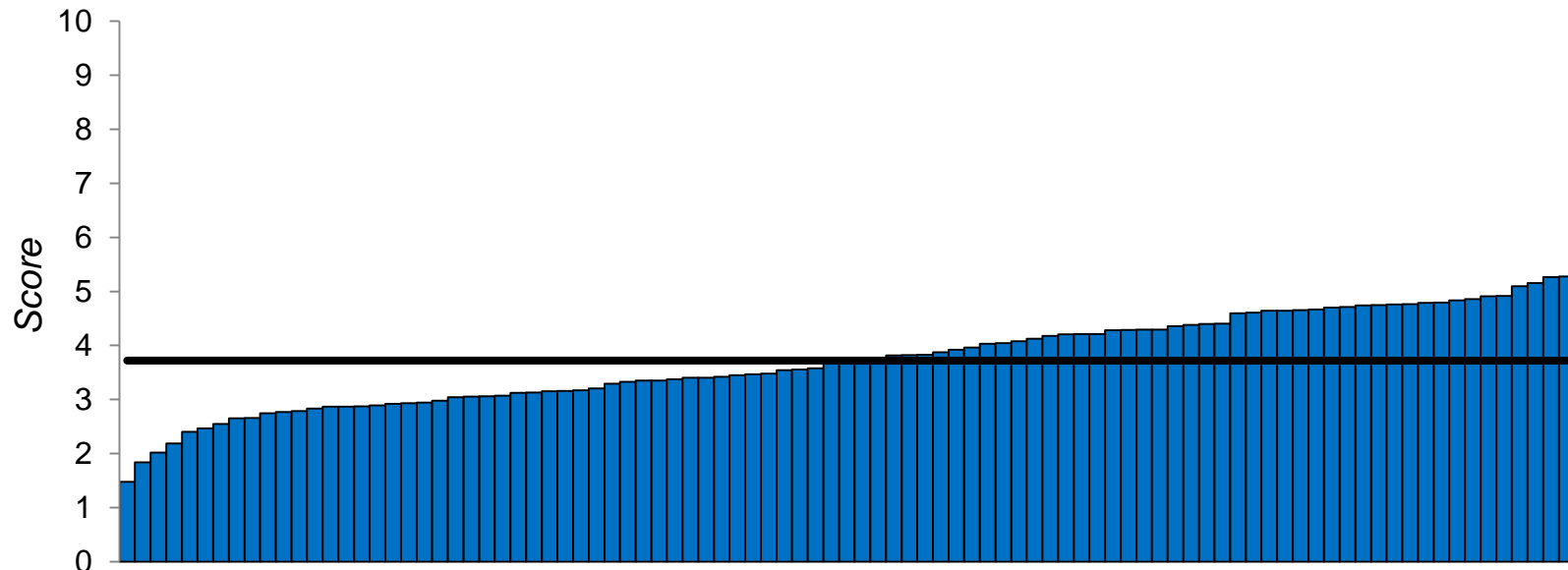
- NHS Antenatal education was offered to only 65% of women, with 84% of first time mothers reporting being offered antenatal education. Less than a third of women attended NHS education sessions and 14% paid for private sessions. Only 31% of women reported being informed about the NHS Information for Parents website.
- More than three quarters of women felt that staff always treated them well, with respect and kindness and talked to them in a way they could understand.
- Overall, 82% of women were asked about their emotional and mental health state at the time of booking, with 84% asked about past mental health problems and family history.
- Only 25% of all women were offered all four options of place of birth (Home, FMU, AMU, OU); 39% were aware of two or three of these options and a third had one choice only.
- Seven out of ten women thought that they had been provided with sufficient information to choose where to have their baby.

The start of care in your pregnancy: B4. Were you offered any of the following choices about where to have your baby?

Out of the questions contributing to the composite score for the "Start of care in your pregnancy" section (CQC maternity survey), question B4 demonstrated the highest variance.

The highest trust score is approximately 3.57 times larger than the lowest trust score. The score for the trust in the 90th percentile was 1.74 times larger than for the 10th percentile.

Trust level variation in scores for question B4. "Were you offered any of the following choices about where to have your baby?"

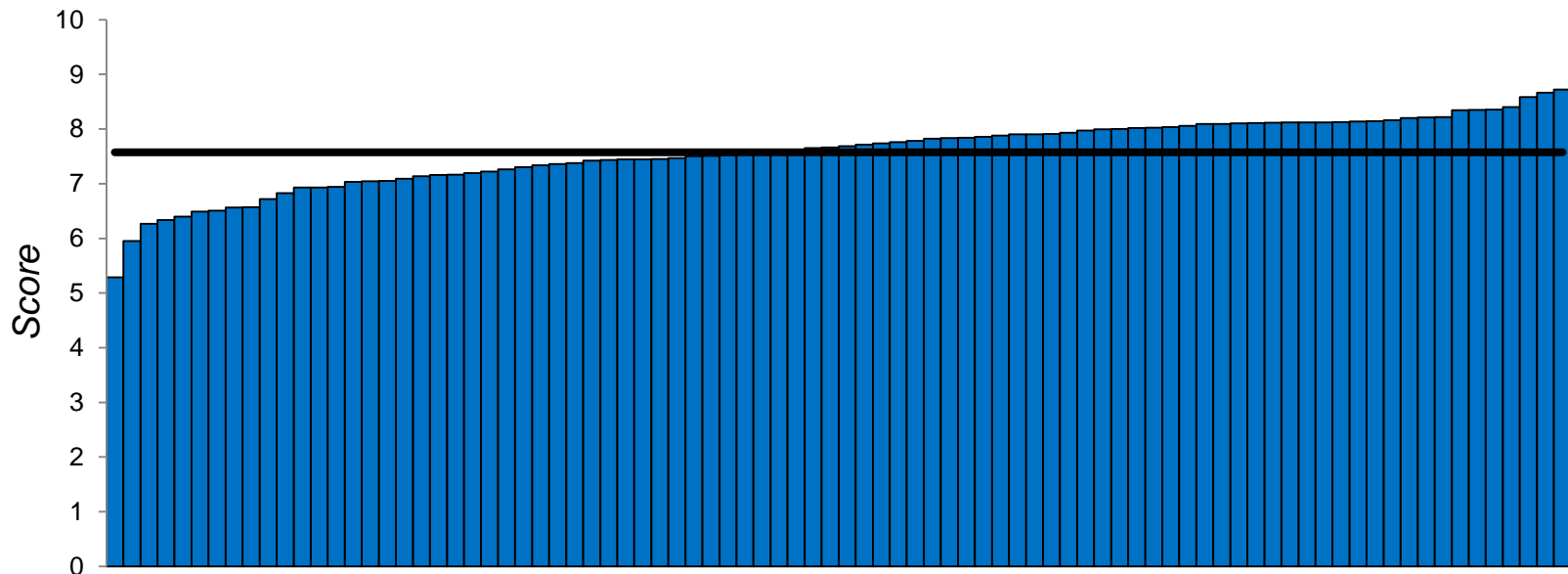


Feeding: E1. During your pregnancy did midwives provide relevant information about feeding your baby?

Out of the questions contributing to the composite score for "Feeding" section (CQC maternity survey), question E1 demonstrated the highest variance based on the max:min ratio.

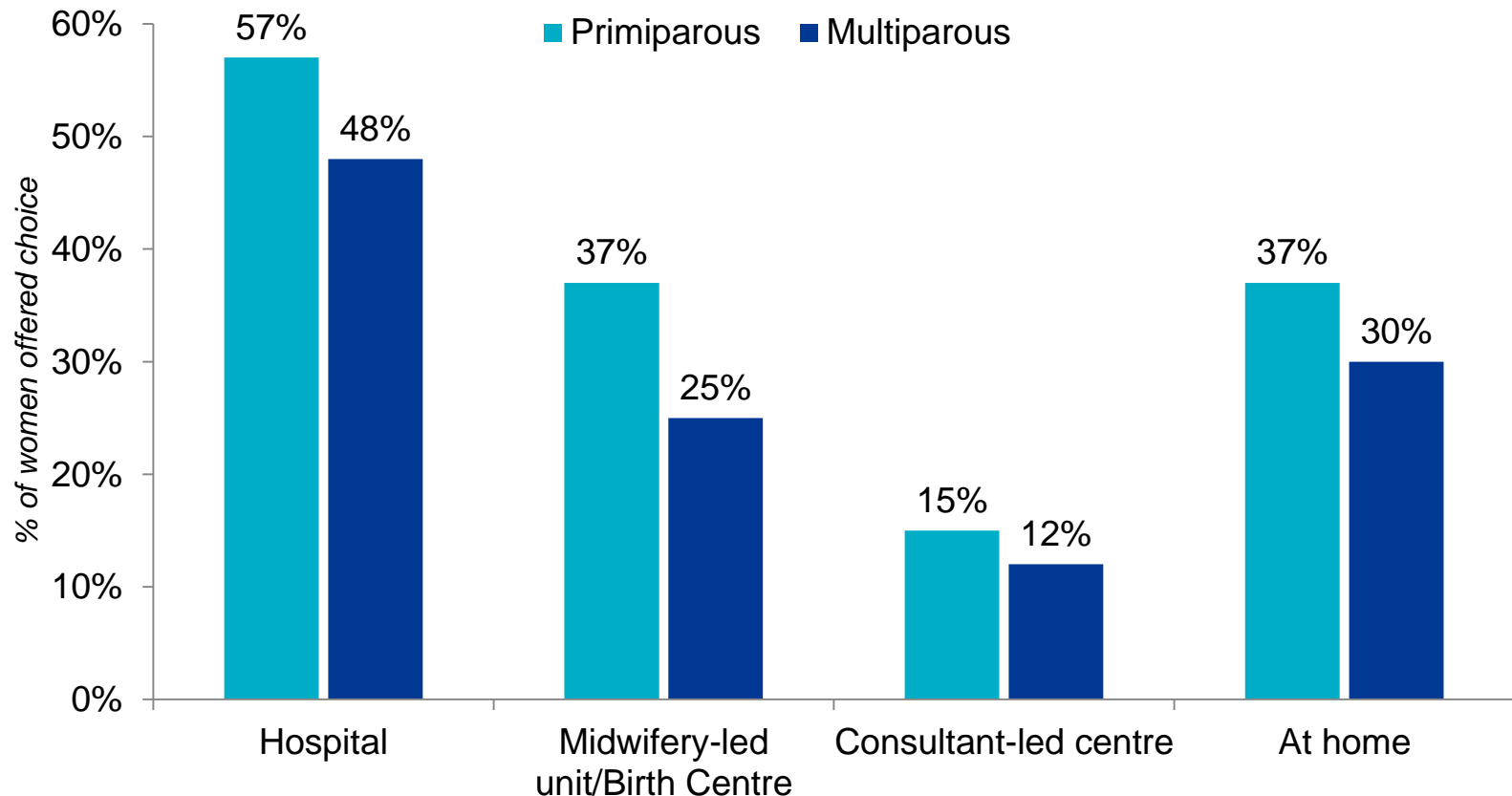
The highest trust score is approximately 1.65 times larger than the lowest trust score.

Trust level variation in scores for question E1. "During your pregnancy did midwives provide relevant information about feeding your baby?"



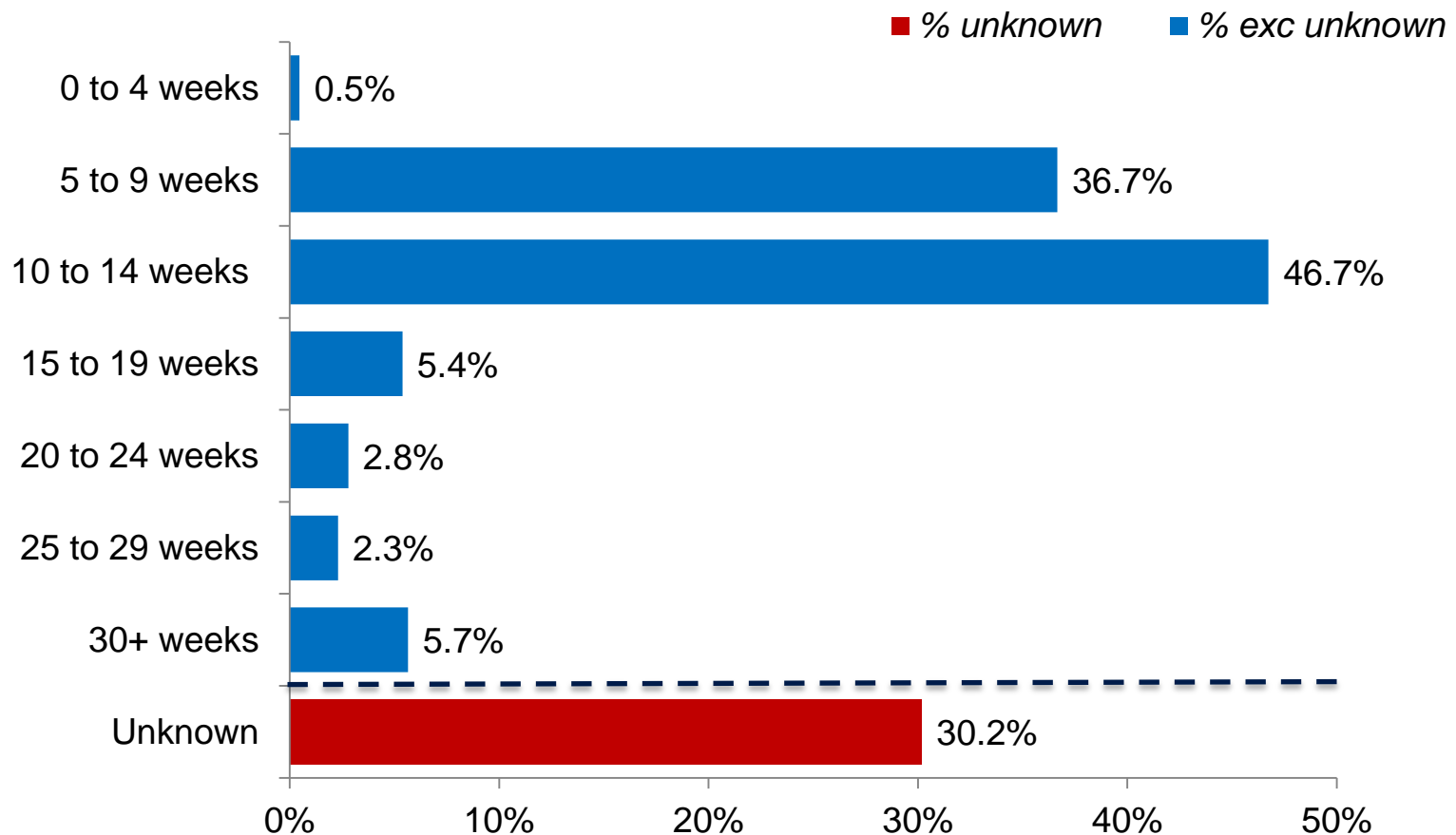
Primiparous women were offered choice of each birth setting more frequently than multiparous women across all options of birth settings, however 18% of primiparous women did not feel they got enough information from a midwife or doctor about deciding where to have their baby, compared to 14% of multiparous women.

Percentage of women offered choice of birth setting, by parity, 2013



84% of women have their first antenatal assessment before 15 weeks gestation but the high proportion of 'unknown' gestational ages reported highlights data quality issues

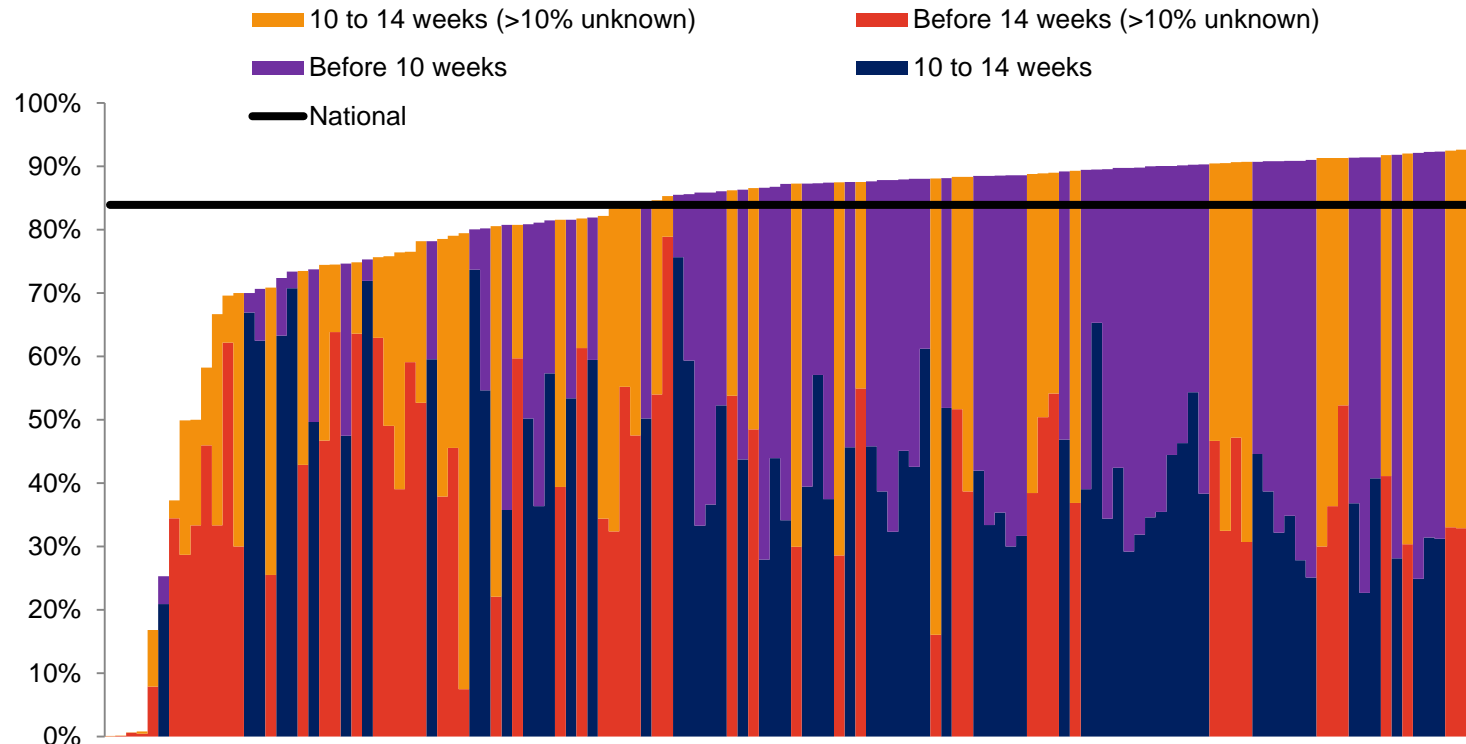
Gestation period at time of first antenatal assessment (England level)



Many trusts report a significant proportion of assessments with unknown gestational age, including 16% of trusts reporting 100% unknown gestational age

Although there appears to be large variation in gestational age at first antenatal assessment, there are data quality issues with this indicator, as highlighted by the large number of trusts with significant number of unknown gestational ages reported (Amber and pink bars below).

% of maternities with first antenatal assessment before 10 and between 10 and 14 weeks gestation (Excluding unknowns)



The crude rate of women smoking at delivery has remained stable, with lowest percentages in London and surrounding areas

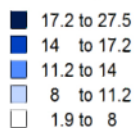
Right: The percentage of women smoking at delivery shows large variation across CCGs.

Below: The percentage of women smoking at delivery is generally lower in and around London.

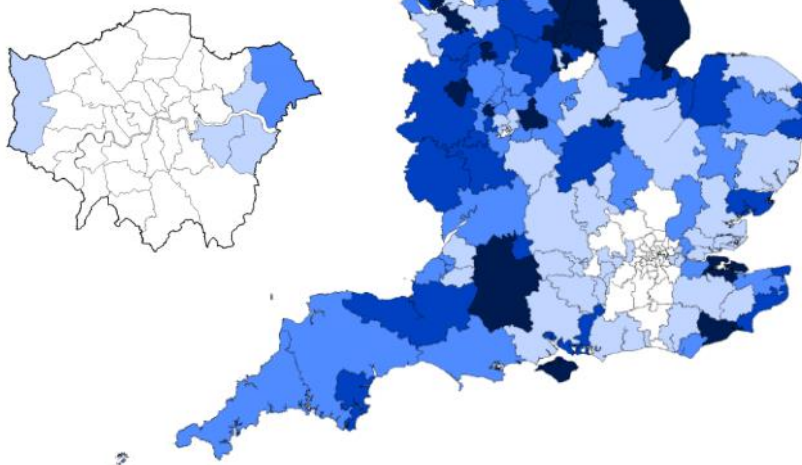
Bottom right: Nationally there has been a slight reduction in the percentage of women smoking at birth in recent quarters.

CCG level geographic variation in maternal smoking at delivery (2013 to 2014)

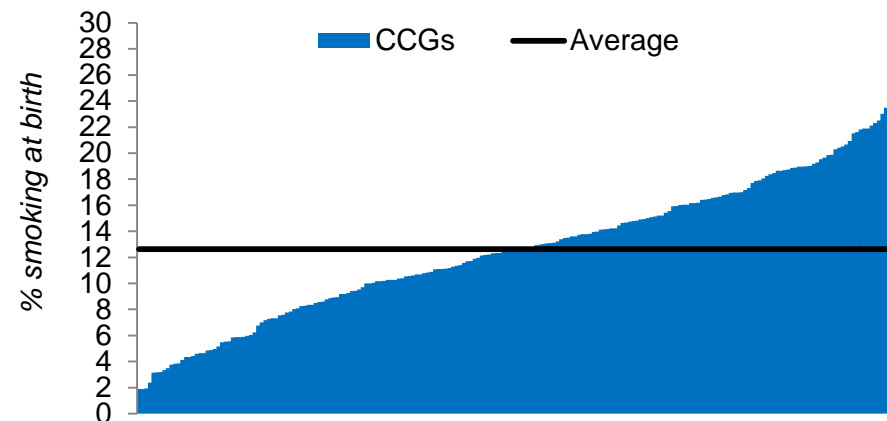
Percentage of women smoking at delivery



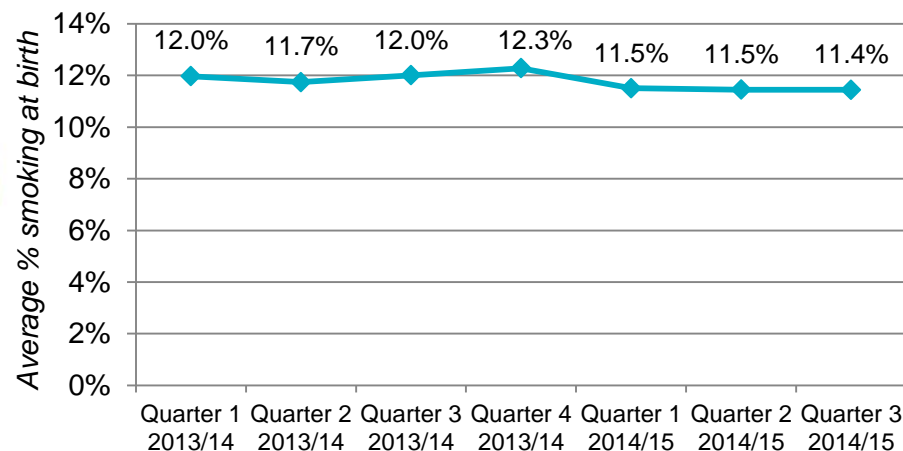
London



CCG level variation in maternal smoking at delivery (2013 to 2014)



Quarterly national trend in maternal smoking at delivery



Labour & Birth

- There is variation in the reporting of safety incidents, probably in common with other NHS services. Site visits have shown that units with open and effective learning cultures report higher rates of incidents. Information about repeat incidents, which may indicate a failure to learn, is lacking.
- Evidence of potential under-reporting should be treated as a flag to prompt further investigation.
- Labour and birth is a physiological process in the great majority, but it is commonly associated with varying degrees of local trauma. Complications of delivery recorded in HES have increased in recent years, the most common being perineal tears, in 40% of all deliveries. However, 3rd and 4th degree perineal tears are more serious, occur in 3% of all deliveries and show significant variation across trusts.^{1,2}
- Clinical indicators derived from HES show variation (after adjustment for clinical risk factors and patient characteristics).² However, data sources suffer from quality issues and process indicators are challenging to interpret in isolation.
- Increases in caesarean section rates over the past 15 years may be due to improvements in procedures, changing attitudes and the increasing age of mothers. However there is significant variation in emergency and elective caesarean section rates at trust level.¹

¹Higher degree perineal lacerations may provide a useful indicator of quality of care , taken from: *The Royal College of Obstetricians and Gynaecologists 2013 Patterns of Maternity Care in Hospitals 2011/12 report*, see the

[RCOG Clinical Indicators Project Website](#) for more information. See slide 143 for elective and emergency caesarean caveats.

²Source: *Hospital Episode Statistics (The Information Centre for health and social care)*. See slide 148 for more information.

Labour & Birth (Continued)

- Women's experience of labour and birth is generally positive. However there is scope for improvement:
 - The proportion of women who felt that they were left alone at a time that worried them during labour and birth ranged from 0% to 21% across trusts.¹
 - Only 16% of labouring women reported having one-to-one midwife care, just over a third had two midwives, with 26% having four or more midwives caring for them.²
 - 85% of women reported not having previously met any of the midwives caring for them during labour and birth.²
 - Labour started naturally for 60% of women. However for those women that were induced, nearly half (45%) were not offered a choice about the induction.²
 - 26% of women did not always feel involved in decisions made about their care during labour and birth.¹ This compares to 23% of women responding to the NPEU Safely Delivered Survey.²

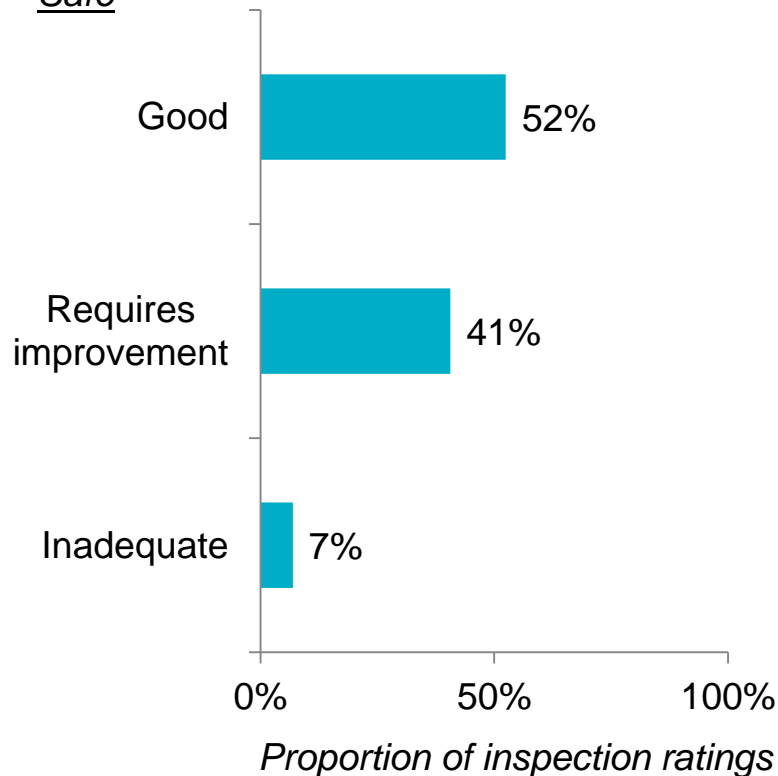
¹Source: CQC Maternity Survey 2013. See slides 78-79 and 144-147 for more information

²Source: NPEU Safely Delivered: a national survey of women's experience of maternity care 2014.

Around 1 in 2 CQC inspections of maternity services resulted in a rating of 'inadequate' or 'requires improvement' for being 'safe' while 1 in 5 resulted in equivalent ratings for being 'effective'¹

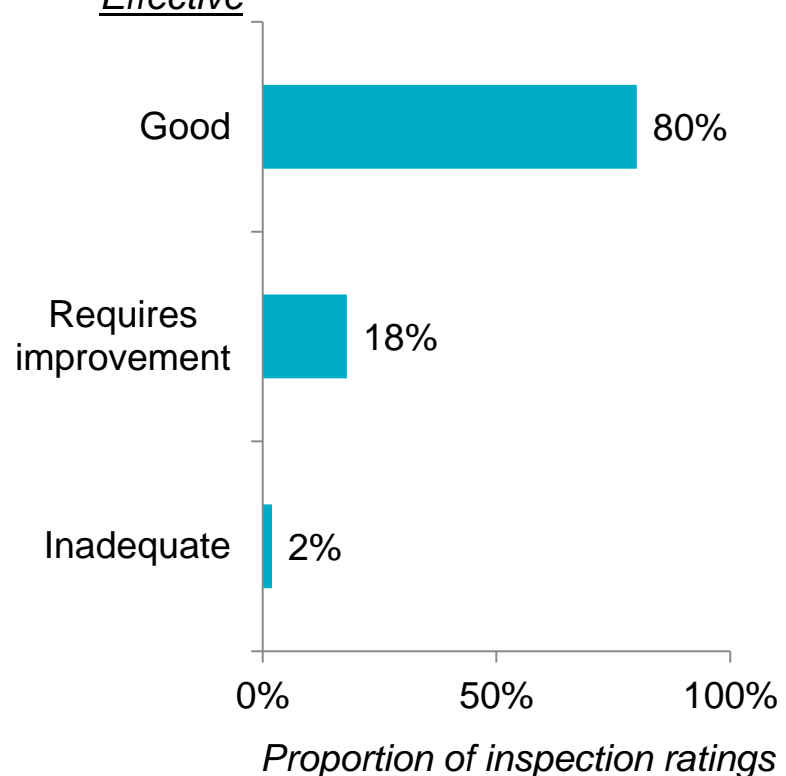
CQC Inspection Ratings, maternity services:

Safe



CQC Inspection Ratings, maternity services:

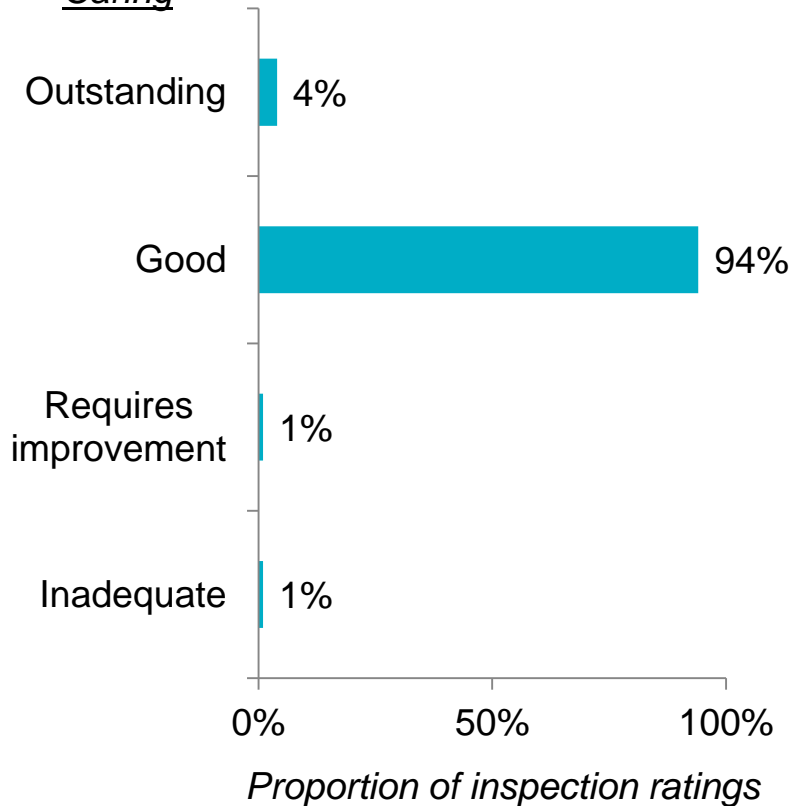
Effective



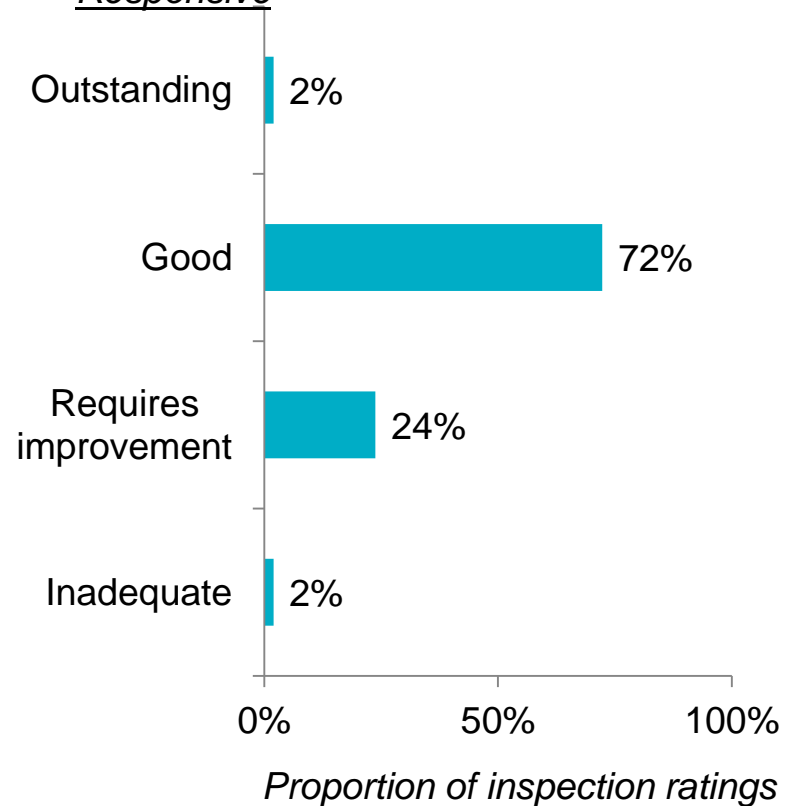
¹Inspections were conducted between 18.12.2013 and 22.05.2015 and covered 67 providers. Inspections are conducted at organisations in which possible indicators of quality show possible cause for concern at trust level. Intelligent Monitoring is used to assign acute NHS trusts into six priority bands for inspection. Intelligent monitoring looks at data for the entire trust not by individual units. Therefore, the proportions represented above are not intended to represent all NHS maternity services.

CQC Inspection Ratings show that maternity services perform very well for 'caring' yet there is room for improvement for being responsive to patients' needs in a quarter of the sites inspected¹

CQC Inspection Ratings, maternity services:
Caring



CQC Inspection Ratings, maternity services:
Responsive

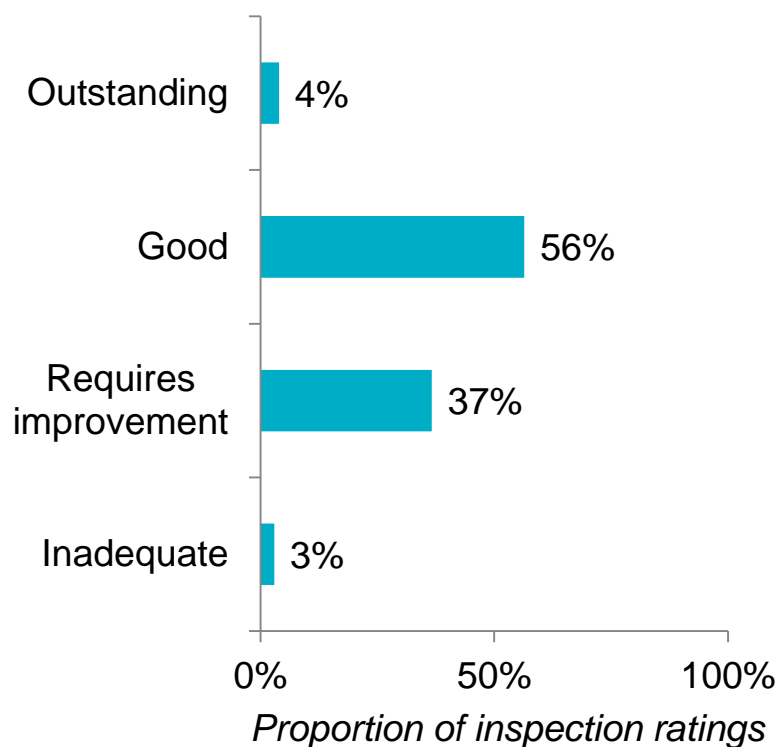


¹Inspections were conducted between 18.12.2013 and 22.05.2015 and covered 67 providers. Inspections are conducted at organisations in which possible indicators of quality show possible cause for concern at trust level. Intelligent Monitoring is used to assign acute NHS trusts into six priority bands for inspection. Intelligent monitoring looks at data for the entire trust not by individual units. Therefore, the proportions represented above are not intended to represent all NHS maternity services.

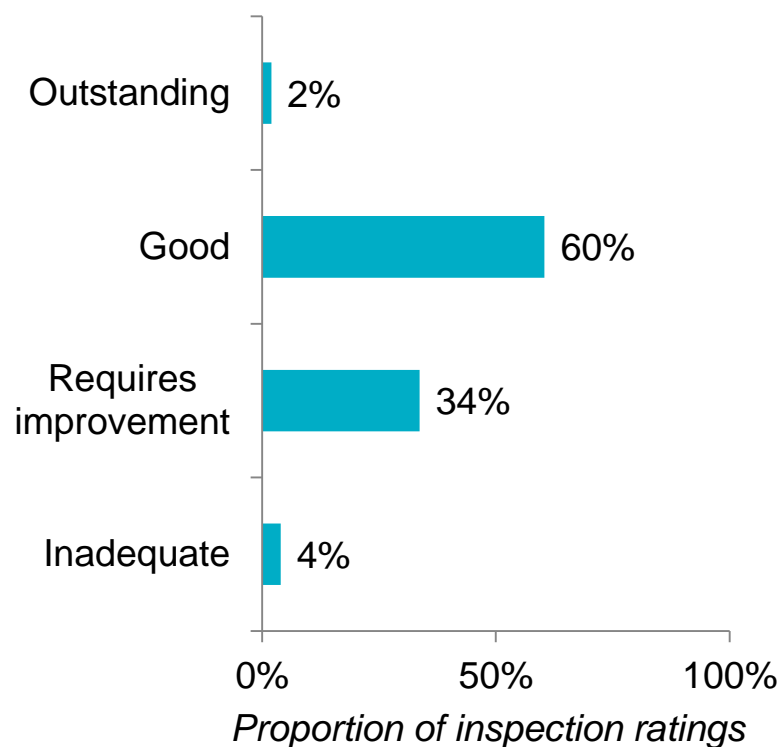
Source: CQC Inspection Ratings Dec 2013 to May 2015. See slide 133 for more information.

Around 1 in 3 of CQC inspections of maternity services resulted in a rating of 'inadequate' or 'requires improvement' for being 'well-led'. 'Overall' ratings show a similar distribution¹

CQC Inspection Ratings, maternity services:
Well-led

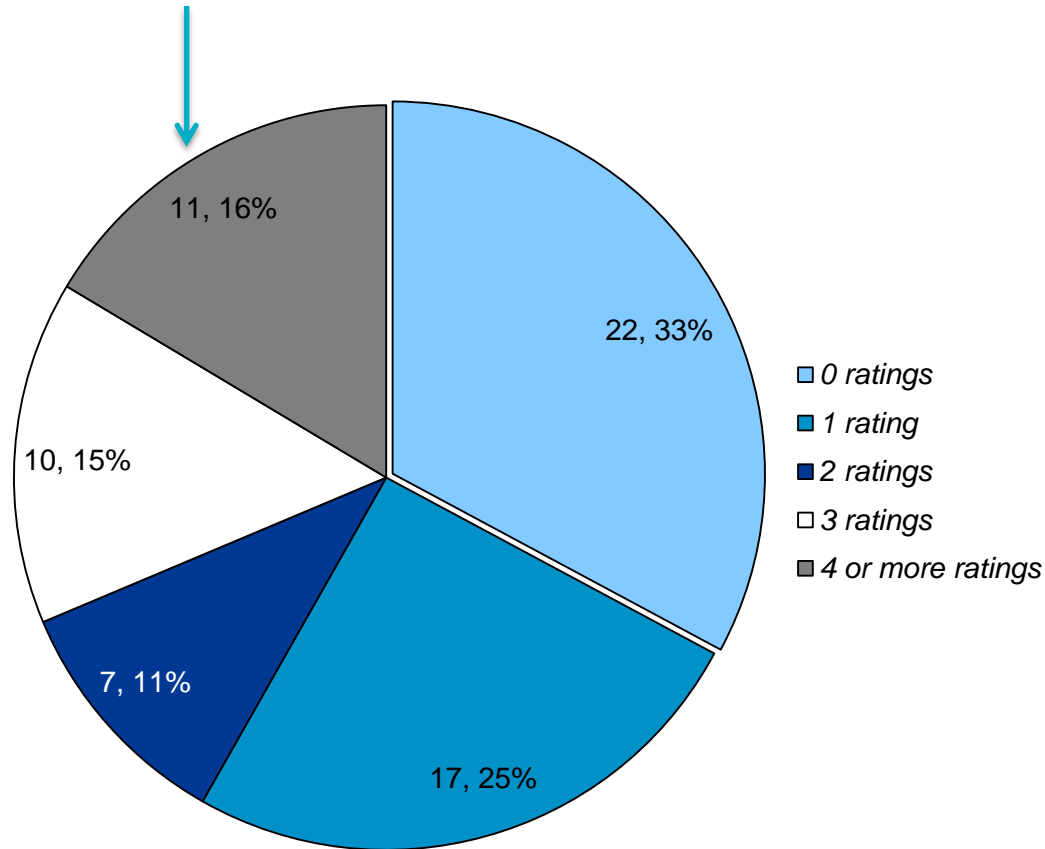


CQC Inspection Ratings, maternity services:
Overall

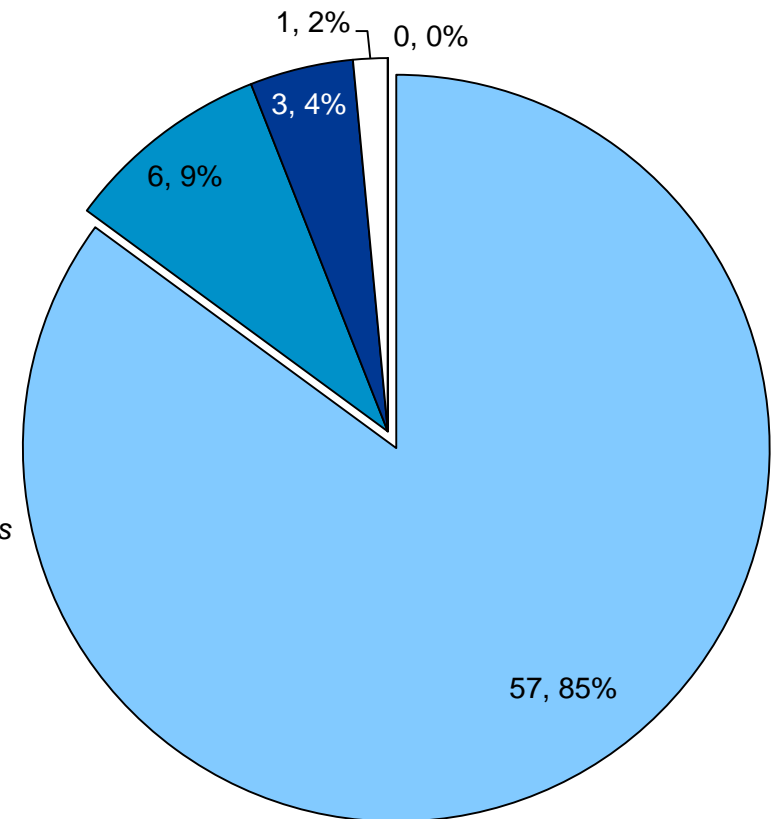


¹Inspections were conducted between 18.12.2013 and 22.05.2015 and covered 67 providers. Inspections are conducted at organisations in which possible indicators of quality show possible cause for concern at trust level. Intelligent Monitoring is used to assign acute NHS trusts into six priority bands for inspection. Intelligent monitoring looks at data for the entire trust not by individual units. Therefore, the proportions represented above are not intended to represent all NHS maternity services.

Eleven trusts (out of 67) have received 4 or more 'requires improvement' ratings from CQC inspections of maternity services



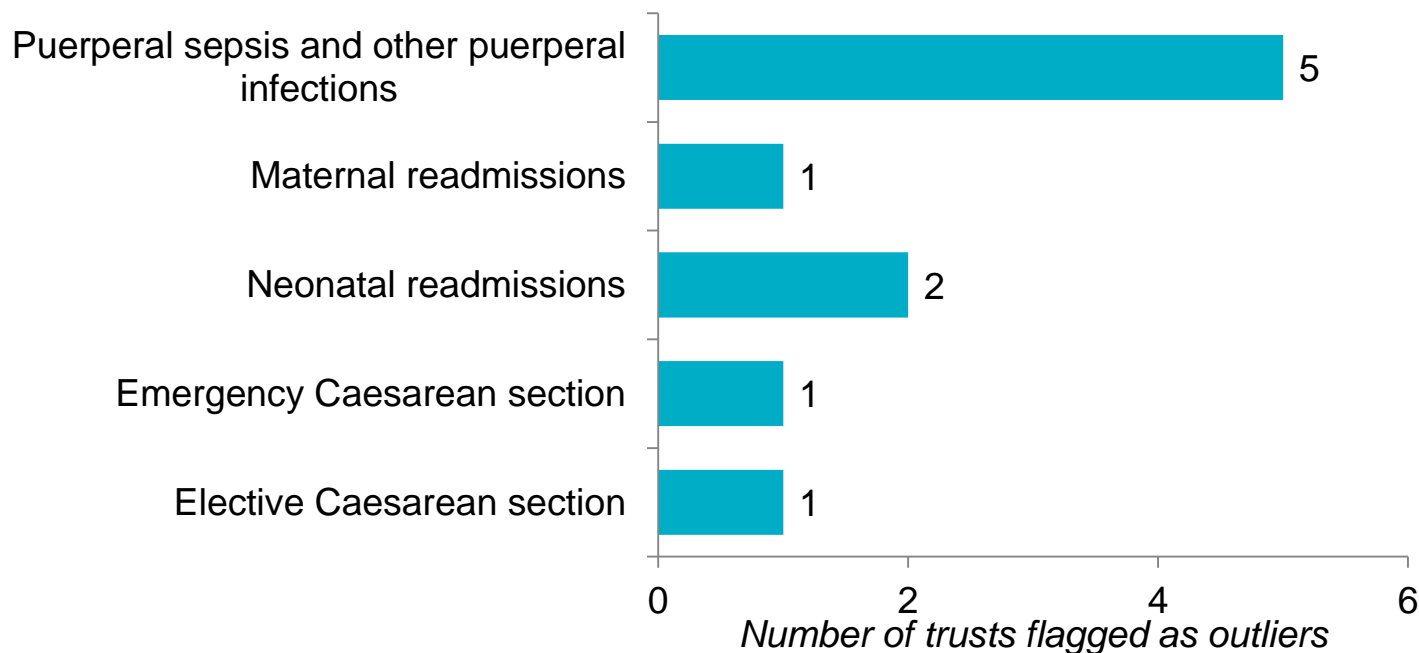
Ten trusts have at least 1 'inadequate' rating from CQC inspections of maternity services, with 1 trust having 3 inadequate ratings



There are no providers with a 'elevated risk' status for the CQC's maternity outlier alert indicators but 10 providers have a status of 'Risk'

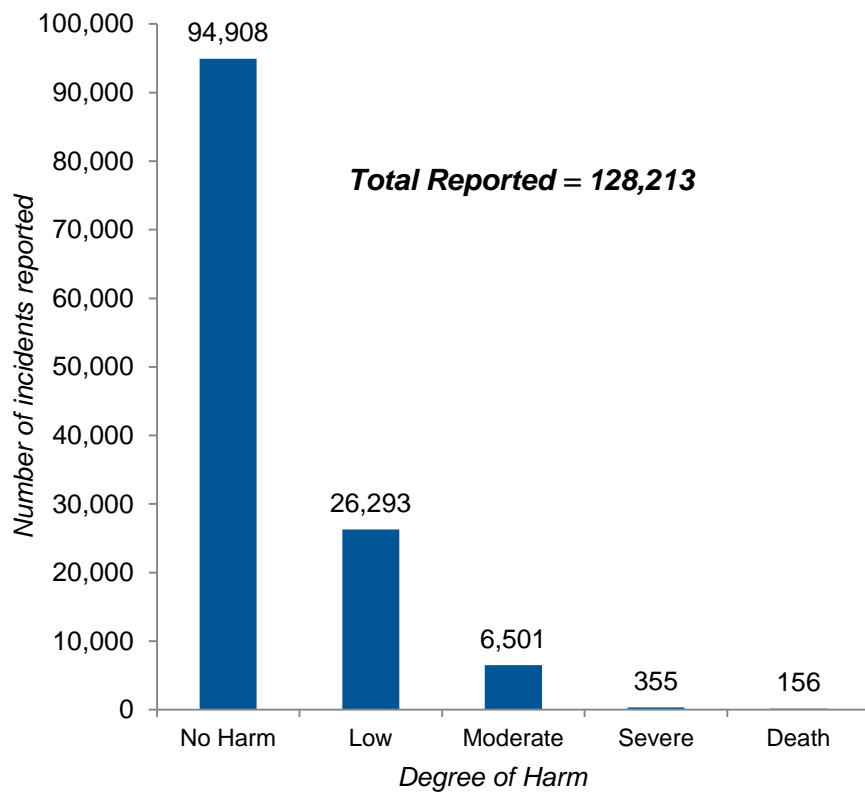
- No providers are flagged as an outlier for more than one (of five) maternity specific indicators.
- There are five trusts with a risk status for 'Puerperal sepsis and other puerperal infections within 42 days of delivery'.

Number of trusts flagged as outliers in maternity specific categories, CQC Intelligent Monitoring, 2015.



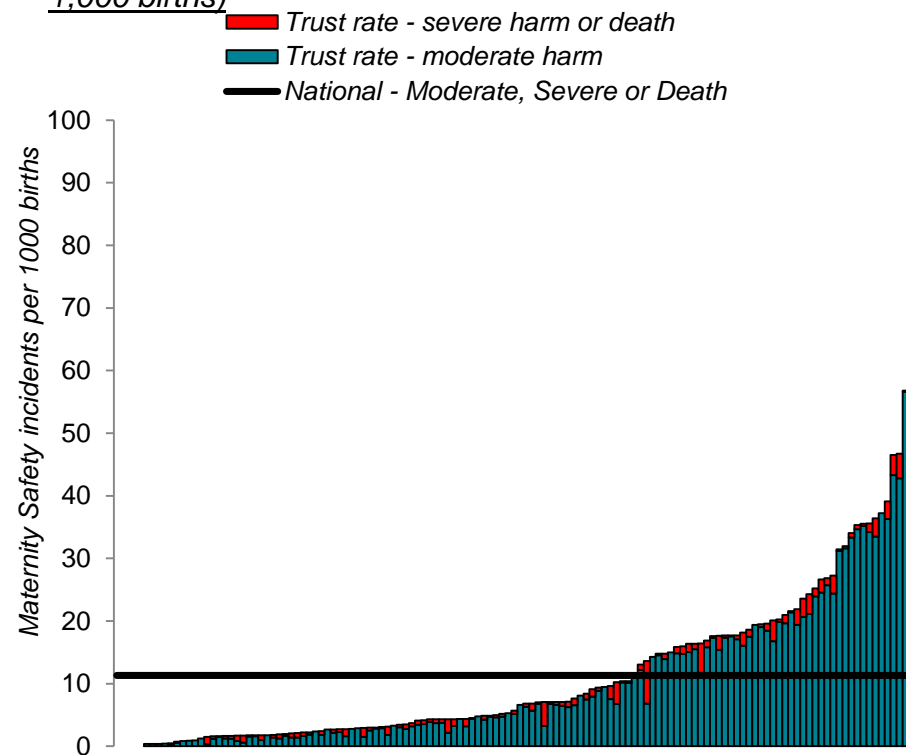
There were 128,213 reported safety incidents in maternity services in 2014-15. Of every 1,000 births, 11.3 births resulted in a safety incident being reported as causing moderate harm, severe harm or death¹

Total Reported Safety Incidents in Maternity Services – 2014/15



There is large variation in maternity safety incident reporting rates across trusts, with between 0 and 98 safety incidents being reported as causing moderate harm, severe harm or death per 1,000 births¹

Trust Variation in Reported Safety Incidents in Maternity Services that led to moderate harm, severe harm or death (per 1,000 births)



¹Outliers at extremes may be linked to data quality issues. The number of incidents reported may differ from the number of incidents that occurred within a given period.

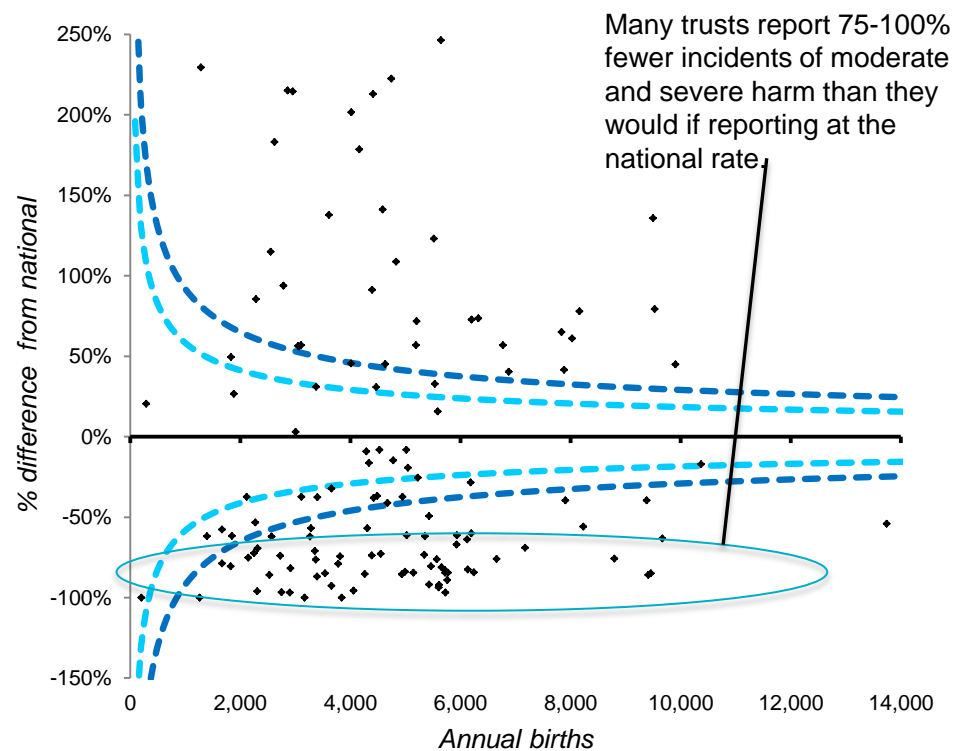
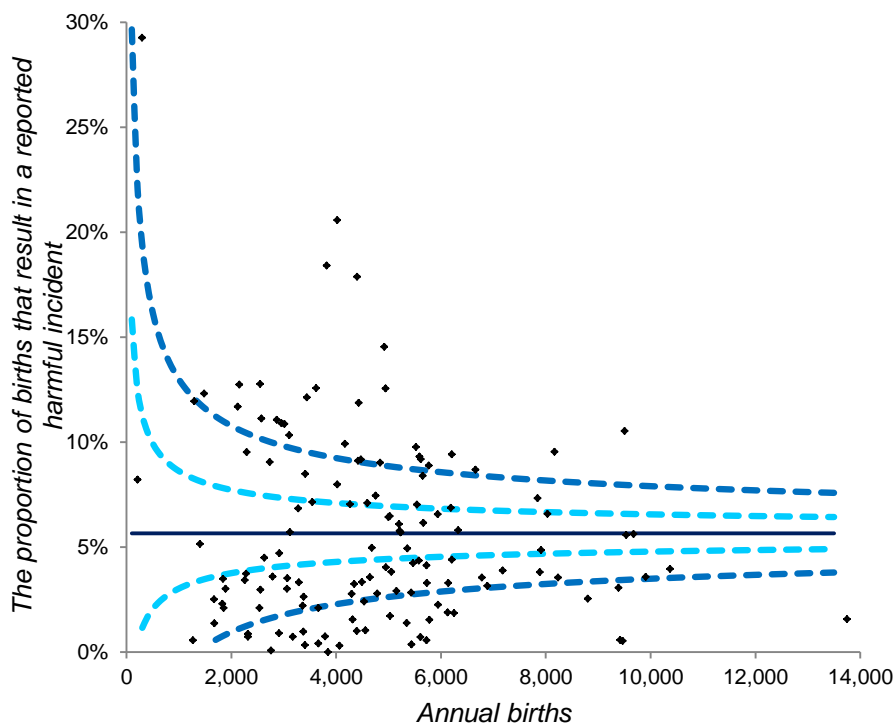
Source: NRLS Team Imperial College. Incidents reported as occurring between 01 Apr 2014 and 31 Mar 2015. NRLS fields were used to derive incidents in maternity services and do not therefore include incidents occurring in community midwifery. HSCIC: HES Maternity Statistics.

Provider level birth numbers 2014-15

There is large variation in actual vs. national safety incident reporting rates in maternity services, which is inexplicable by random variation alone. Of particular note is the extent of inexplicable variation in the rate of reported incidents that led to moderate or more severe harm. (See slide 141 for detailed notes on interpretation of incident reporting data)

Variation in the proportion of births that result in a reported harmful incident, by trust¹. Points show individual trusts; black line shows the national mean

Variation in the number of incidents reported resulting in moderate or greater harm, by trust, compared to the national rate.



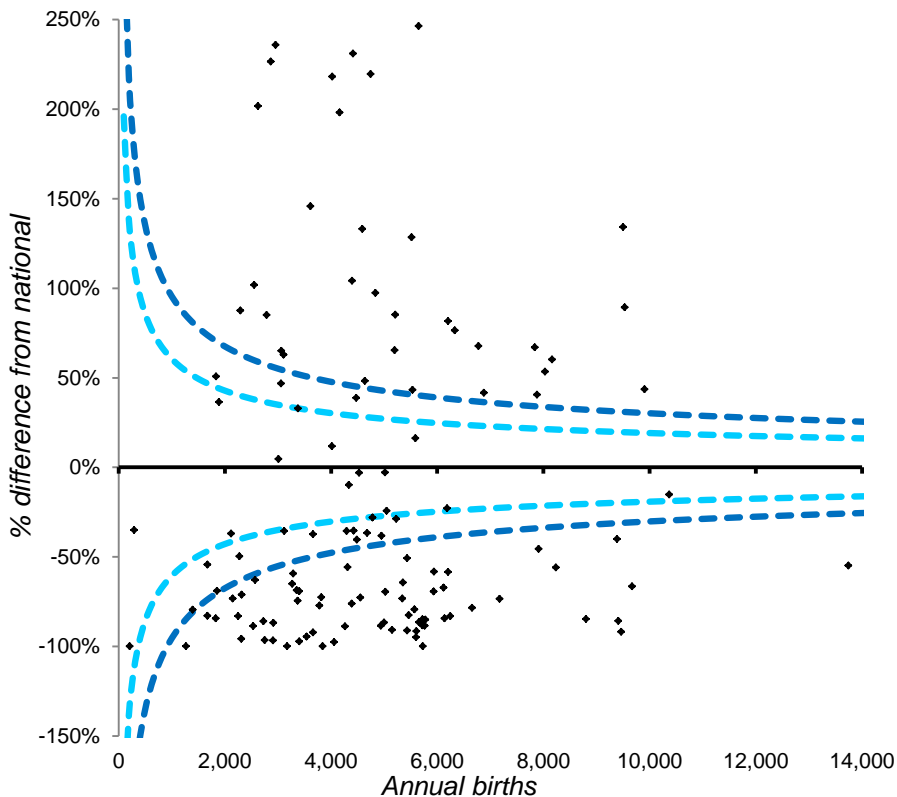
1. The funnel plots demonstrate the degree of variance in reported incident rates and are not intended to represent the indicator is a suitable measure of quality and safety. Data has therefore not been adjusted for over-dispersion. Points show individual trusts; black line shows mean; light and dark blue dotted lines show 5/100 and 2/1000 expected levels respectively, if variation random.

Source: NRLS Team Imperial College. Incidents reported as occurring between 01 Apr 2014 and 31 Mar 2015. NRLS fields were used to derive incidents in maternity services and do not therefore include incidents occurring in community midwifery. HSCIC: HES Maternity Statistics.

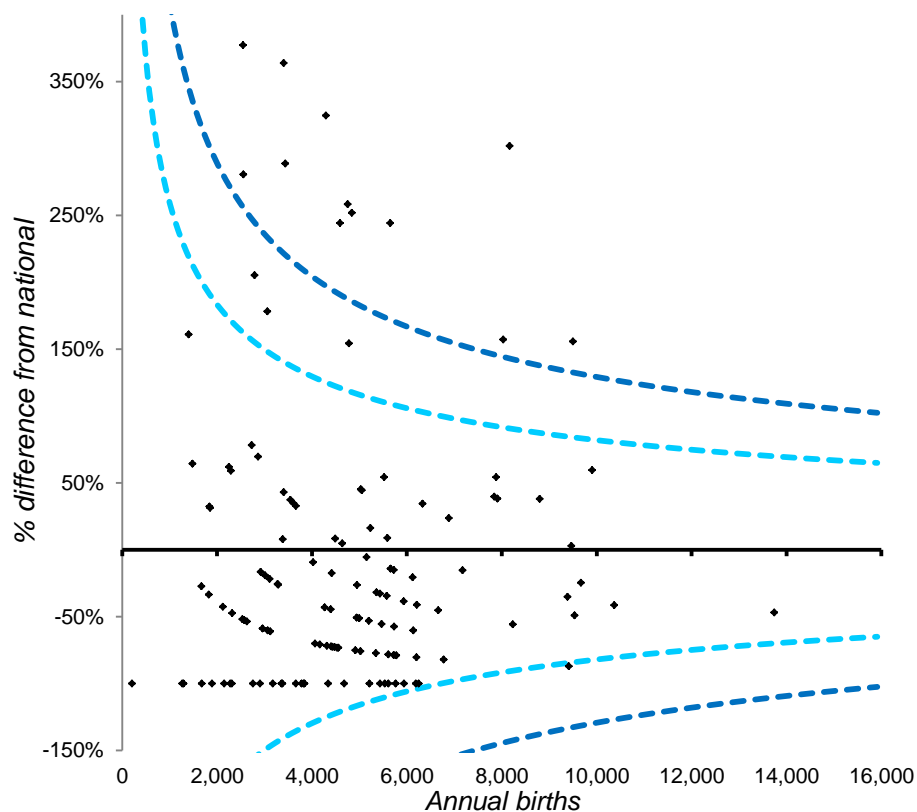
Provider level birth numbers 2014-15

There is large variation in actual vs. national safety incident reporting rates in maternity services for moderate harm; and severe harm and death, which is also inexplicable by random variation alone¹ (See slide 141 for detailed notes on interpretation of incident reporting data)

Variation in the number of incidents reported resulting in moderate harm, by trust, compared to the national rate.



Variation in the number of incidents reported resulting in severe harm, or death, by trust, compared to the national rate.



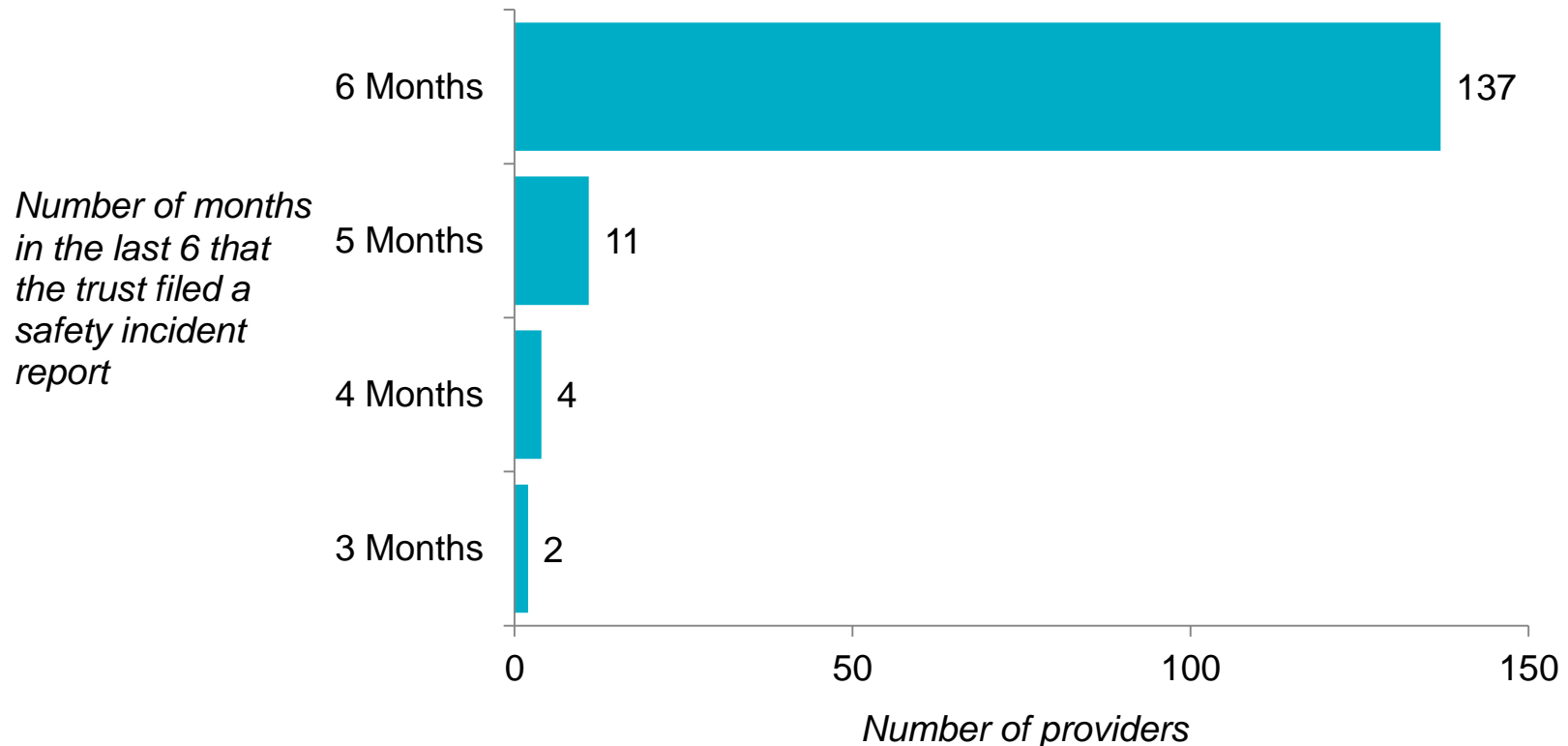
1. The funnel plots demonstrate the degree of variance in reported incident rates and are not intended to represent the indicator is a suitable measure of quality and safety. Data has therefore not been adjusted for over-dispersion. Points show individual trusts; black line shows mean; light and dark blue dotted lines show 5/100 and 3/1000 expected levels respectively, if variation random.

Source: NRLS Team Imperial College. Incidents reported as occurring between 01 Apr 2014 and 31 Mar 2015. NRLS fields were used to derive incidents in maternity services and do not therefore include incidents occurring in community midwifery. HSCIC: HES Maternity Statistics.

Provider level birth numbers 2014-15

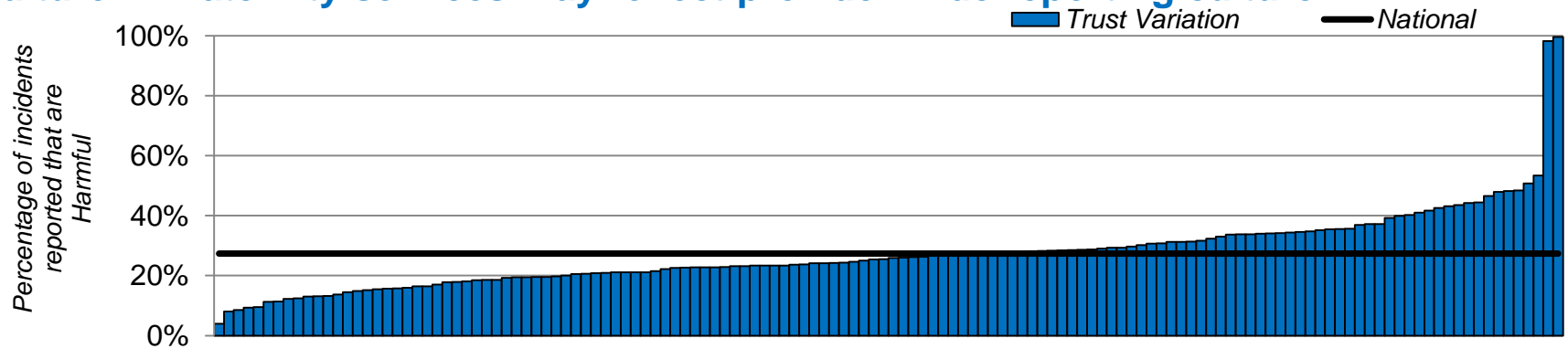
Delayed reporting of incidents is an issue at provider level: Six trusts did not upload an incident report in three or four of the calendar months in the six months to June 2015¹ *(See slide 141 for detailed notes on interpretation of incident reporting data)*

Number of months in the last 6 that trusts filed a safety incident report

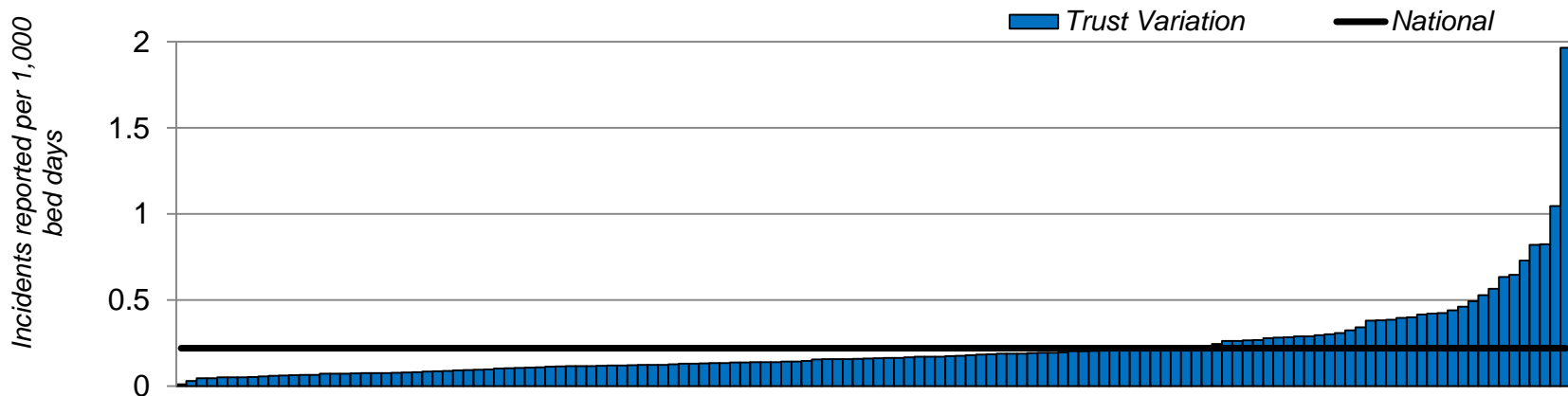


¹There may be legitimate reasons why upload is occasionally delayed and does not occur for one or two calendar months. The most typical cause is providers installing a new local risk management system, where upload to the NRLS will be held back until the NRLS team have confirmed the data linkages are correctly configured. Typically after a period of missed upload trusts will retrospectively upload all reports for that earlier periods. If missed upload occurs without legitimate reasons, it may indicate weaknesses to central governance systems in the trust.

Nationally, 27% of all reported incidents are harmful; and at provider level there is large variation in the proportion of reported incidents that are harmful. Reporting culture in maternity services may reflect provider-wide reporting culture.



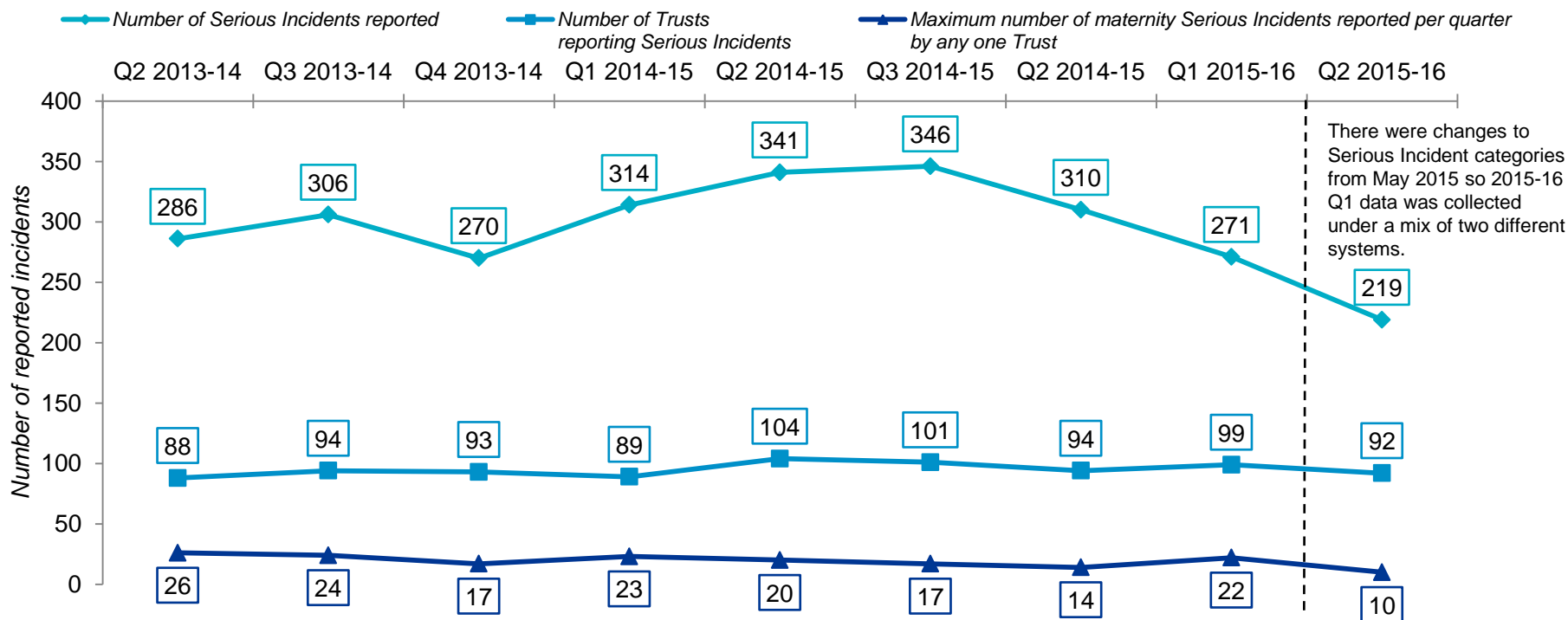
Variation in reported incidents of death and severe harm per 1,000 bed days highlights inconsistency in provider-wide reporting practices, for example potential under reporting; or over-reporting through incorrect categorisation of incidents.



While some trusts report no Serious Incidents identifiable as happening in maternity services¹ in a given quarter, others report up to 26 Serious Incidents, suggesting large variation in reporting practices and culture (See slide 141 for detailed notes on interpretation of incident reporting data)

- The variation in the number of Serious Incidents reported by trusts is not indicative of the safety of services but may reflect differences in serious incident reporting thresholds and/or differences in reporting and learning cultures.

Serious Incidents in Maternity Services – Quarterly Aggregated Trends² (Q2 2013-14 – Q2 2015-16)



1. Some Serious Incidents occurring in maternity services are not identifiable as such due to the type of incident reported. From May 2015-16 incidents can be identified by clinical area such as obstetrics, so a wider variety of incidents can be identified as happening in maternity units.

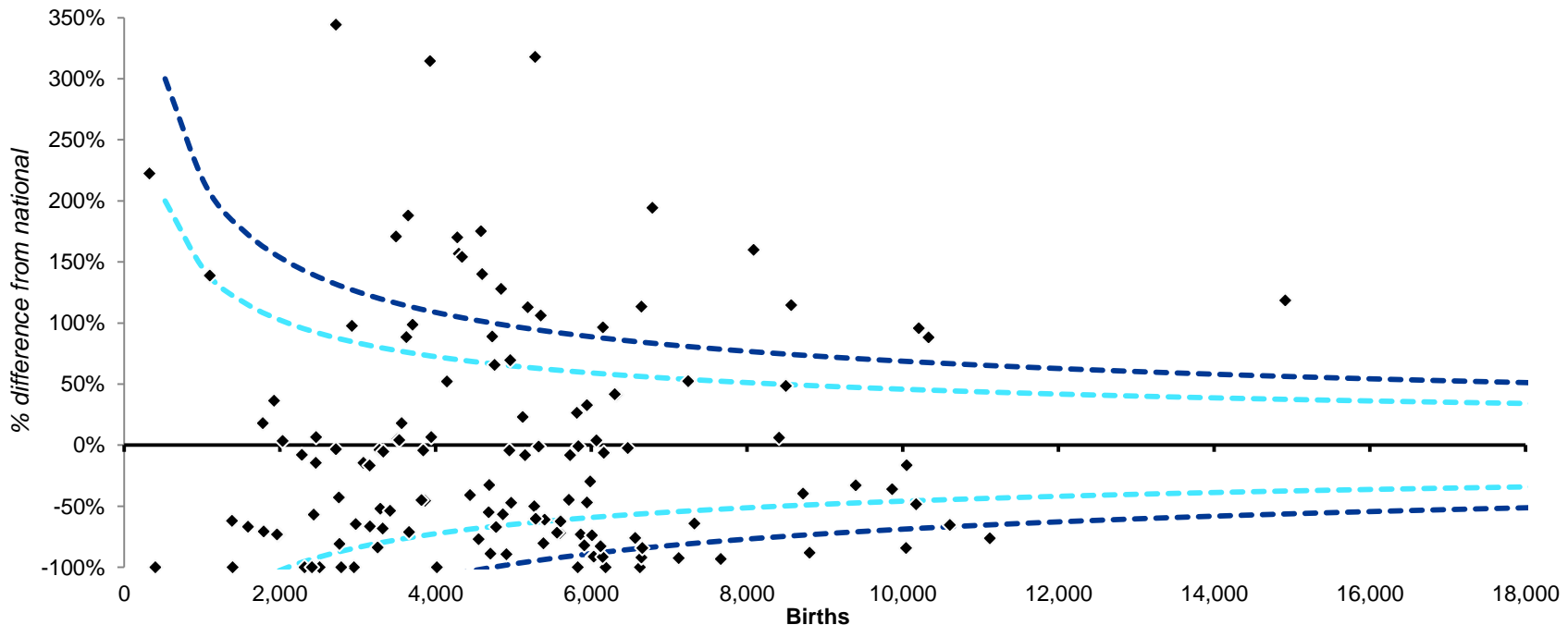
2. Time series comparisons must be made with caution due to changes in reporting categories

Source: NHS England STEIS database - Q2 2013-14 to Q2 2015-16. See slides 139-141 for more information.

The variation in serious incident reporting rates in maternity services, is inexplicable by random variation alone (See slide 141 for detailed notes on interpretation of incident reporting data)

- A funnel plot of actual vs national reported serious incident rates at provider level shows large variation, which may be interpreted as an indication of variation in reporting and learning culture between trusts.
- Due to the high volume of activity in maternity services it is unlikely that incidents would occur so infrequently. Trusts with low numbers of serious incidents declared (i.e. reported to STEIS) **may** therefore not be using effective reporting practices.¹

Variation in the number of serious incidents in maternity services reported, by trust, compared to the national rate.
(Light blue dashed lines represent 95% limits. Dark blue dashed lines represent 99.8% limits)



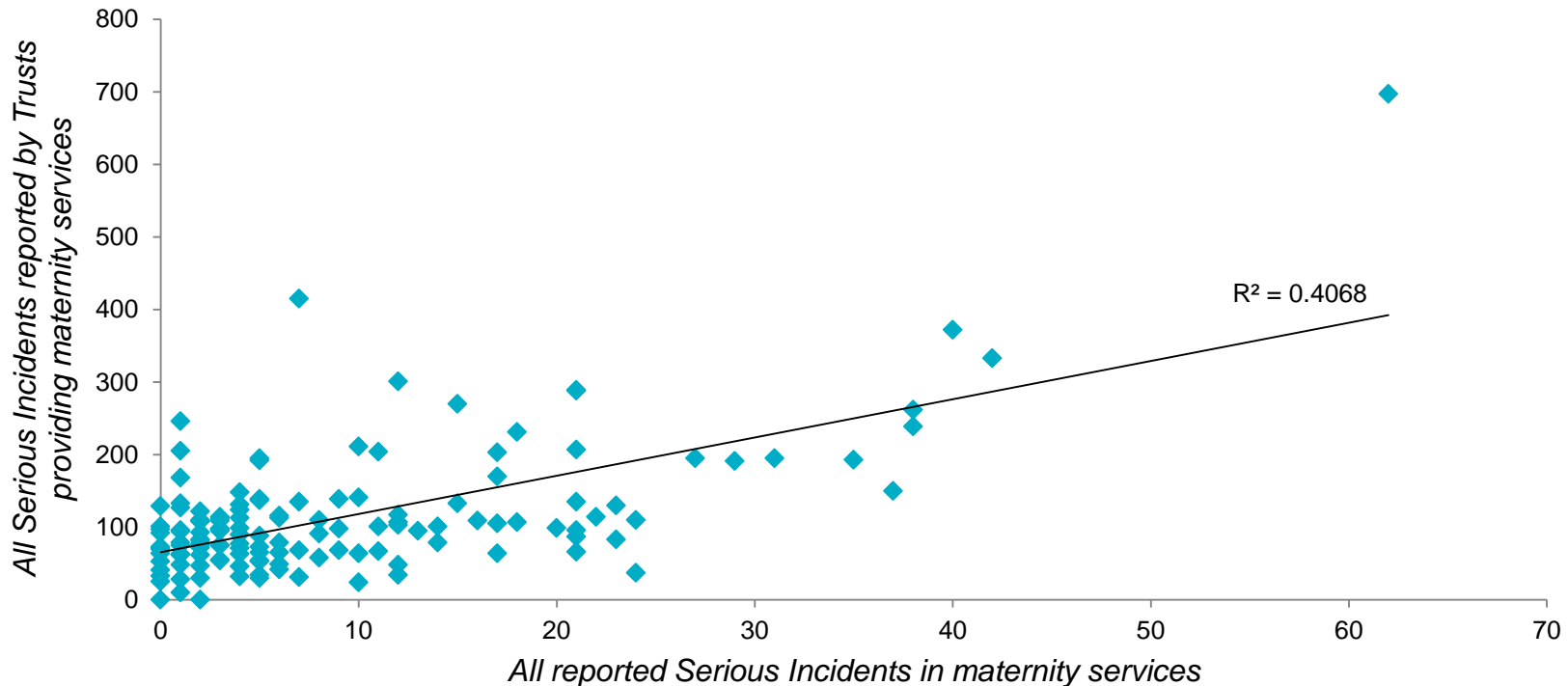
Source: NHS England STEIS database - Serious Incidents identifiable as in Maternity Services with a created date between 01 Apr 2014 and 31 Mar 2015.

1. Some serious incidents occurring in maternity services are not identifiable as such due to the type of incident reported. From May 2015-16 incidents can be identified by clinical area such as obstetrics, so a wider variety of incidents can be identified as happening in maternity units.

There is some evidence of reporting and learning culture being trust wide. *(See slide 141 for detailed notes on interpretation of incident reporting data)*

- The variation in numbers of reported Serious Incidents in maternity services explains 41% of the variation in the number of all Serious Incidents reported by trusts providing maternity services, providing some evidence that reporting and learning culture is trust wide

Number of Serious Incidents reported in Maternity Services against number of all Serious Incidents, by trust (2014/15)¹

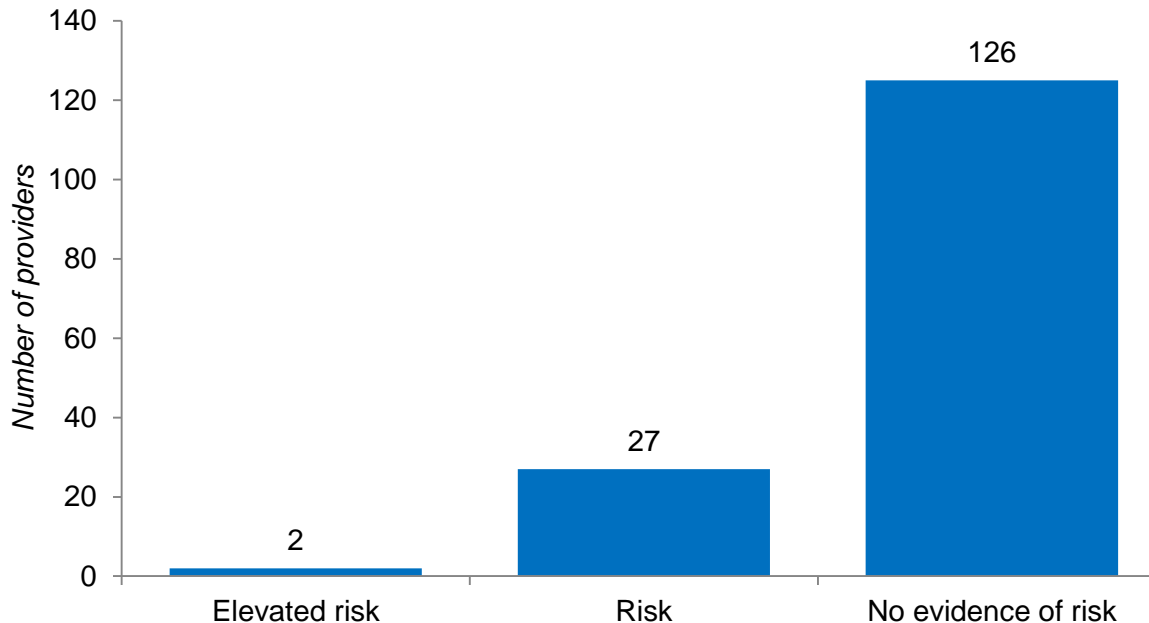


Source: NHS England STEIS database - Serious Incidents identifiable as in Maternity Services with a created date between 01 Apr 2014 and 31 Mar 2015.

1. Some serious incidents occurring in maternity services are not identifiable as such due to the type of incident reported. From May 2015-16 incidents can be identified by clinical area such as obstetrics, so a wider variety of incidents can be identified as happening in maternity units.

CQC flag 2 providers with elevated risk and 27 with risk for dealing with Central Alerting System (CAS) safety alerts in a timely way

Count of providers with CAS alerts that had closing dates during the preceding 12 months to May 2015, where the provider closed the alert late



The composite indicator is based on three other alert indicators:

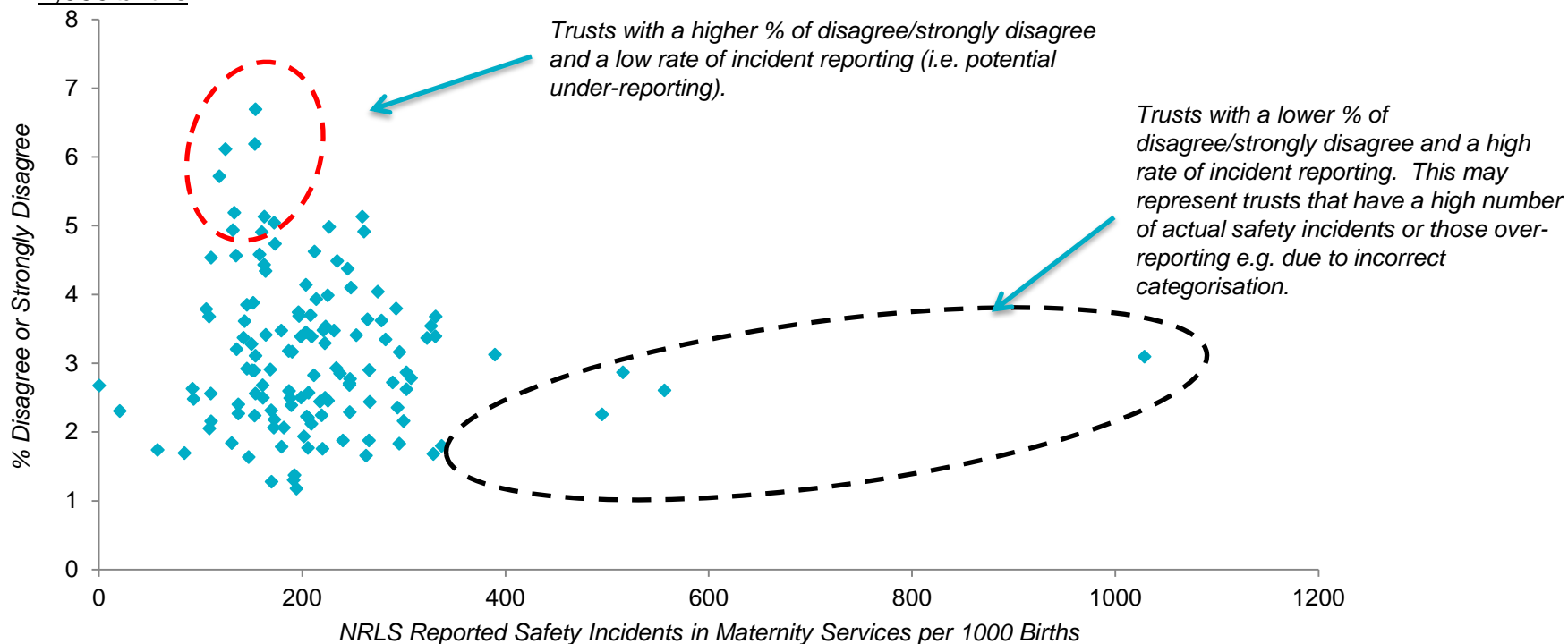
- The number of alerts which CAS stipulated should have been closed by trusts during the preceding 12 months, but which were still open on the date CQC extracted data from the CAS system.
- The number of alerts which CAS stipulated should have been closed by trusts more than 12 months before, but which were still open on the date CQC extracted data from the CAS system.
- Percentage of CAS alerts with closing dates during the preceding 12 months which the trust has closed late.

NHS Staff Survey results indicate that incident reporting is actively encouraged within midwifery compared to other occupations within the NHS, however a significant minority of midwives do not feel secure raising a concern and worry that they may be blamed or punished.

- 94% of midwives think that their organisation encourages staff to report errors, near misses and incidents, compared to 85% for all other occupations.
- 22% of midwives think that people are blamed or punished for being involved in errors, near misses or incidents, compared to 14% for all other occupations.
- 75% of midwives think that when incidents are reported, their organisation takes action to ensure that they do not happen again, compared to 62% for all other NHS occupations.
- Around 12% of midwives and 11% of all other staff said they would feel insecure raising a concern about unsafe clinical practice.
- For the majority of the safety questions, midwives' scores are comparable to all other NHS nursing staff.
- However, a higher percentage (22%) of midwives felt that people are blamed or punished for being involved in errors, near misses or incidents compared to all other nursing staff (16%), while a higher percentage (19%) of midwives feel that people are not treated fairly for reporting incidents compared to other nursing staff (11%).

Several trusts have a high incident reporting rate in maternity services and a low proportion of staff who disagree that their organisation encourages safety reporting at provider level. Other trusts may be under-reporting incidents because their organisation does not encourage staff to report. (See slide 141 for detailed notes on interpretation of incident reporting data)

Proportion of all staff that disagree with the statement 'My organisation encourages us to report errors, near misses or incidents' vs. Reported Safety Incidents within maternity services per 1,000 births



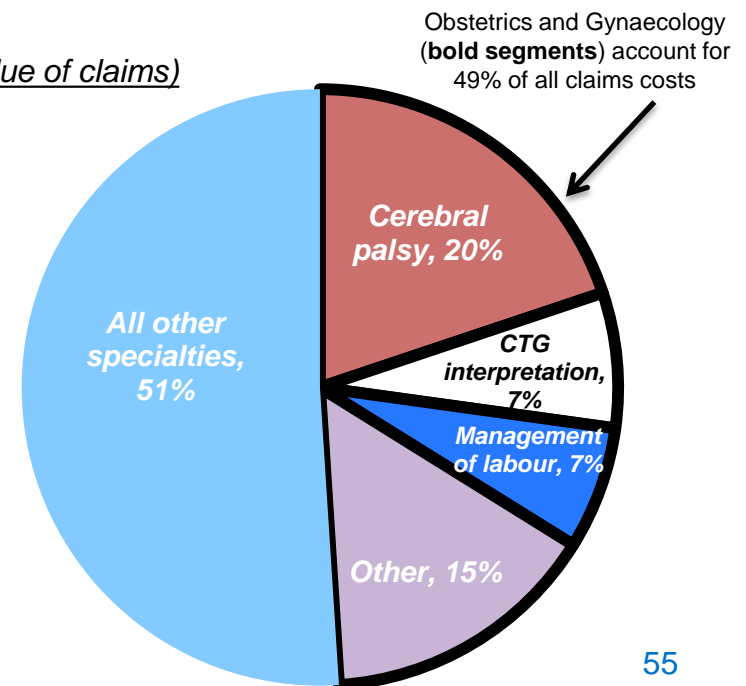
In most trusts, 80-90% of staff agreed or strongly agreed with the staff survey statement above, indicating that most staff are being encouraged to report safety incidents.

NHSLA found that maternity claims represented the second highest number of claims against the NHS between 2000 and 2010, totalling 20% of all claims and 49% of the total value of all claims at £3.1 billion

- In birth injury claims, the claimant must establish a causative link between the alleged breach and the damage, otherwise the claim will fail.
- Less than 0.1% of births lead to claims, but the value of these claims is high as birth injury can result in lifelong disability.
- Most claims relate to issues with management of labour, caesarean sections or cases of cerebral palsy.

Claims by speciality or area (as a % of total value of claims)

<u>Three most frequent categories of maternity claims¹</u>	<u>Three most costly categories of maternity claims¹</u>
Management of labour (14%)	Cerebral Palsy (41%)
Caesarean Section (13%)	CTG Interpretation (15%)
Cerebral Palsy (10%)	Management of labour (14%)



¹Percentages based on all maternity-related claims.
Source: NHSLA (2012) Ten Years of Maternity Claims.

Claims around CTG interpretation were mainly concerning a failure to recognise an abnormal CTG and act on it.

NHS LAs secondary study of CTG interpretation claims found that:

- Only 21% of claims involved high risk pregnancies;
- 60% related to an incident which took place “out of hours”;
- 69% of CTG interpretation claims were for babies born with neurological problems;
- It is likely that issues concerning CTG interpretation also arose in a number of the claims in the management of labour, caesarean section and cerebral palsy categories.

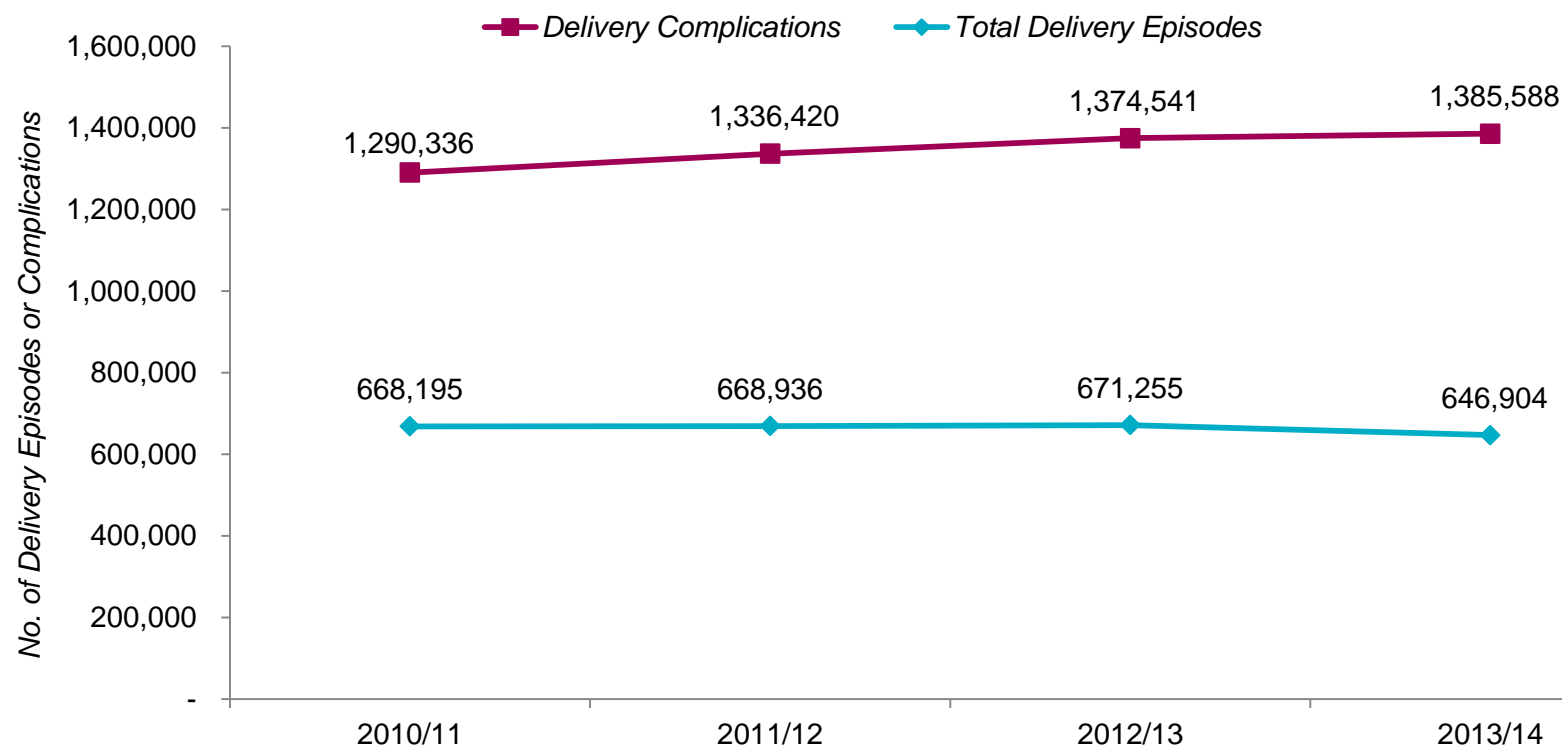
The timescales involved with the claims process mean caution is needed when using the data as an indicator of the current quality of maternity services

- Claims for clinical negligence should generally be brought within three years of the incident date but may occur later e.g. claims for children can be made up to 3 years from their 18th birthday; and there is no time limit for claims linked to brain damage.
- **Clinical practice has developed** since the ten year period examined, especially in relation to ultrasound and prenatal diagnosis.
- Some of the complexities of the cases may not have been accounted for appropriately due to the design of the NHSLA database, which does not account for the clinical situation relating to the claim.
- Having **multiple categories per allegation** leads to difficulties in coding the claim on the database. Claims were mapped to most relevant area.
- **Changing allegations** - The nature of the allegations can change on more than one occasion during the lifetime of a legal claim.
- **Unsuccessful/withdrawn claims** - The claims considered included those which were either unsuccessful or withdrawn, and the study therefore took into account claims where the allegations could not be substantiated.

There has been an increase in the number of delivery complications¹ recorded in HES in recent years

Between 2010/11 and 2013/14 delivery complications have risen 7%, while total delivery episodes has fallen 3%.

Number of delivery complications and delivery episodes recorded in HES, 2010/11-2013/14



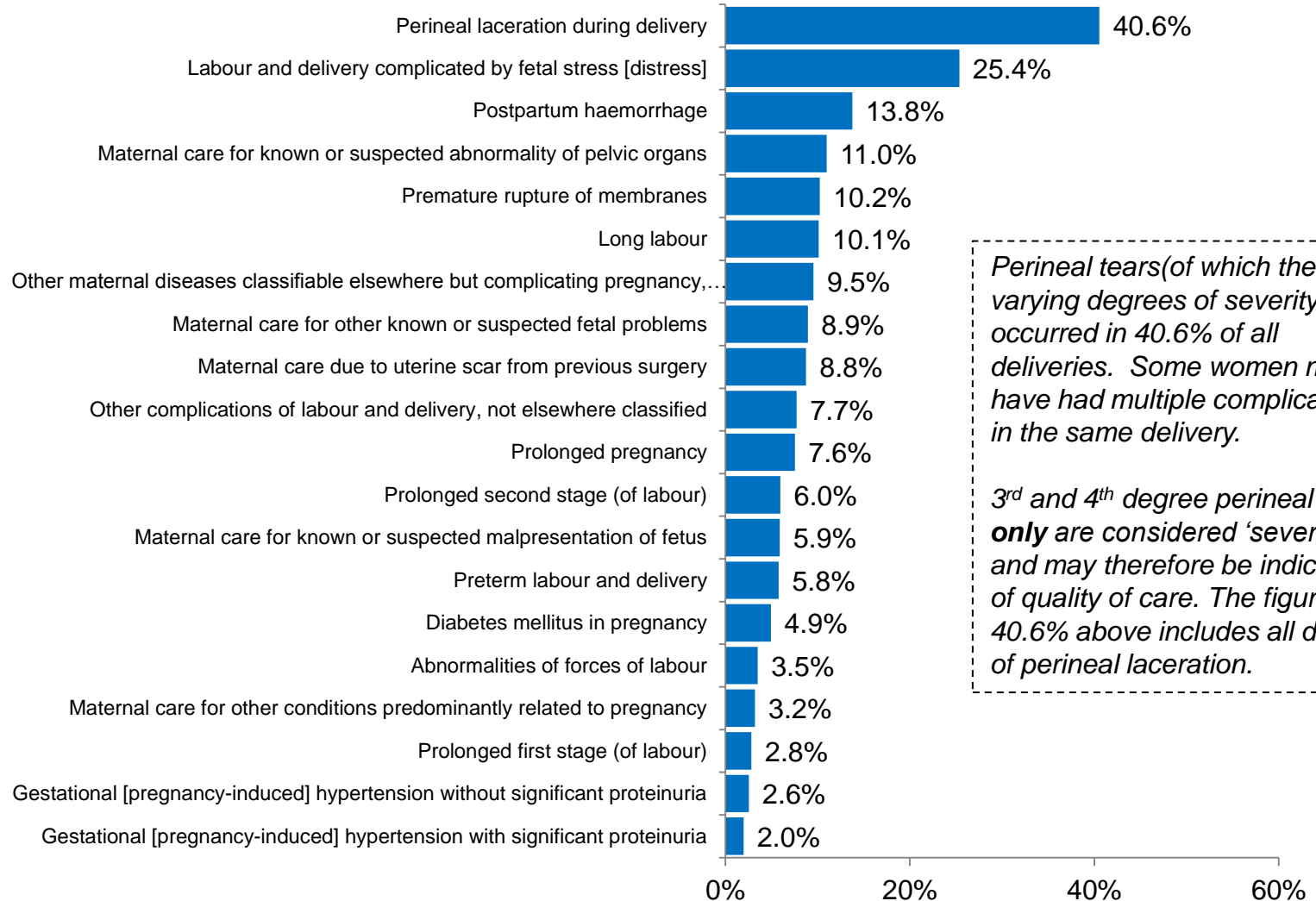
¹Some complications from earlier in the pregnancy may be recorded during the delivery episode if they are relevant to the patient's care. This does not necessarily mean the patient was admitted to hospital for all complications.

The total number of delivery complications will not sum to the total delivery episodes as some patients will have no complications and some will have more than one complication recorded during the delivery episode.

Source: Hospital Episode Statistics (The Information Centre for health and social care) (2010/11, 2011/12, 2012/13, 2013/14 – Delivery Complications).

See slide 148 for more information.

20 main delivery complication types as a percentage of all deliveries, 2013-14 National results



Perineal tears (of which there are varying degrees of severity) occurred in 40.6% of all deliveries. Some women may have had multiple complications in the same delivery.

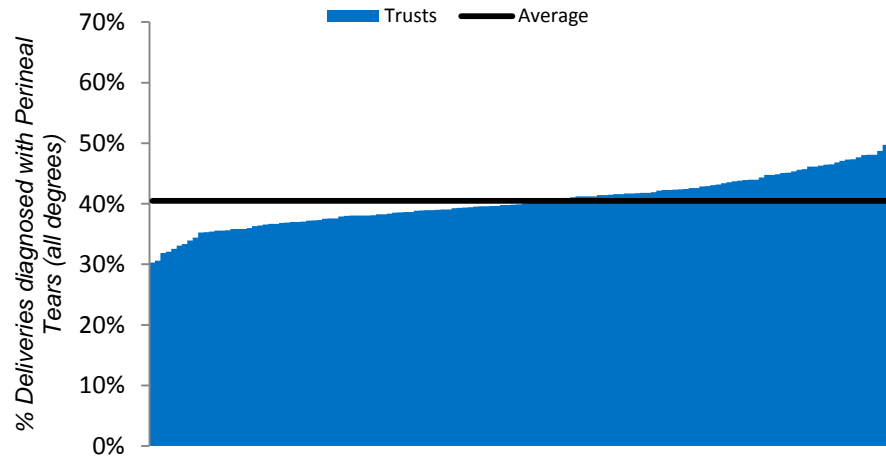
*3rd and 4th degree perineal tears **only** are considered 'severe'¹ and may therefore be indicative of quality of care. The figure of 40.6% above includes all degrees of perineal laceration.*

¹See Gurol-Urganci et al. 2013, Third- and fourth-degree perineal tears among primiparous women in England between 2000 and 2012: time trends and risk factors. BJOG. 120, 12, pp. 1516-1525.

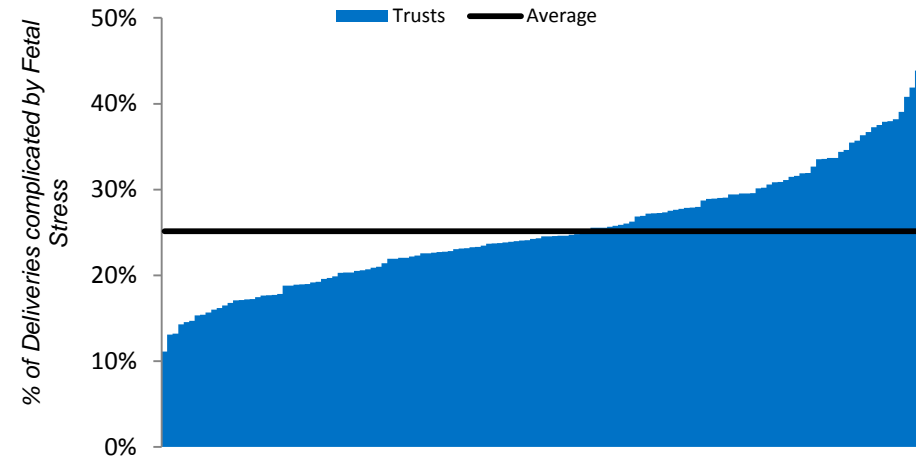
Source: Hospital Episode Statistics (The Information Centre for health and social care). See slide 148 for more information.

A high level of trust-level variation exists in crude rates of the main delivery complication types – further work is required to assess the level of variation remaining once socio-demographic and clinical risk factors are accounted for.

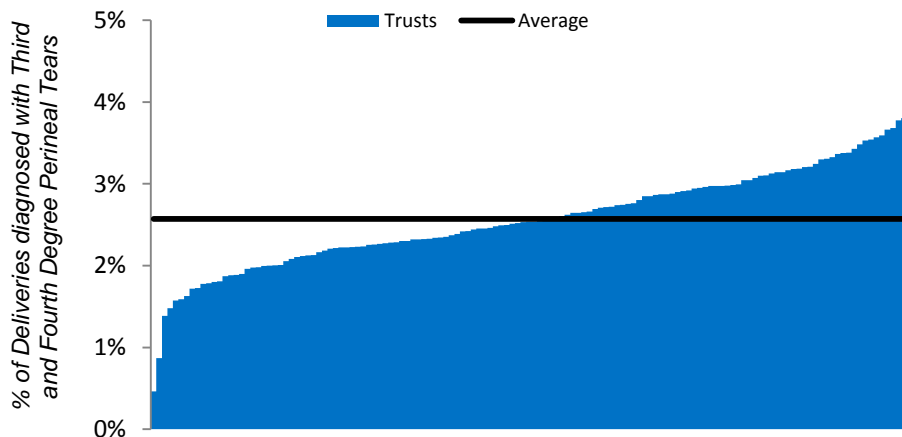
Perineal tears during delivery



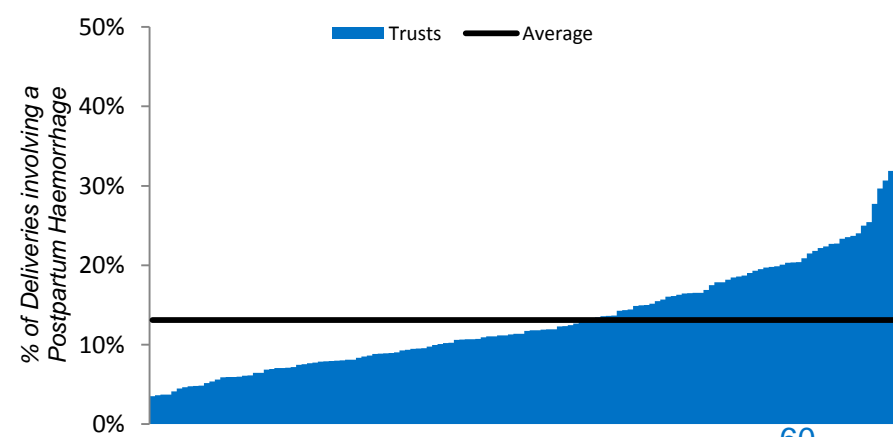
Labour and delivery complicated by fetal stress



Third and fourth degree perineal tears

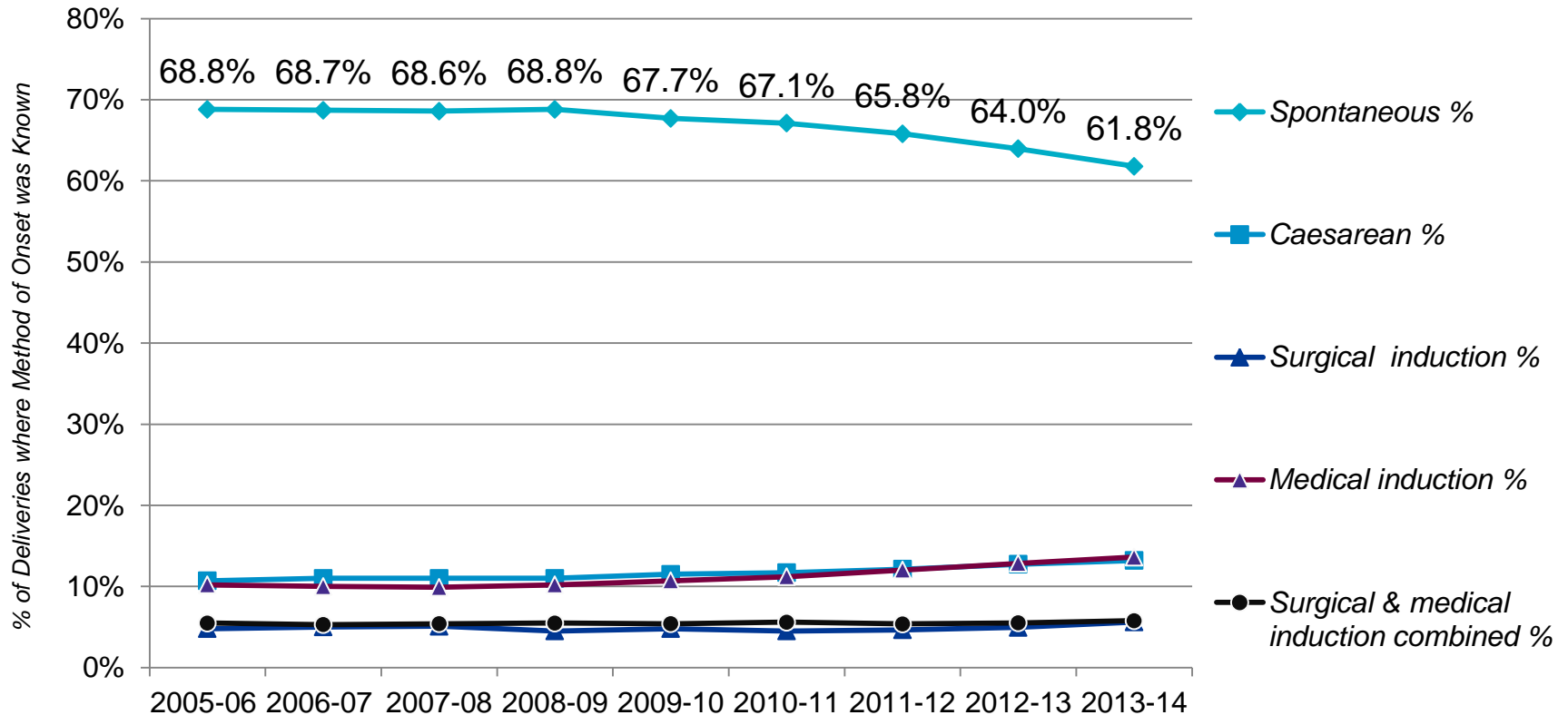


Postpartum haemorrhage

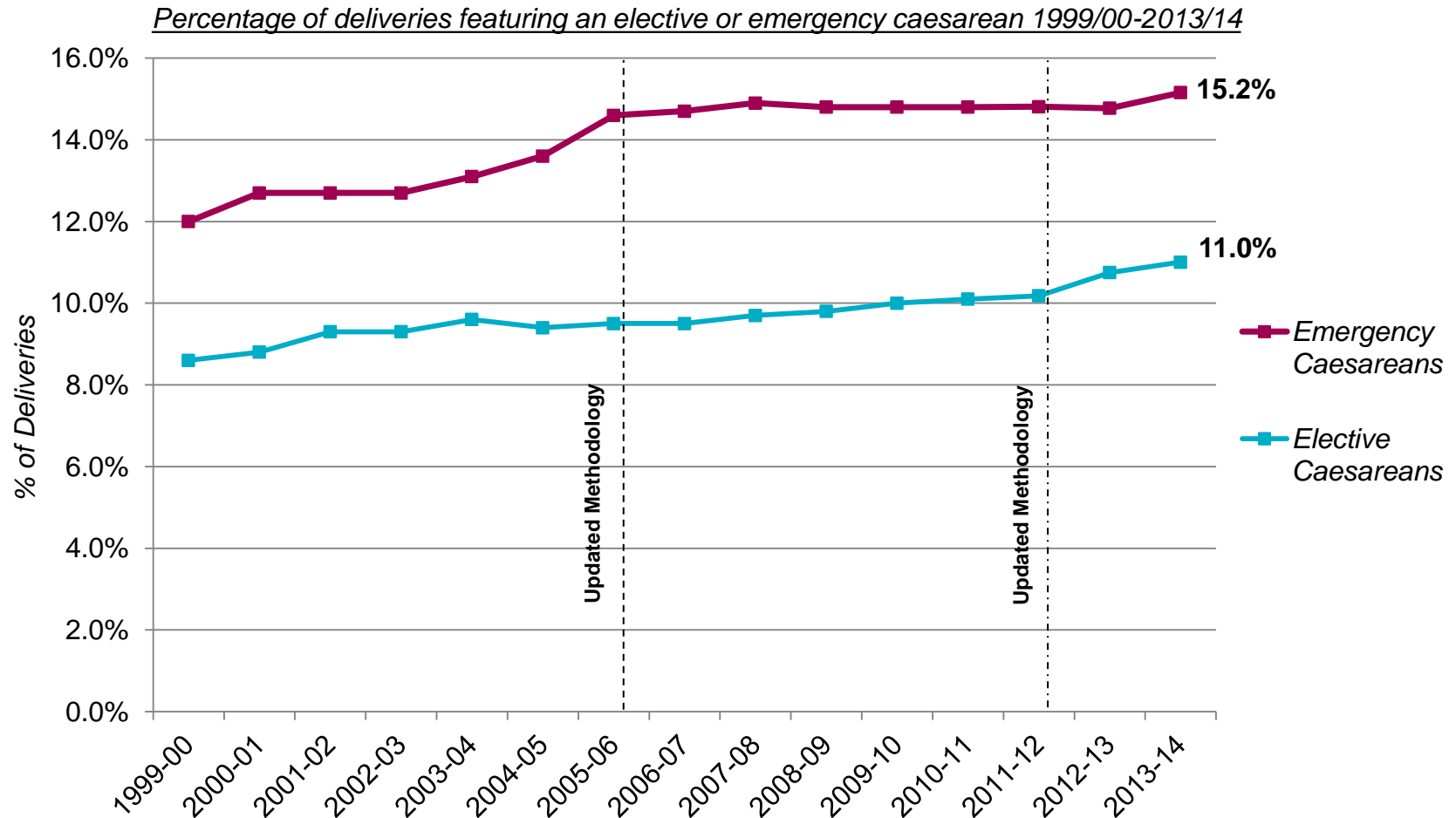


Recent time series for method of onset shows a fall in the proportion of spontaneous onset and increases in caesarean and medical induction rates

Method of onset of labour, 2005/06-2013/14



There has been a gradual rise in both elective and emergency caesareans over the past 15 years. This can be attributed to a range of factors – from improvements in procedures, changing attitudes and increasing age of mothers



Updated Methodology denotes changes in the data collection methodology for the years 2005-05 and 2011-12, based on changes or additions to OPCS codes. This means that data either side of these years may not be directly comparable.

Source: Hospital Episode Statistics (The Information Centre for health and social care). See slide 148 for more information.

The crude ratio of elective to emergency caesareans shows large variation between trusts

The crude ratio of elective to emergency caesareans ranges from 0.42 to 1.12.

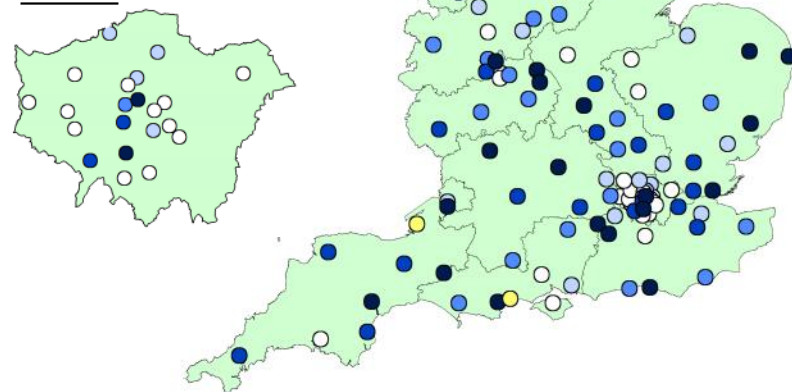
Variation in elective to emergency caesarean ratio may reflect differences in management of interventions and differences in case mix.

Geographic variation in elective to emergency caesarean ratios

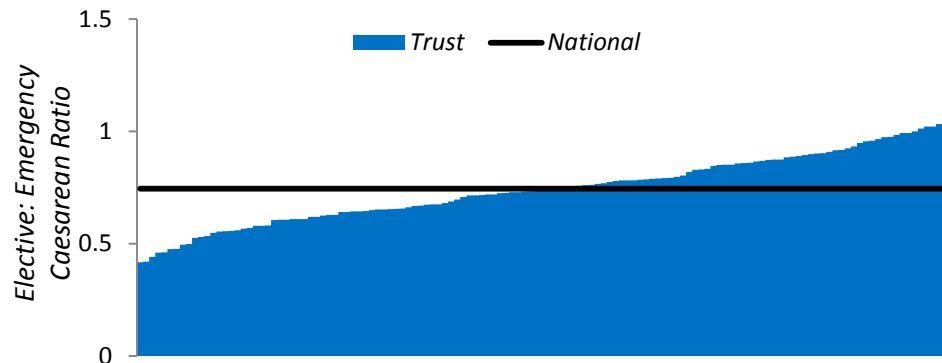
Elective/Emergency Caesareans
2013-2014

- 0.88 to 1.12
- 0.78 to 0.88
- 0.69 to 0.78
- 0.61 to 0.69
- 0.42 to 0.61
- Suppressed (5)

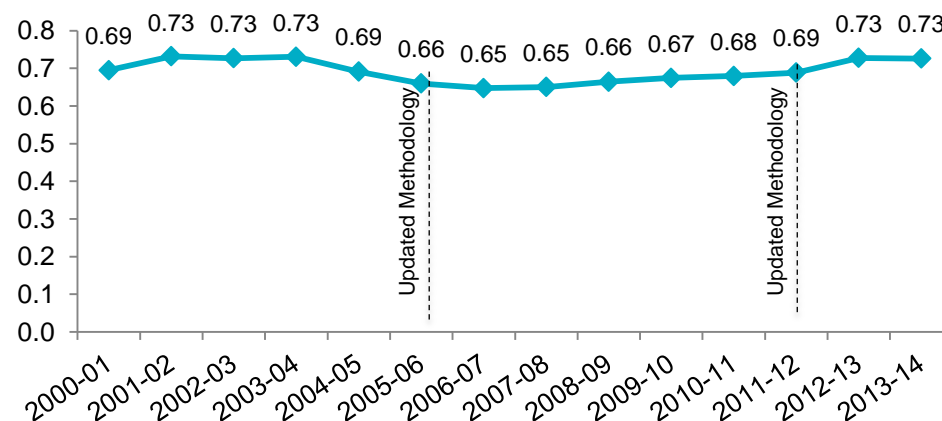
London



Trust level variation in the ratio of elective to emergency caesarean numbers for 2013-2014



National trends in the ratio of elective to emergency caesarean numbers¹



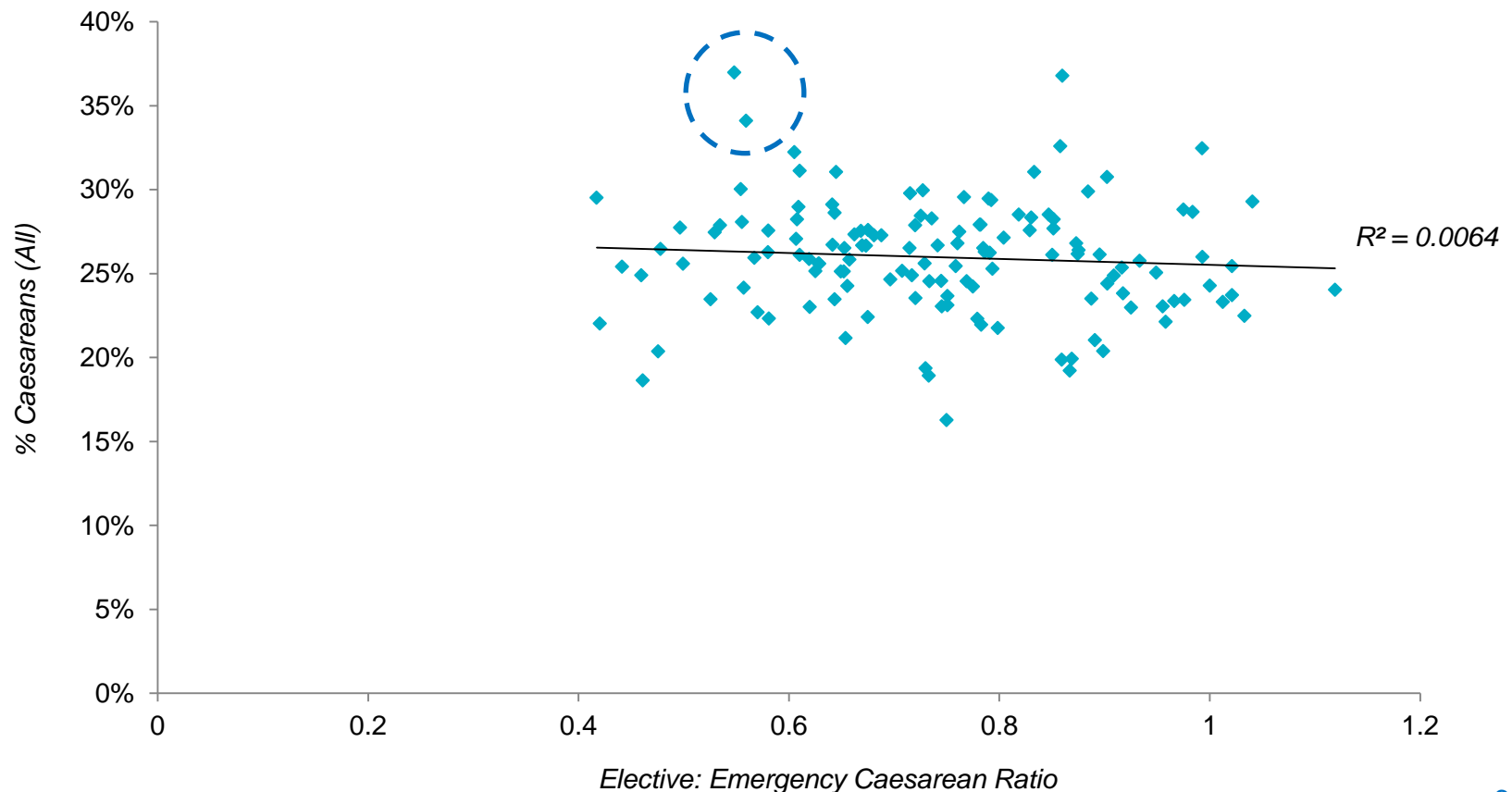
¹There were changes in the data collection methodology for 2005/06 and 2011/12, based on changes or additions to OPCS codes.

Therefore, years either side of these changes may not be directly comparable. See slide 141 for more information.

Source: Hospital Episode Statistics (The Information Centre for health and social care). See slide 148 for more information.

The crude total caesarean rate ranges from 16% to 37% across trusts. We may expect a high total caesarean rate in trusts with a low elective to emergency caesarean ratio. Although this is the case for a couple of trusts (highlighted) there is no evidence of an overall relationship between the two variables. This may be due to the complexity of the clinical decision-making process but also linked to data quality issues (See slide 148 in Annex A for further information).

Elective: Emergency Caesarean Ratio vs. Total Caesarean Rate



RCOG's analysis based on HES data highlights concerning variation¹ across a range of clinical indicators

Accounting for a number of clinical risk factors and patient characteristics RCOG's Clinical Indicators Project reported that:

- There was 2.5 fold variation in the rate of spontaneous labours resulting in emergency caesarean sections for first-time mothers. Rates varied from 7% to 17.2% from the lowest to highest deciles.²
- There was 4.2 fold variation in the rate of elective caesareans sections for primiparous women. Rates varied from 1.2% to 5% from the lowest to highest deciles.²
- There was 3.7 and 11.5 fold variation in the rates of third and fourth degree perineal tears for instrumental deliveries in primiparous and multiparous women, respectively. Rates varied from 3% to 11% in primiparous women and 0.4% to 4.6% in multiparous women from the lowest to highest deciles.²

¹RCOG state that variation could suggest not all women are receiving the best possible care or NHS resources aren't being used in the most efficient way. However, caution against over-interpretation of the findings is recommended as some variation may be due to inconsistencies in the quality of data submitted in HES; or differences in patient characteristics that could not be controlled for.

²Source: The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12, see the [RCOG Clinical Indicators Project Website](#) and the 2013 Patterns of Maternity Care in Hospitals 2011/12 report for more information..

HES based indicators show notable variation

Based on RCOG clinical indicators publication which used 2011-12 HES data

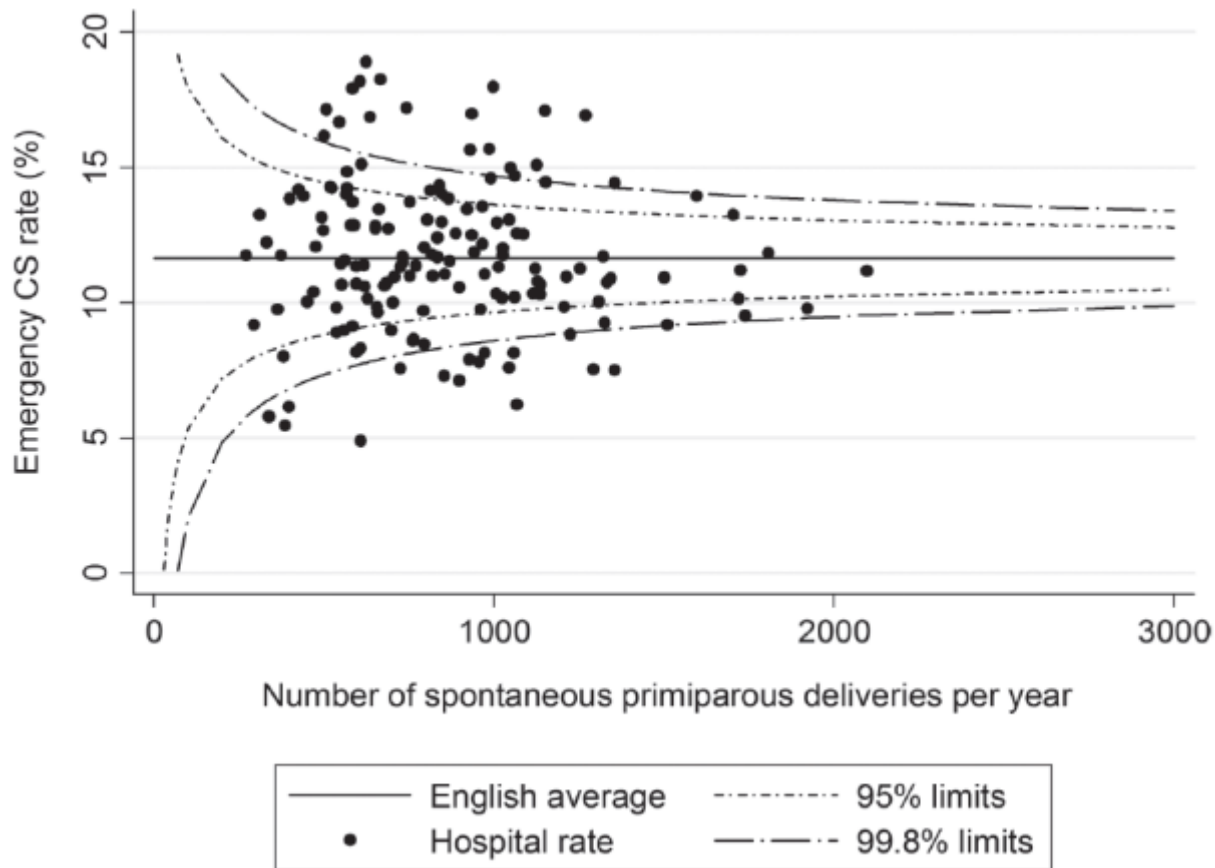
Indicator (RCOG Clinical Indicators project based on 2011-12 HES data)	Subset of population used	National mean	Mean of bottom decile of units ¹	Mean of top decile of units ¹	Variation between top and bottom decile
Induction of labour rate	P,S,T,C	26.9%	16.9%	37.0%	2.2
	M,S,T,C	21.4%	13.5%	29.4%	2.2
Percentage of induced labours resulting in emergency caesarean section	P,S,T,C	30.2%	20.4%	40.3%	2.0
	M,S,T,C	13.2%	5.8%	22.1%	3.8
Percentage of spontaneous labours resulting in emergency caesarean section	P,S,T,C	11.6%	7.0%	17.2%	2.5
	M,S,T,C	6.2%	2.9%	9.2%	3.2
Elective caesarean section rate	P,S,T,C	2.8%	1.2%	5.0%	4.2
	M,S,T,C	12.1%	7.2%	15.0%	2.1
Elective caesarean section performed before 39 weeks of gestation without clinical indication	S,T	30.3%	18.0%	52.5%	2.9
Instrumental delivery rate	P,S,T,C	24.2%	16.4%	31.8%	1.9
	M,S,T,C	7.5%	3.8%	11.5%	3.0
Percentage of instrumental deliveries carried out by vacuum extraction (i.e. vacuum extraction: forceps delivery ratio)	STC	49.3%	24.2%	72.1%	3.0
Percentage of attempted instrumental deliveries resulting in emergency caesarean section	STC	3.1%	1.1%	7.0%	6.4
Rate of third and fourth degree tears among unassisted vaginal deliveries	P,S,T,C	4.0%	2.0%	6.8%	3.4
	M,S,T,C	1.4%	0.6%	2.4%	4.0
Rate of third and fourth degree tears among instrumental vaginal deliveries	P,S,T,C	6.9%	3.0%	11.0%	3.7
	M,S,T,C	2.5%	0.4%	4.6%	11.5
Emergency maternal readmission within 30 days of delivery	S,T,C,V	0.8%	0.3%	1.6%	5.3
	S,T,C,CS	1.4%	0.3%	3.4%	11.3

C = cephalic presentation; CS = caesarean section deliveries; M = multiparous women; P = primiparous women; S = singleton deliveries; T = term deliveries; V = vaginal deliveries;. ¹The indicators were derived for appropriate subsets of all deliveries. For all indicators, multiple and preterm deliveries were excluded. In this way attention is focused on a more homogeneous group of women whose maternity care is most affected by clinical uncertainty. Additional exclusions were also applied to each indicator, as detailed in the main body of the report.

Source: RCOG Clinical Indicators Report 2011/12, see [The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12](#), see the [RCOG Clinical Indicators Project Website](#) and the 2013 [Patterns of Maternity Care in Hospitals 2011/12](#) report for more information..

There was 2.5 fold variation in the rate of spontaneous labours resulting in emergency caesarean sections for first-time mothers, with rates varying from 7% to 17.2% from the lowest to highest deciles¹

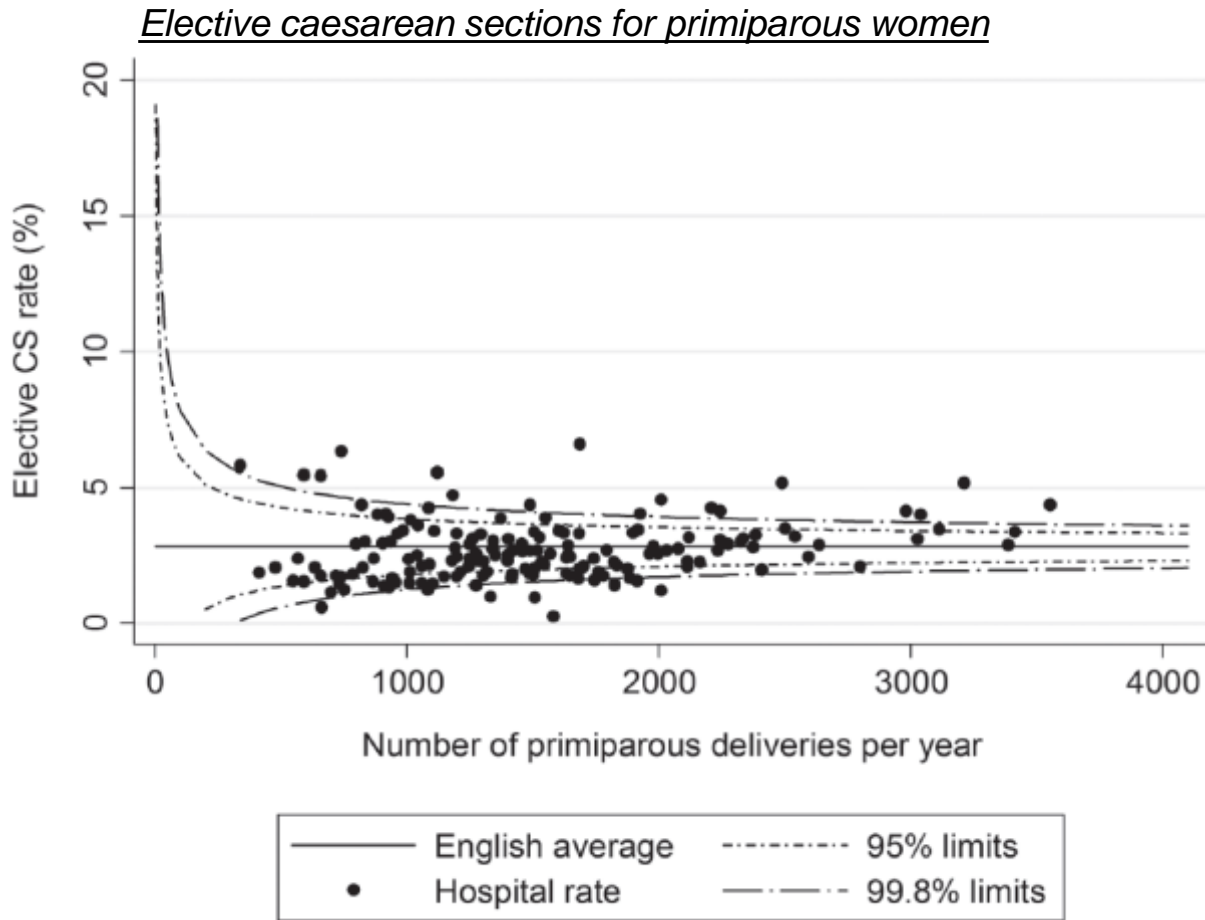
Spontaneous labours resulting in emergency caesarean sections for primiparous women



¹Variation exists between the mean values for the ranked top and bottom 10% of trusts included within RCOG's 2011-12 Clinical Indicators Project, which used 2011-12 HSCIC HES data.

Source: RCOG Clinical Indicators Project 2011-12. See The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12, see the [RCOG Clinical Indicators Project Website](#) and the 2013 Patterns of Maternity Care in Hospitals 2011/12 report for more information.

There was 4.2 fold variation in the rate of elective caesareans sections for primiparous women, with rates varying from 1.2% to 5% from the lowest to highest deciles



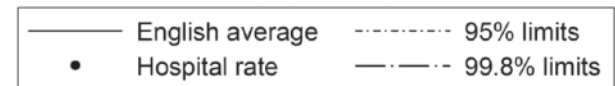
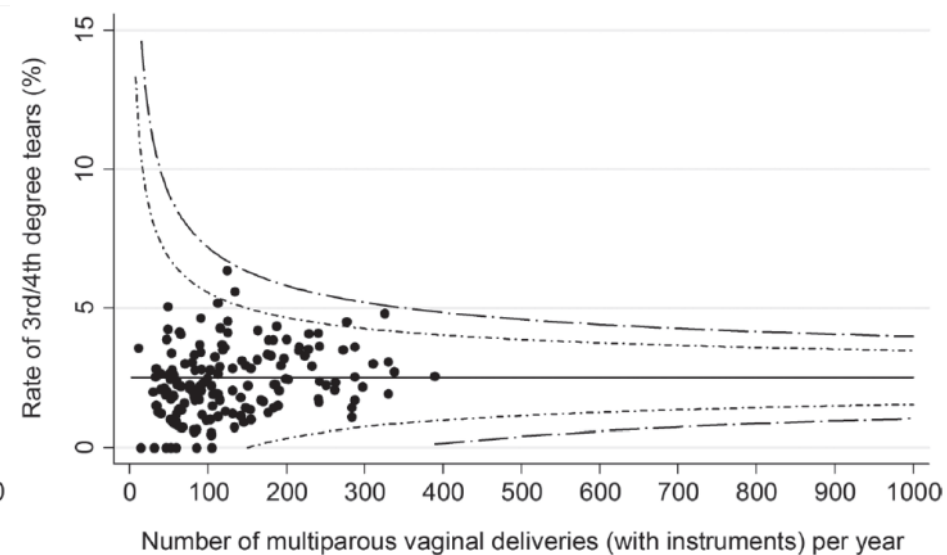
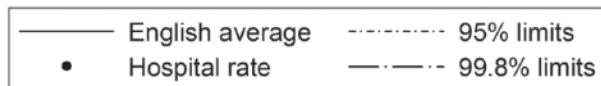
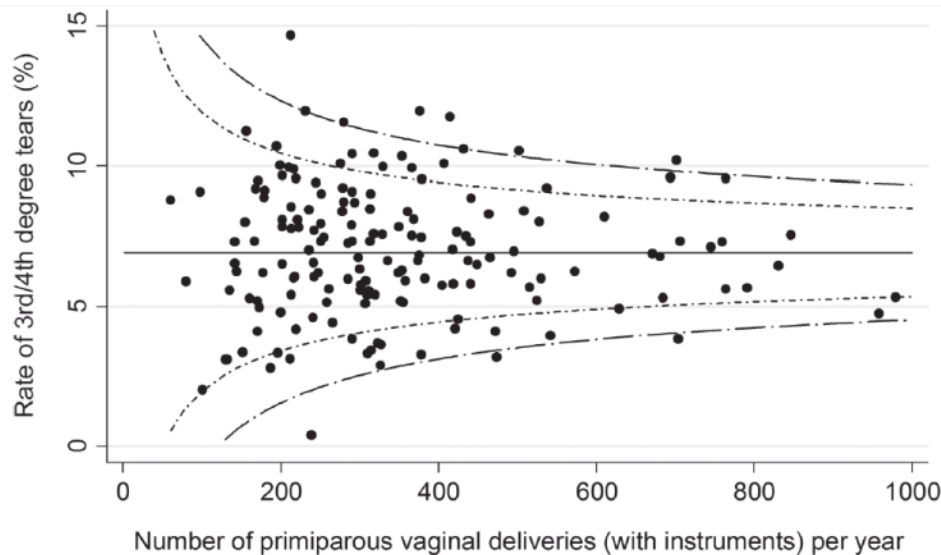
¹Variation exists between the mean values for the ranked top and bottom 10% of trusts included within RCOG's 2011-12 Clinical Indicators Project, which used 2011-12 HSCIC HES data.

Source: RCOG Clinical Indicators Project 2011-12. See The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12, see the [RCOG Clinical Indicators Project Website](#) and the 2013 Patterns of Maternity Care in Hospitals 2011/12 report for more information.

There was 3.7 and 11.5 fold variation in the rates of third and fourth degree perineal tears for instrumental deliveries in primiparous and multiparous women, respectively. Rates varied from 3% to 11% in primiparous women, and from 0.4% to 4.6% in multiparous women, from the lowest to highest deciles.¹

3rd and 4th degree perineal tears in instrumental deliveries for primiparous women.

3rd and 4th degree perineal tears in instrumental deliveries for multiparous women



¹Variation exists between the mean values for the ranked top and bottom 10% of trusts included within RCOG's 2011-12 Clinical Indicators Project, which used 2011-12 HSCIC HES data.

Source: RCOG Clinical Indicators Project 2011-12. See The Royal College of Obstetricians and Gynaecologists Clinical Indicators Project 2011-12, see the [RCOG Clinical Indicators Project Website](#) and the 2013 Patterns of Maternity Care in Hospitals 2011/12 report for more information.

RCOG Clinical Indicators Project update

Following a delay in the release of refreshed HES data extracts by the HSCIC due to an internal review of its data sharing procedures, the RCOG is now producing a second 'Patterns of Maternity Care in English NHS Hospitals' report using the most recent (2013/14) data.

The RCOG plans to publish this report, including updates to previous indicators and the addition of several new indicators, in early 2016. This report will produce risk-adjusted results on a named trust basis, unlike the previous report which was anonymous.

Due to the above, we have drawn upon the most recently available information from RCOG's Clinical Indicators Project. This was published in 2013 and based on 2011/12.

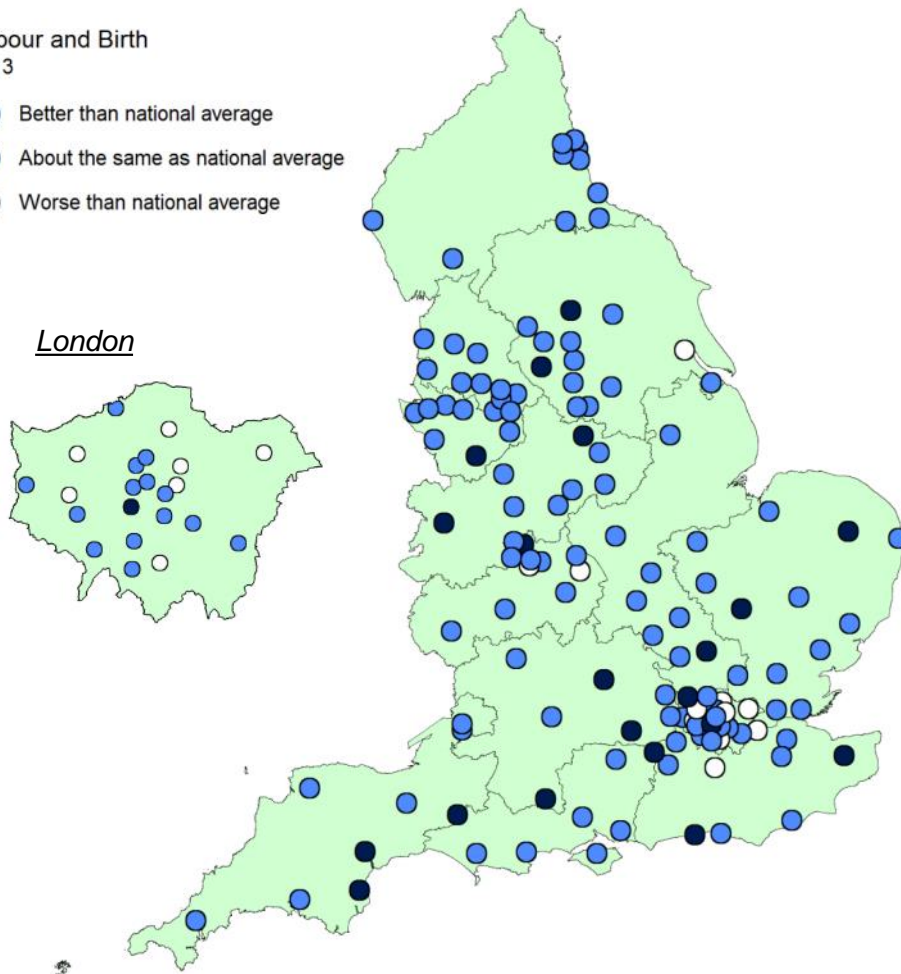
There is little variation in trusts' overall maternity survey scores for patients' experience of labour and birth, with only 12 out of 137 trusts having scores significantly lower than the national average

Geographic variation in maternity survey scores for labour and birth

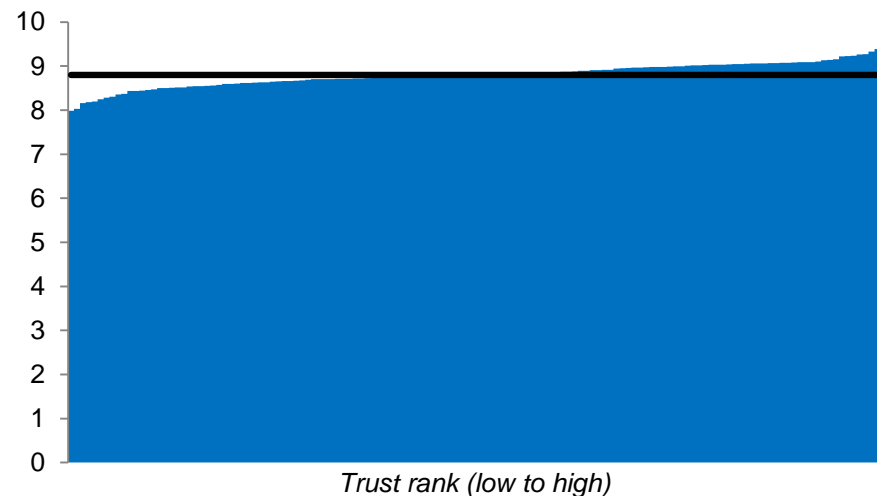
Labour and Birth
2013

- Better than national average
- About the same as national average
- Worse than national average

London



Trust level variation in maternity survey scores for labour and birth



Above: Composite scores for maternity survey questions around patient experience of labour and birth show only small variation from 8.0 out of 10 to 9.3 out of 10.

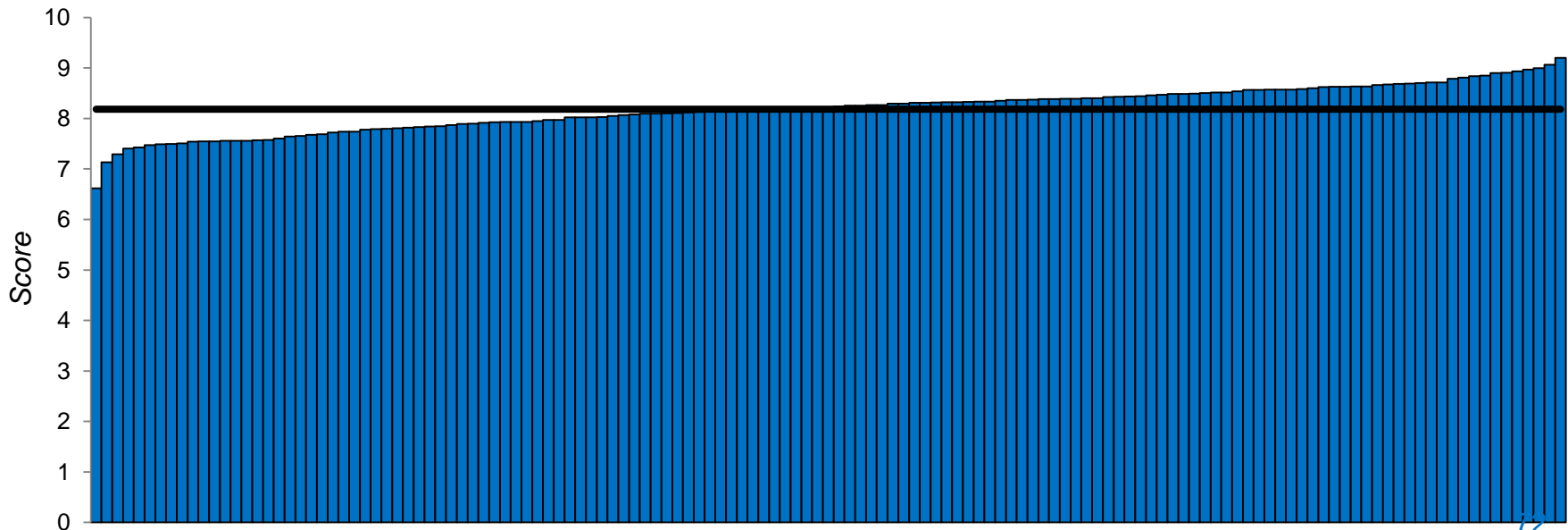
Left: There is no obvious geographical pattern to trust performance for this indicator. (White spots on the map indicate locations of providers who are performing significantly worse from the national average for patient experience of labour and birth. Those performing significantly better are highlighted by dark blue spots.)

Labour and Birth: C2. During your labour, were you able to move around and choose the position that made you most comfortable?

Out of the questions contributing to the composite score for "Labour and Birth" section (CQC Maternity Survey), question C2 demonstrated the highest variance.

The highest trust score for is approximately 1.39 times larger than the lowest trust score. The score for the trust in the 90th percentile was 1.15 times larger than for the 10th percentile.

Trust level variation in scores for question C2. "During your labour, were you able to move around and choose the position that made you most comfortable?"

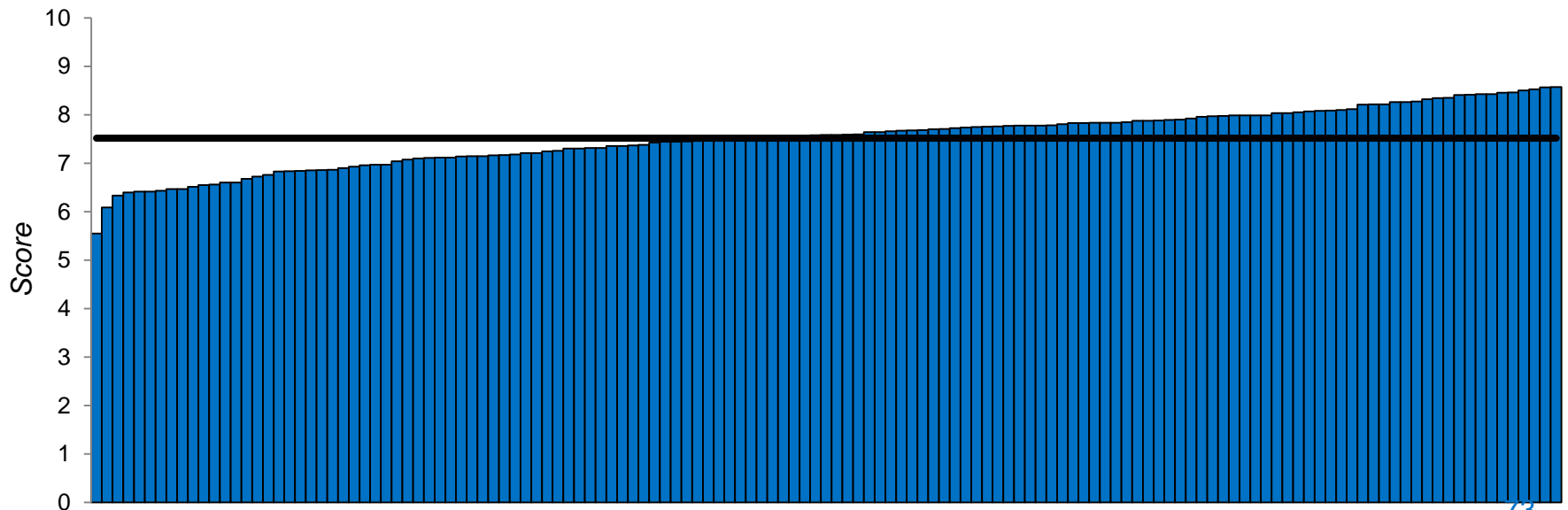


Staff: C13. Were you (and/or your partner or a companion) left alone by midwives or doctors at a time when it worried you?

Out of the questions contributing to the composite score for the "Staff" section (CQC Maternity Survey), question C13 demonstrated the highest variance.

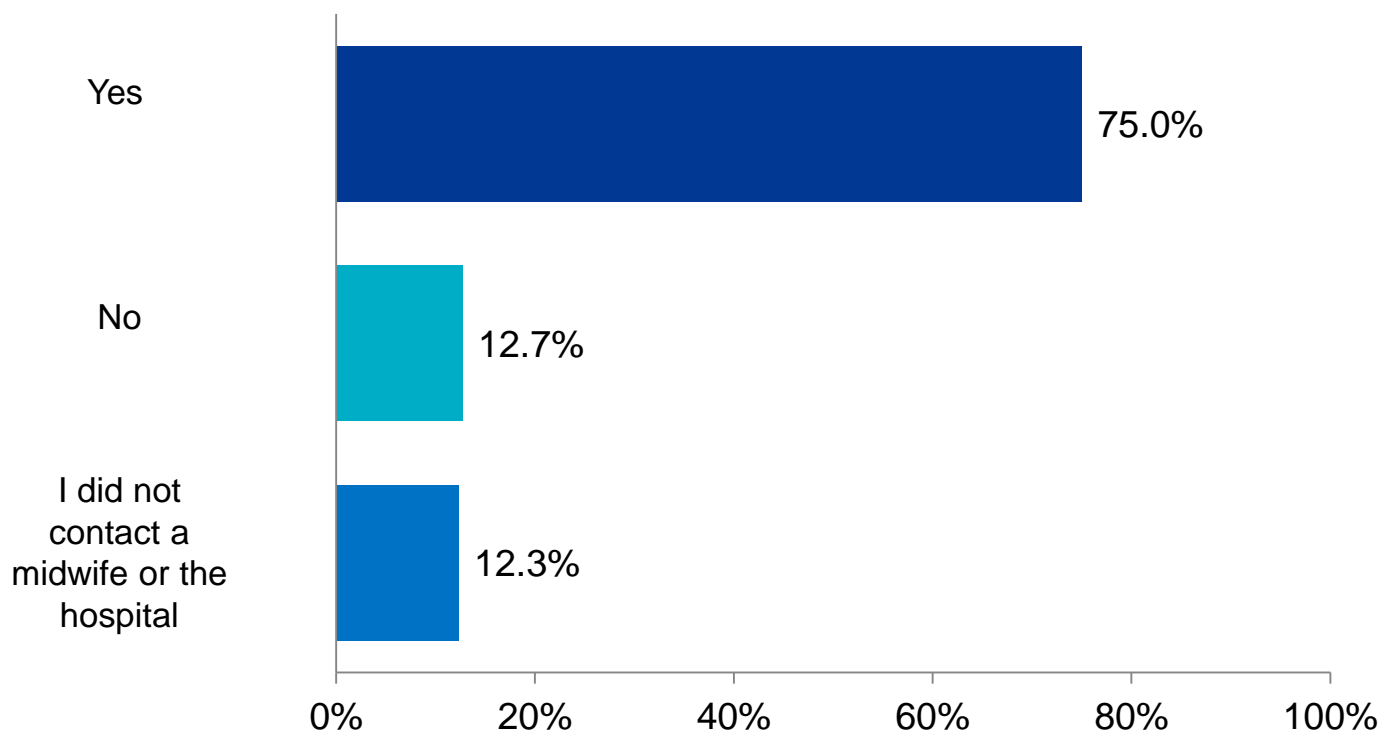
The highest trust score is approximately 1.54 times larger than the lowest trust score. The score for the trust in the 90th percentile was 1.24 times larger than for the 10th percentile.

Trust level variation in scores for question C13. "Were you and/or your partner or a companion left alone by midwives or doctors at a time when it worried you?"



Most women felt they had appropriate support when they contacted the midwife or hospital at the start of their labour

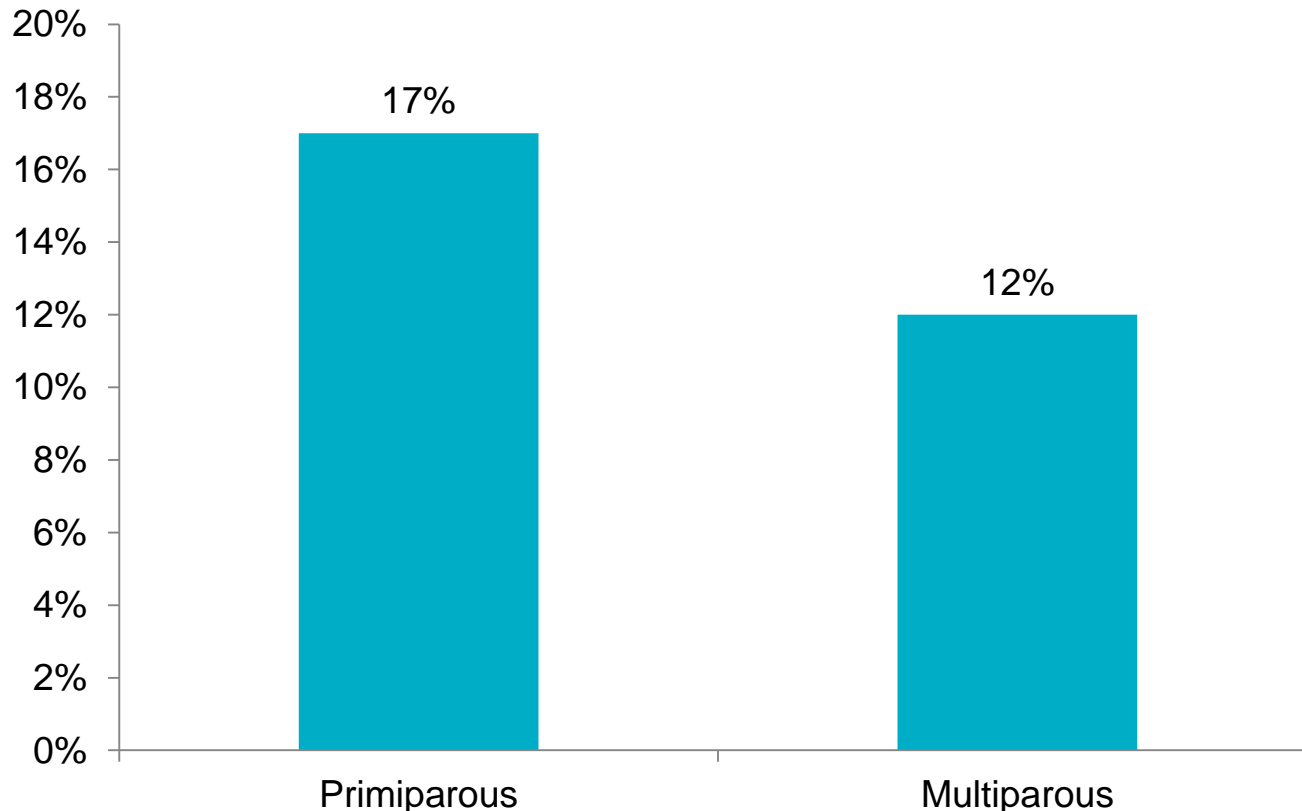
Women who were asked if they felt they had appropriate support at the very start of their labour upon contacting a midwife or the hospital¹



- The 2014 NPEU Safely Delivered survey found that 85% of women were offered appropriate advice and support when contacting a midwife or the hospital. However, this figure is not directly comparable to work by the CQC due to differences in question wording and methodology.

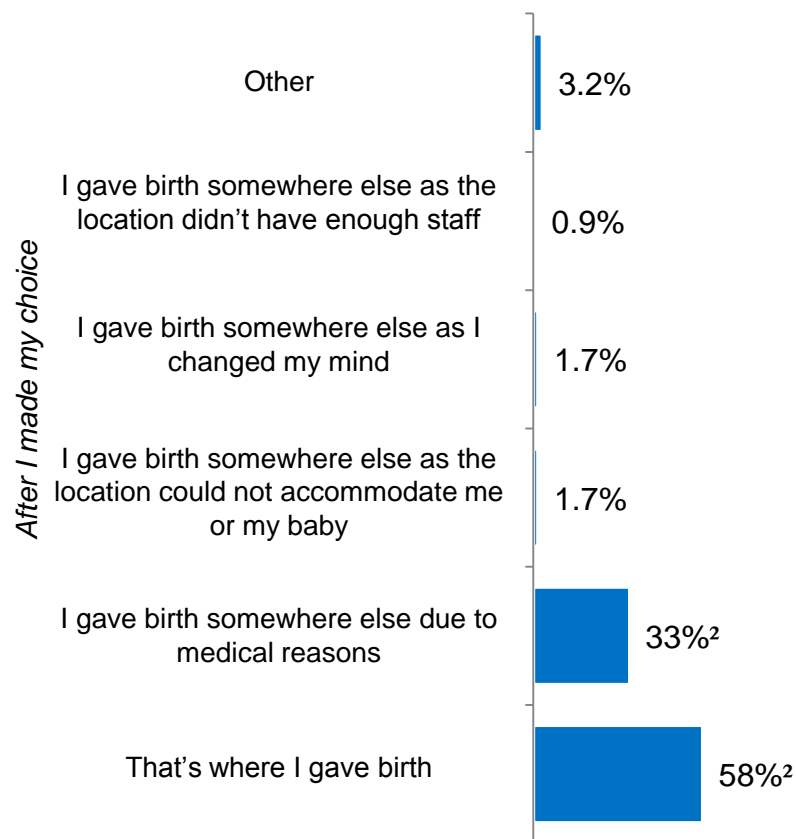
More first time mothers said they were not given appropriate advice and support when contacting a midwife or hospital at the start of labour compared to multiparous women

Percentage of women who reported not receiving appropriate advice and support when contacting a midwife or hospital at the very start of labour



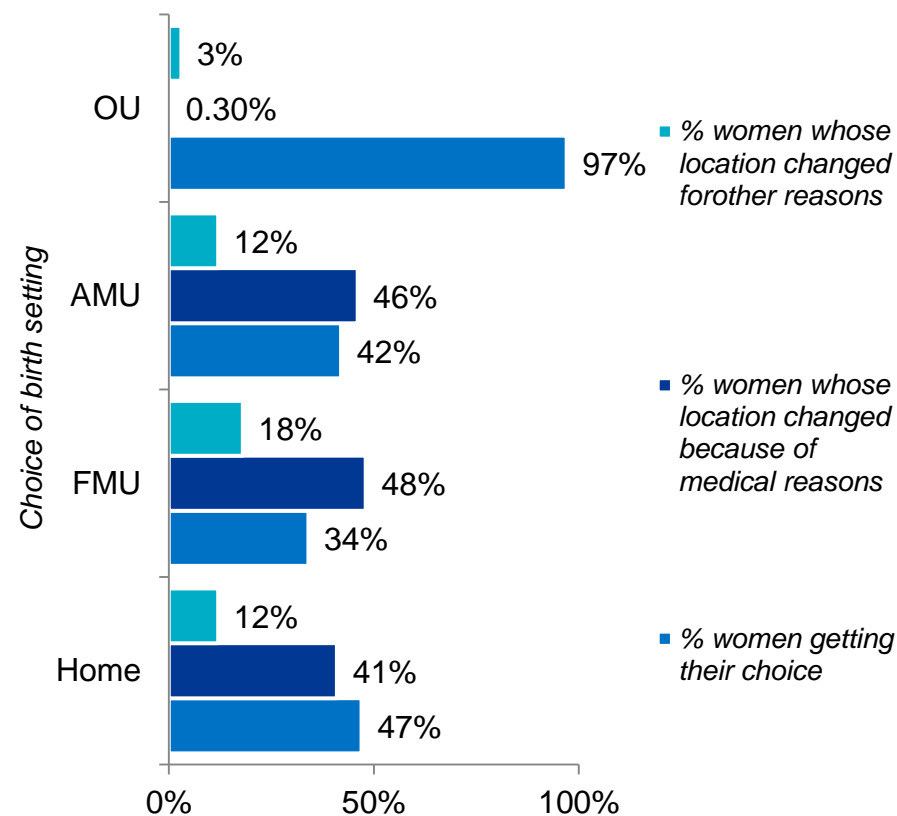
58% of women reported giving birth in their intended location¹

Percentage of women who gave birth in their chosen setting, and who did not due to medical or other reasons



47% of women who would have liked a home birth were able to give birth at home¹⁻²

Percentage of women who were able to give birth in their chosen setting, and those whose setting changed for medical or other reasons



¹ Results may not be fully representative of respondents views. See slide 143 for more information.

These figures are based upon two drivers of choice: locations provided by Trusts/Boards generally for all women and then whether those locations were available for individual women at their time of giving birth..

² 10% of all respondents would have liked to give birth at home, with 41% of these changing location due to medical reasons and 12% for other reasons.

Source: Support Overdue: Women's experiences of maternity services. NCT and WI 2013. Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway. One third of results were from the London region. As a result, survey results may not be wholly reflective of all participants opinions and should be interpreted with caution.

Labour started naturally for 60% of women. However for those women that were induced, just over half were not offered a choice about the induction.

The NPEU 2014 Safely Delivered survey¹ also reported that:

- 63% of women had the type of pain relief they wanted, however, only 28% received the pain relief they wanted 'to some extent' and 9% did not get they type of relief they wanted at all.
- Three quarters (74%) of women who received pain relief reported receiving it at the time they wanted.
- The majority of women held their baby (89%); had skin on skin contact (85%) and put their baby to their breast (74%) shortly after birth.
- Only 16% of labouring women reported having one-to-one midwife care during labour, just over a third had two midwives, with 26% having four or more midwives caring for them.
- The majority (85%) of women reported having not previously met any of the midwives caring for them during labour and birth.

95% of women indicated that they felt that partners/companions were able to be involved to the extent they wanted during labour and birth.

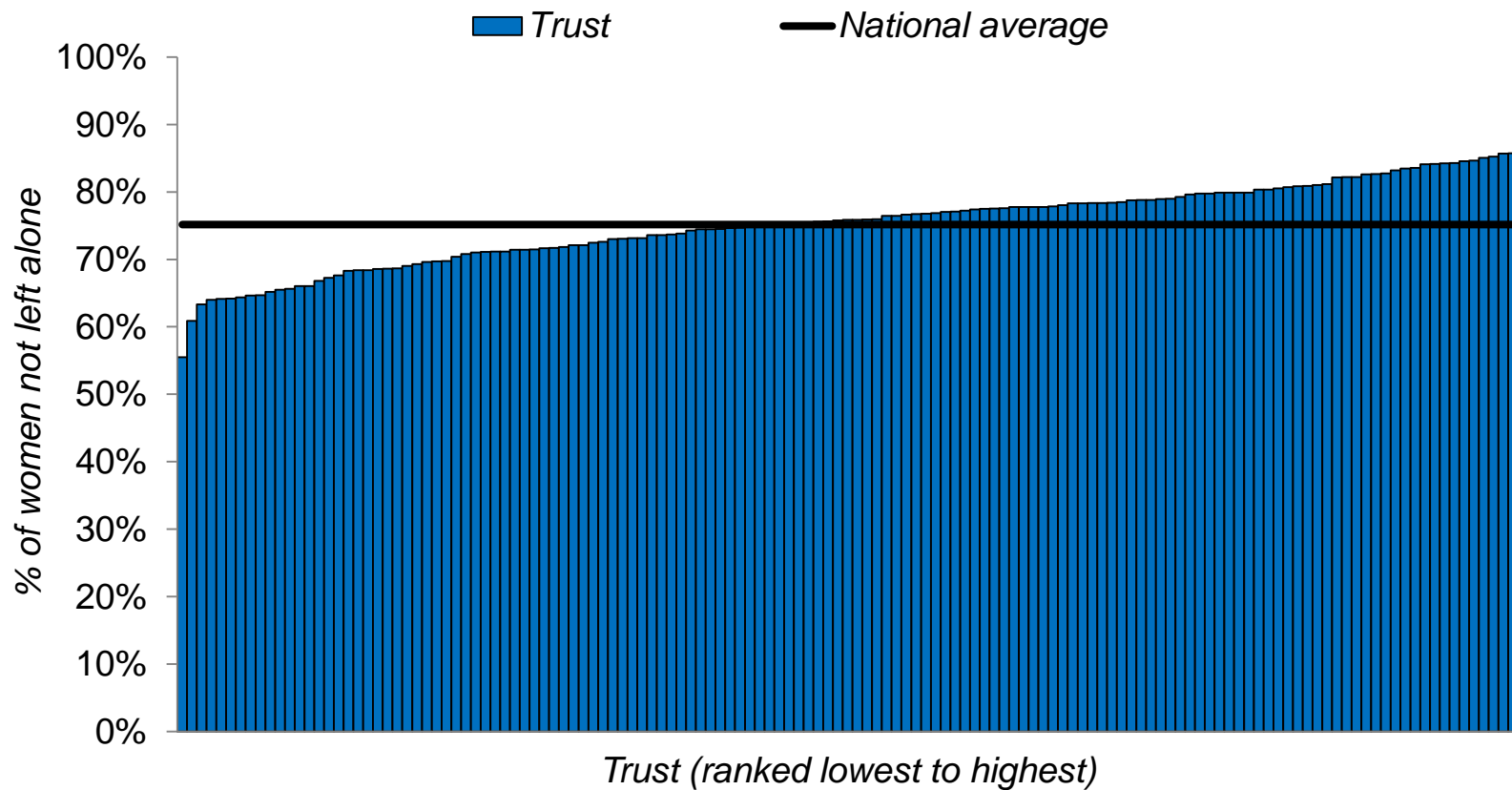
However,

13% of women indicated that they were left alone by midwives or doctors at a time that worried them during early labour and 9% were left alone at a time that worried them in the later stages of labour.

Of those women who raised concerns during birth and labour, 1 in 5 (19%) of women did not feel their concerns were taken seriously.

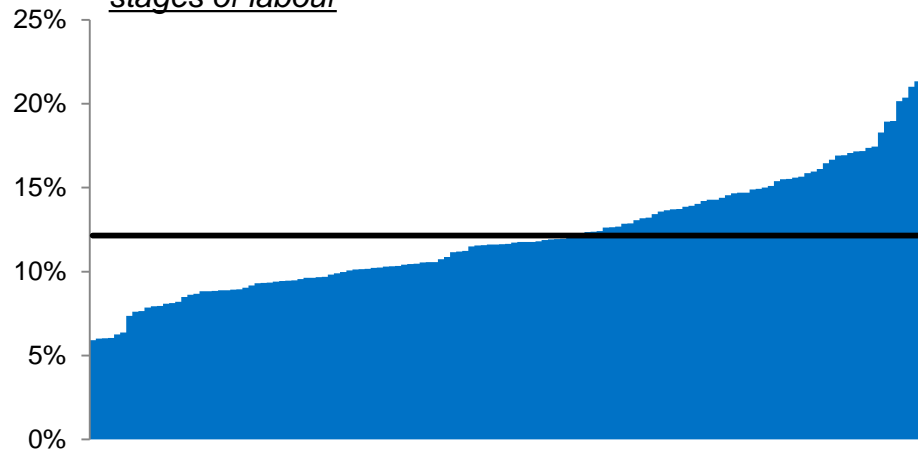
The proportion of women who felt they were not left alone during labour and birth at a time when it worried them ranged from 55% to 85% across trusts

Trust level variation in the percentage of women who felt they were not left alone during labour and birth at a time when it worried them

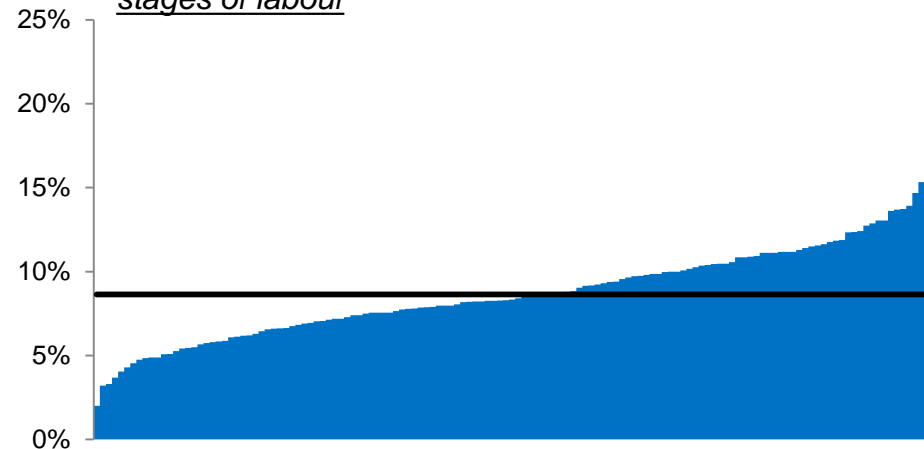


In a number of trusts, a significant minority of women feel that they are left alone at some point during labour; and there is notable variation between trusts in the proportion of women feeling left alone during labour

Women who felt they were left alone during the early stages of labour



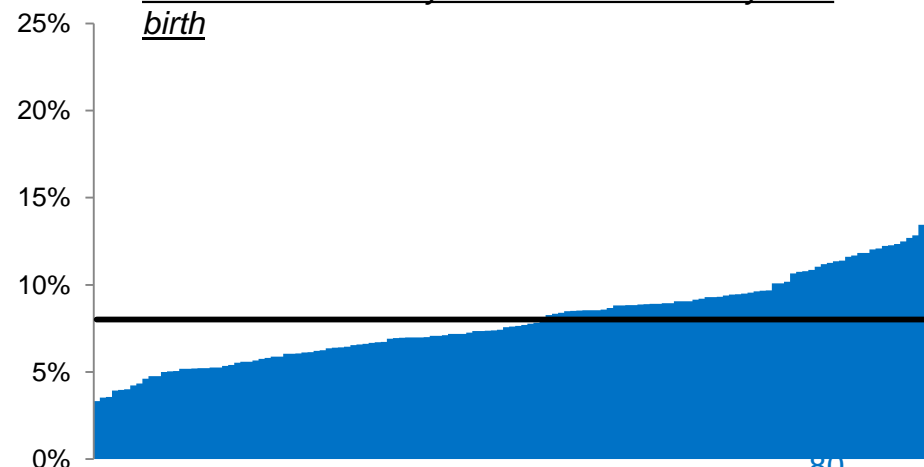
Women who felt they were left alone during the later stages of labour



Women who felt they were left alone during birth

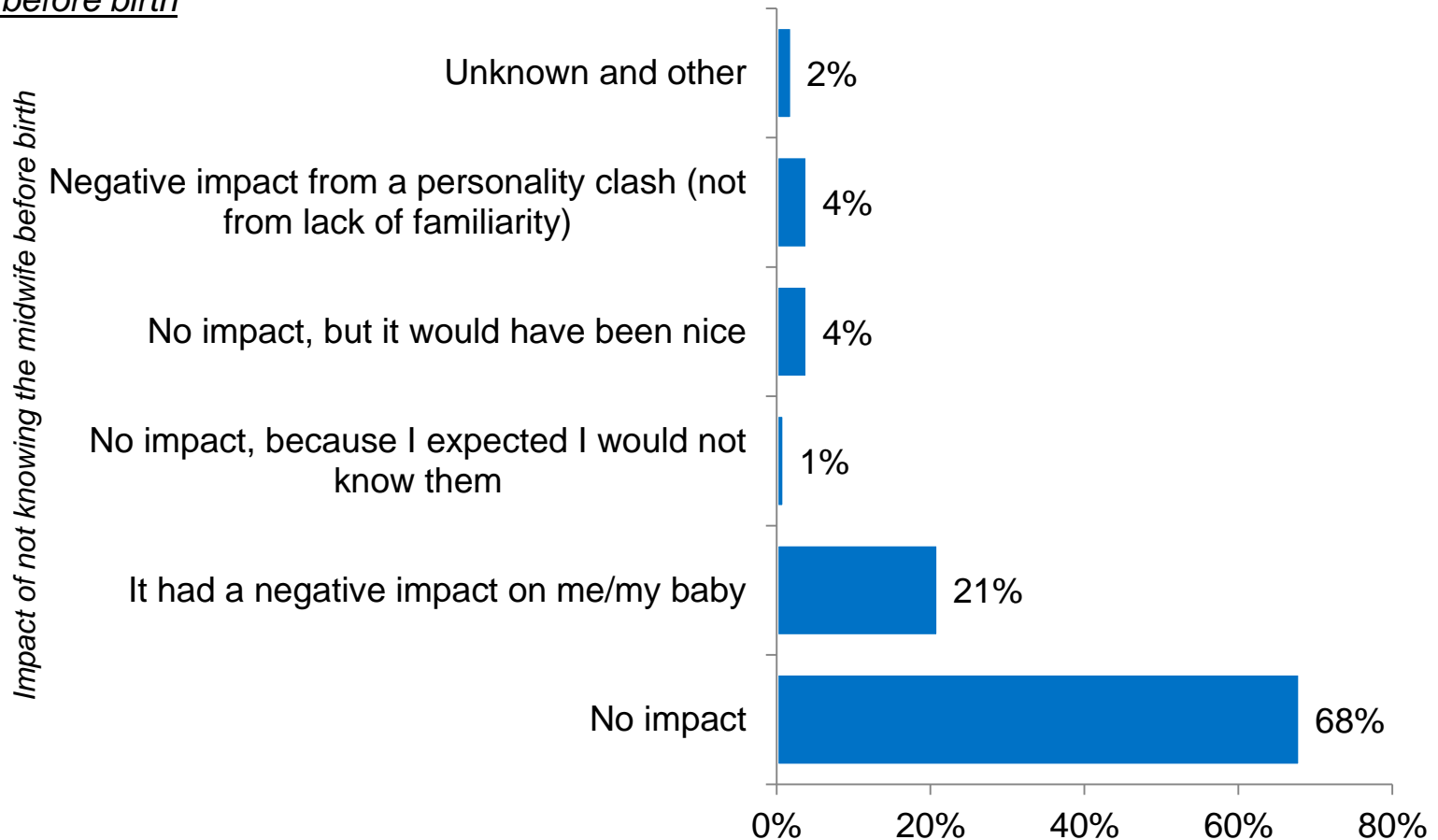


Women who felt they were left alone shortly after birth



The 'Support Overdue' survey found that 21% of women believed that not knowing their midwife had a negative impact on them or their baby due to a lack of familiarity

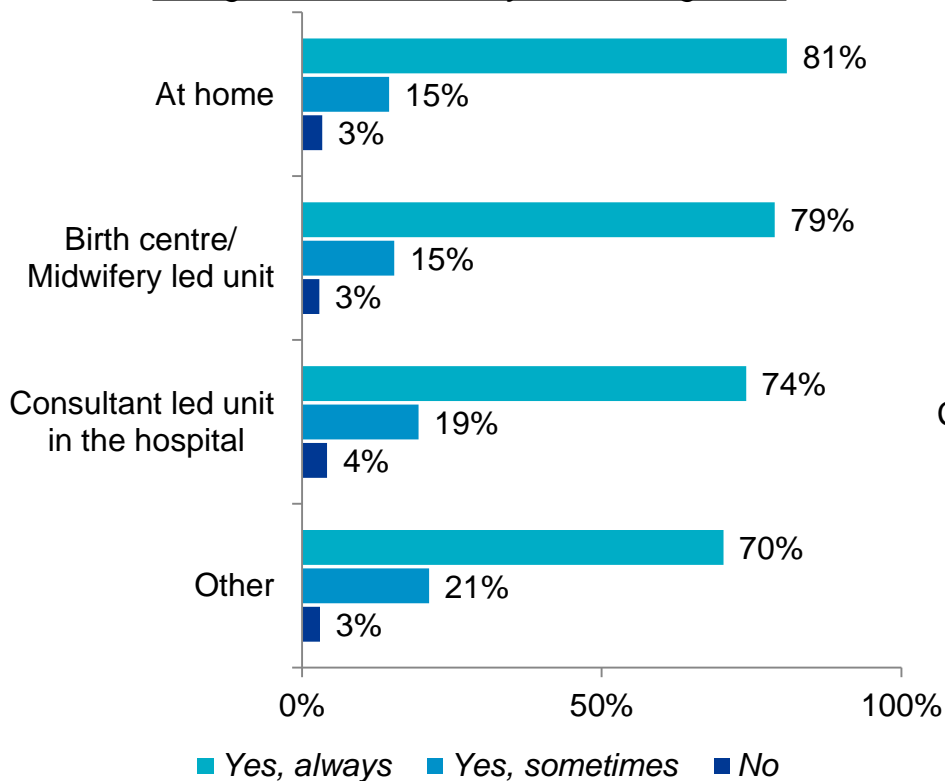
Percentage of women who felt they were, or were not, impacted by not knowing their midwife before birth



Source: Support Overdue: Women's experiences of maternity services NCT and WI. Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway. One third of results were from the London region. As a result, survey results may not be wholly reflective of all participants opinions and should be interpreted with caution. See slide 143 for more information.

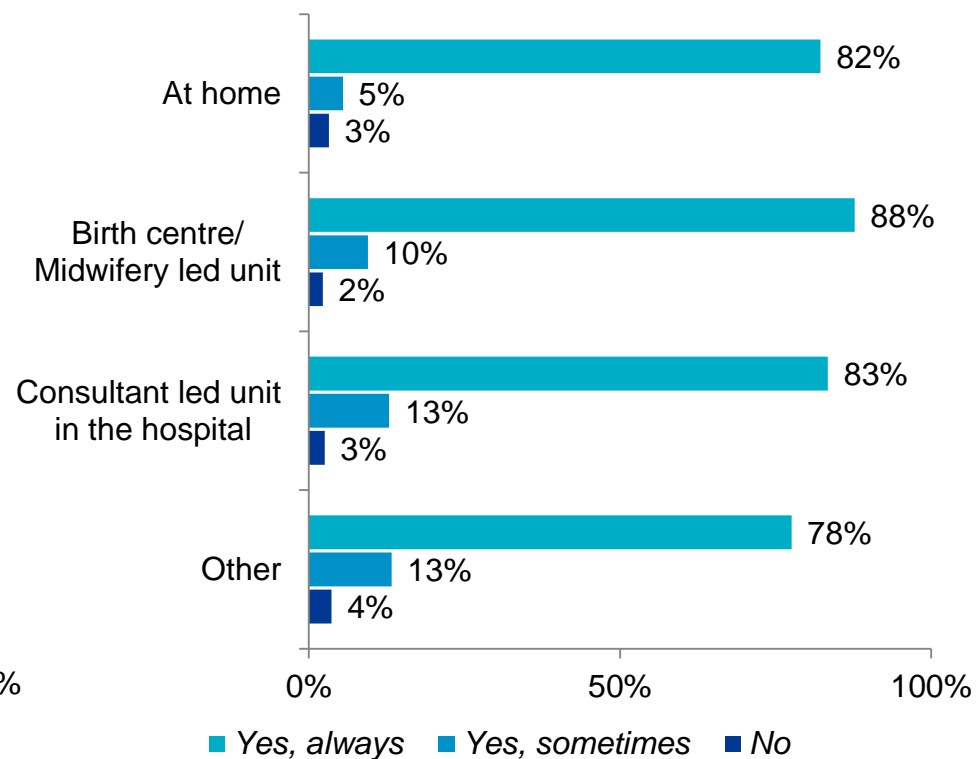
Most women (74%) felt that they are always involved in decisions about their care during labour and birth, with higher proportions feeling this at home and in MLUs compared to OUs

Percentage of women who felt they were always involved in decisions about their care during labour and birth, by birth setting, 2013



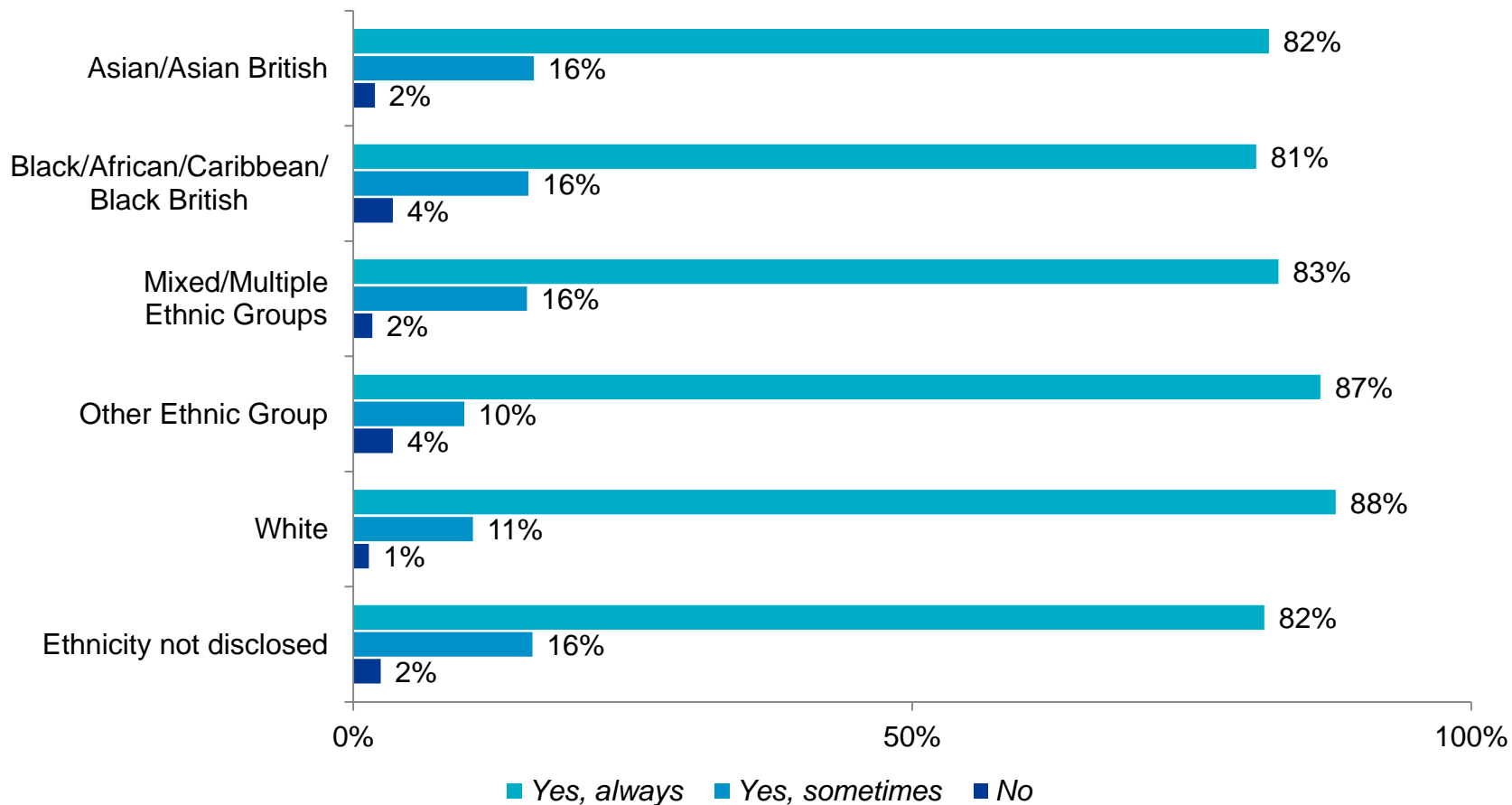
85% of women felt that they were always treated with respect and dignity during labour and birth, with some variation by place of birth

Percentage of women who felt that they were always treated with respect and dignity during labour and birth, by birth setting, 2013



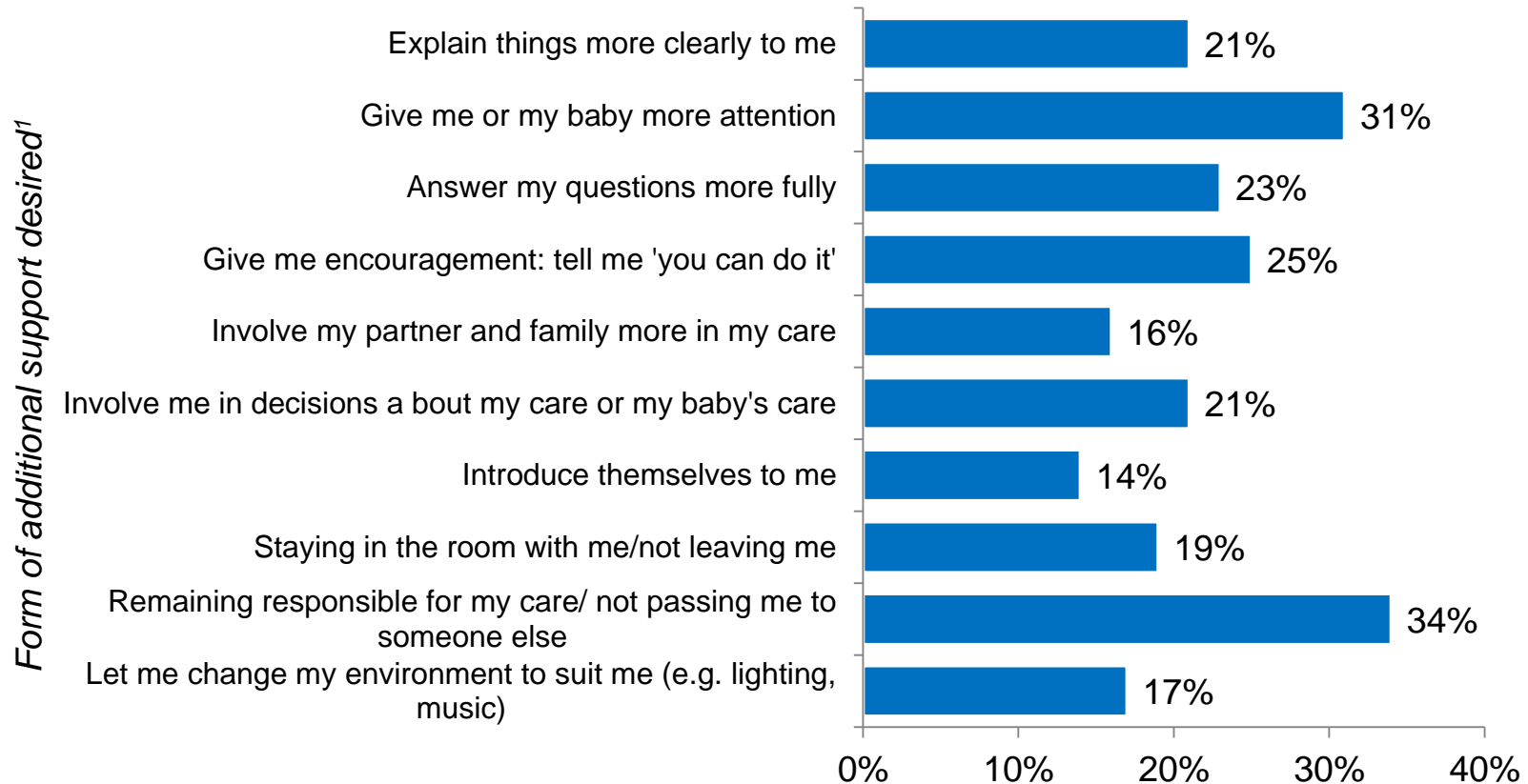
Although the majority (87%) of women felt that they were spoken to in a way they could understand during labour and birth, some variation exists between different ethnic groups

Percentage of women who felt they were, or were not, spoken to in a way they could understand during labour and birth, by ethnicity, 2013.



79% of women wanted some form of additional support. Around a third of these mums want midwives to remain responsible for their care and give them or their baby more attention

Percentage of women who desired a particular form of additional support from staff, of the 79% of women who wanted some form of additional support



¹Statements regarding forms of additional support desired by women were drawn from [NICE Intrapartum Care Clinical Guidance 190](#)

Source: Support Overdue: Women's experiences of maternity services NCT and WI. Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway. One third of results were from the London region. As a result, survey results may not be wholly reflective of all participants opinions and should be interpreted with caution. See slide 143 for more information.

79% of women were within a 30-minute drive of both an obstetric unit and a midwifery-led unit in 2013, compared with 59% in 2007.

‘Despite the improvement, there were still a few areas where women lacked a meaningful choice of type of maternity unit.’

Bed occupancy rates have remained relatively stable nationally at around 60%, however occupancy rates range from 13% to 100% across trusts¹

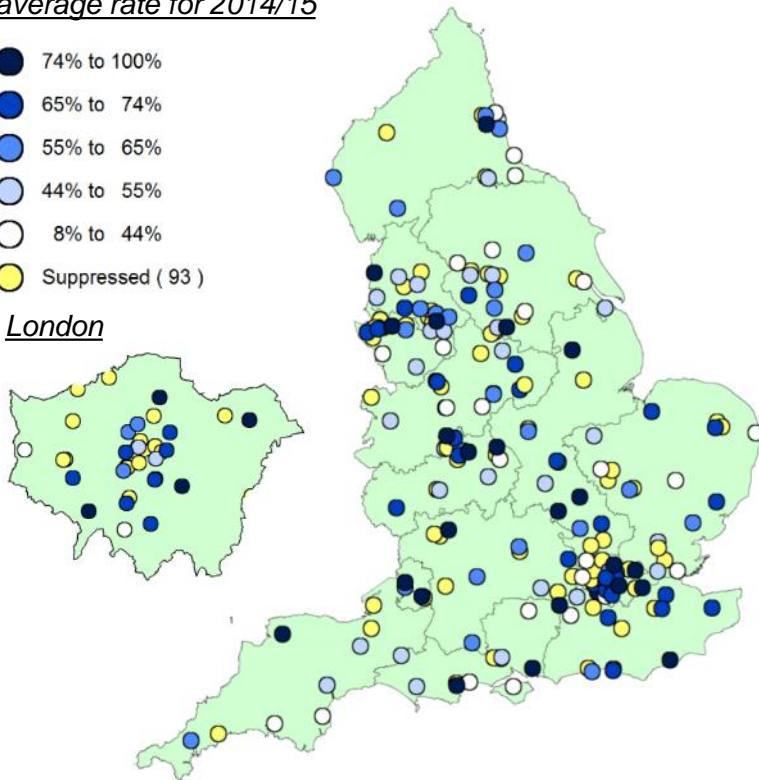
Bottom right: At a national level maternity bed occupancy has remained relatively stable from 2010-11 to 2014-15 with around 60% of available beds occupied.

Bottom: There are no clear geographical patterns in bed occupancy rates across maternity providers.

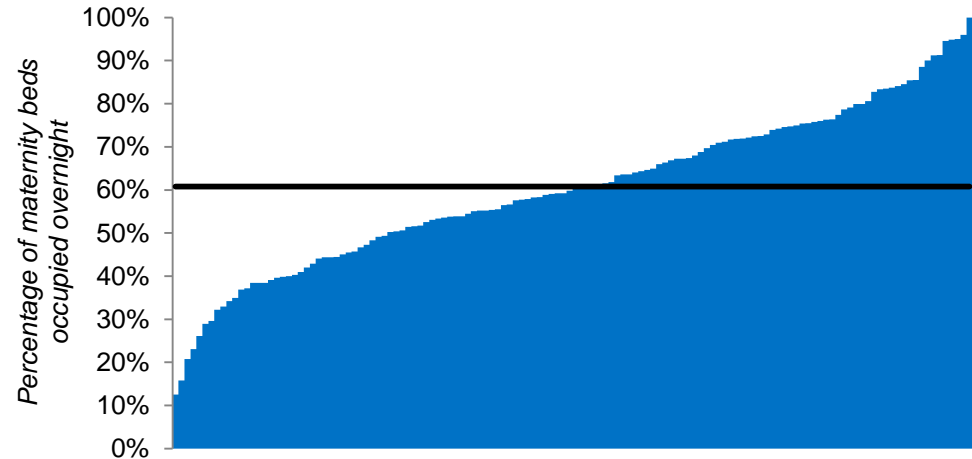
Geographic variation in maternity bed occupancy rates – average rate for 2014/15

- 74% to 100%
- 65% to 74%
- 55% to 65%
- 44% to 55%
- 8% to 44%
- Suppressed (93)

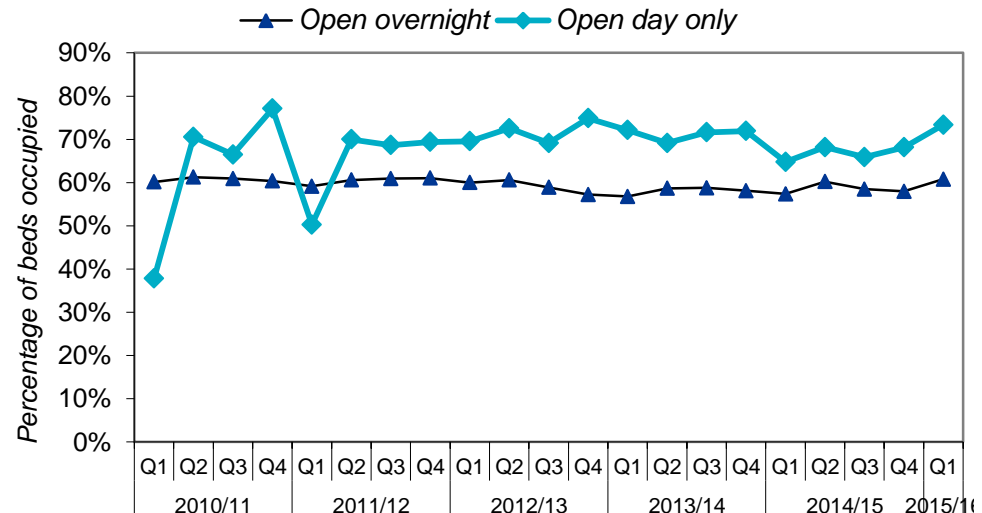
London



Trust level variation in maternity bed occupancy (Q1 2015-16)



National quarterly time series for maternity bed occupancy



¹See [NHS England Bed Availability and Occupancy statistics](#) and associated guidance for more information.

Postnatal Care

- Neonatal audit data show recent improvements across a number of key indicators. For example, 12% of babies born at <29 weeks had a temperature below 36°C in 2013 compared to 16% in 2012.¹ However, variation remains between units in both measures and data quality.
- Although 84% of parents had a consultation with a senior member of the neonatal team within 24 hours of their baby's admission, 7% waited longer than 24 hours³ and 3% received no consultation at all.²
- The percentage of women initiating breastfeeding varies significantly by trust, with higher rates of initiation in London and the South of England.²
- Perinatal mental illnesses are very common, affecting 1 in 5 women at some point during the perinatal period.⁴
- Depression and anxiety affects 15-20% of women in the first year after childbirth⁵. About half of all cases of perinatal depression and anxiety go undetected, with many of those which are detected failing to receive evidence-based forms of treatment.⁴ There is also a large geographic variation in service provision with an estimated 40% of women in England without access to specialist perinatal mental health services.⁴

¹Source: National Neonatal Audit Programme Annual Report 2012., see slide 136-137 for more information.

²Source: NHS England Statistical Release Breastfeeding Initiation and Breastfeeding Prevalence 6-8 weeks Q4 2014/15. See slide 93-94 for more information.

³This includes those who had a consultation before being admitted.

⁴Bauer et al (2014) The Costs of Perinatal Mental Health Problems. Centre for Mental Health and London School of Economics.

⁵NICE Guidelines CG192 2015.

Postnatal Care (Continued)

- Patient experience data¹⁻² suggests this part of the maternity pathway shows significant scope for improvement.
- For example, on leaving hospital only 77% of women had the name and telephone number of a 'named midwife' or health visitor they could contact.¹
- 40% of women had not met any of the midwives who made home visits before and one in three (33%) saw three or more different midwives.¹
- Women saw a midwife an average of 3.1 times during the postnatal period at home after birth, with 97% of women having at least one visit from a midwife at home¹. 1 in 4 women who saw a midwife at home after birth wanted to see the same midwife on all visits but didn't.²

¹Source: NPEU-Safely Delivered: a national survey of women's experience of maternity care, 2014.

²Source: CQC Maternity Survey 2013. See slide 144-147 for more information.

There has been a rise in the proportion of babies born at <29 weeks gestation having their temperature taken within an hour after birth but between unit variation still exists

- 93% of babies born at less than 29 weeks can now be shown to have had a temperature measured within an hour of birth – increasing from 89% in 2012.¹
- Hypothermia remains depressingly common – 12% of these babies had a temperature below 36°C, which shows only a small improvement on 16% in 2012. 41% remain hypothermic with a temperature below 36.5°C (43% in 2012).¹
- Some variation between units is shown, representing an opportunity to improve care.¹

Standards: 98-100% of babies should have their temperature taken within an hour of birth. (Set internally by NNAP Board)

Findings: In the 88 NNUs with valid data (See Data Quality note below):

95% of babies with temperature records had their temperature taken within one hour of birth

One NNU was shown to be a negative statistical outlier (More than two standard deviations below the mean)

Good performance (across all 170 NNUs): There were 31 NNUs with ≥ 10 babies, and 60 NNUs with <10 babies, that took the temperature of all their babies on time and recorded it.

Data quality: Results were excluded from the outlier analysis where:

> 10% of babies had no temperature records.

< 10 babies born under 29 weeks' gestation

There were partial data submissions.

¹*Source: The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013 (using the National Neonatal Research Database), see slides 136-137 for more information.*

87% of eligible babies had their first Retinopathy of Prematurity (ROP) screening recorded as completed within a week of the nationally recommended timeframe

- There was an 18% improvement in this indicator (accounting for the change in measurement) between 2012 and 2013, which may reflect greater data completeness.¹
- Just 6% appear to have had no screening at all and 9% of babies had their first screen after discharge.¹
- As in 2012, a significant number of babies appear to have been screened at the wrong time. The data suggest that smaller, more mature babies - particularly growth retarded babies born after 32 weeks gestation - are not always screened. Instances where such screens are accidentally missed represent a real opportunity for quality improvement.¹

Standards: 100% of eligible babies should receive ROP screening within the time windows for first screening recommended in the guidelines (National standard (RCPCH, RCOphth, BAPM and Bliss, Guideline for the Screening and Treatment of Retinopathy of Prematurity, 2008)

Findings: 94% of eligible babies had at least one screening for ROP recorded. 87% of babies were screened 'on time' in accordance with current NNAP criteria, including the 9% of babies who were screened 'on time' after neonatal discharge.

One NNU was identified as a negative statistical outlier (More than 3SDs from the mean) and flagged for further investigation

Good performance: There were 22 NNU with no missing screening records and all babies achieving the NNAP standard.

Data quality: There were no screening data available for 6% of eligible babies. Babies with gestations of 32 weeks or above, but with birth weights <1,501g had poor data completeness. Distinguishing between lack of data entry and lack of screening remains a problem.

¹Source: The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013 (using the National Neonatal Research Database), see slides 136-137 for more information.

Although most parents speak to a senior member of the neonatal team within a day after admission, there are many who don't

- 84% of parents were recorded as having spoken to a senior member of the neonatal team within 24 hours of their baby's first admission.¹
- This represents:
 - An increase of 5 percentage points from 2012;
 - An increase of 16 percentage points from 2011.¹
- 7% of consultations occurred either before or more than 24 hours after admission.¹
- No consultations occurred for 3% of eligible episodes.¹

Standard: 100% (Source of Standard: NNAP Board)

Findings: A senior member of the neonatal team consulted parents or carers within 24 hours of admission for 84% of eligible episodes.

Consultations that occurred before admission, or more than 24 hours after admission, were recorded in 7% of eligible episodes.

No consultation occurred for 3% of eligible episodes

One NNU (of 133 eligible NNUs) had an unusually low proportion of consultations within 24 hours of admission (More than 2 SDs below national average)

Good performance: There were seven NNUs with no missing consultation records and all babies achieving the NNAP standard.

Data quality:

Data on consultations was either missing or 'unknown' for 5% of eligible episodes.

There were 39 NNU (9,098 babies) that did not provide sufficient data for outlier analysis

¹Source: The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013 (using the National Neonatal Research Database), see slides 136-137 for more information.

The proportion of babies at <33 weeks gestation discharged home receiving any breast milk rose from 54% in 2011 to 58% in 2012 and 59% in 2013

- The proportion of babies at <33 weeks gestation discharged home who were receiving any breast milk rose from:
 - 54% in 2011 to 58% in 2012;
 - 58% in 2012 to 59% in 2013.¹
- A striking geographical variation divides the high and low outliers, with low outliers tending to be in areas with a high proportion of younger mothers of white/British background and higher rates of smoking at pregnancy.¹

Standards: Benchmarking (Source of Standard: NNAP Board)

Findings: 59% of eligible babies were receiving mother's milk at the time of discharge (Exclusively or in combination with another feeding type)

Six NNU had unusually low numbers of babies fed mother's breast milk at discharge.

Six NNU had unusually high numbers of babies breast milk fed at discharge.

Even after case-mix adjustment, the NNU flagged as low outliers tended to have younger mothers, a higher proportion white/British and higher rates of smoking during pregnancy than the population average; while NNUs flagged as high outliers tended to have older mothers, a lower proportion of white/British and a lower proportion of smokers.

Data quality: 170 NNUs met the inclusion criteria and there were very few babies with missing data.

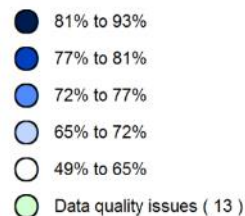
¹Source: The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013 (using the National Neonatal Research Database), see slides 136-137 for more information.

The crude rate of women initiating breastfeeding varies significantly by trust, with generally higher rates of initiation in London and the South of England¹

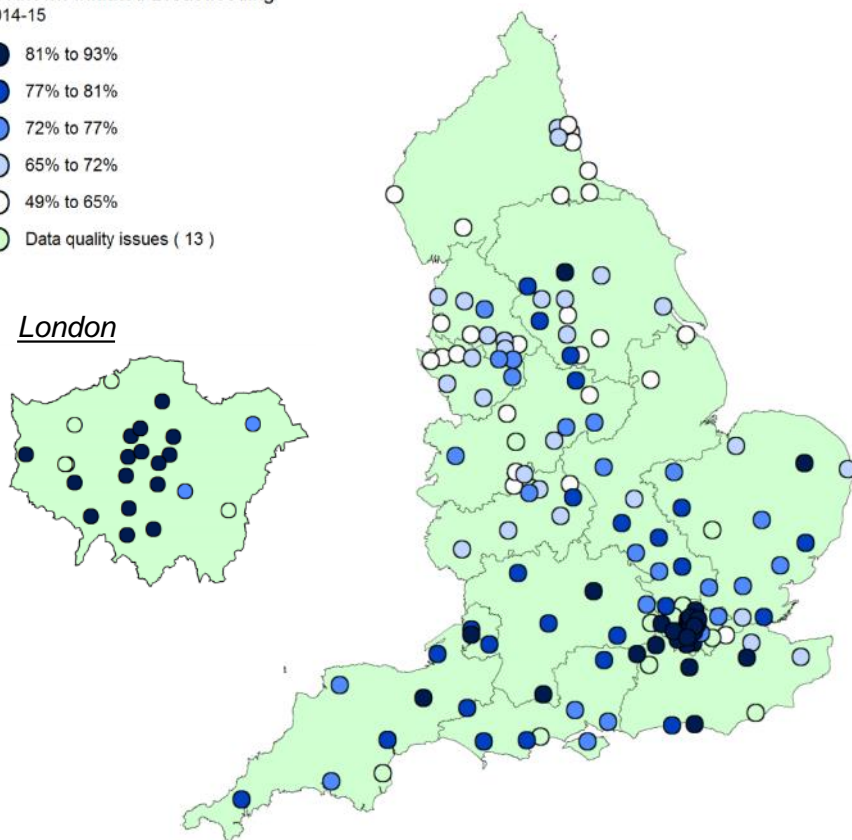
Trust level geographic variation in breastfeeding initiation rates

% Known Initiated Breastfeeding

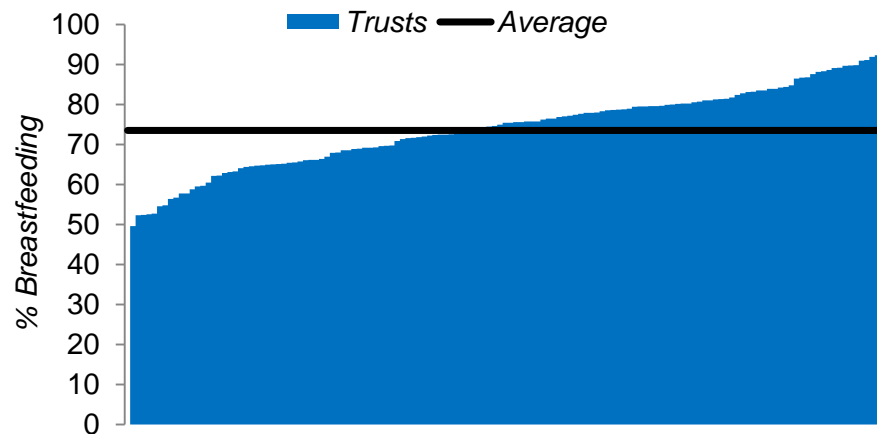
2014-15



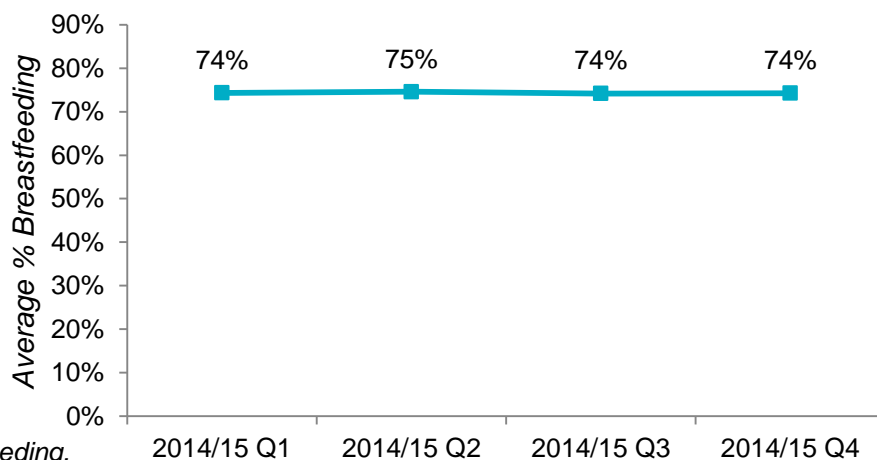
London



Trust level variation in breastfeeding initiation rates (2014-15)



National time series for breastfeeding initiation rates (2014-15)

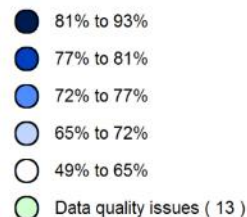


¹Data are experimental, non-standardised and represent only known initiated breastfeeding. This may be lower than actual rates of breastfeeding. Variation amongst trusts and geographical distribution may be influenced by socio-demographic factors not accounted for. Data should therefore be interpreted with caution. See slide 142 for more information. Source: NHS England Statistical Release Breastfeeding Initiation and Breastfeeding Prevalence 6-8 weeks Q4 2014/15.

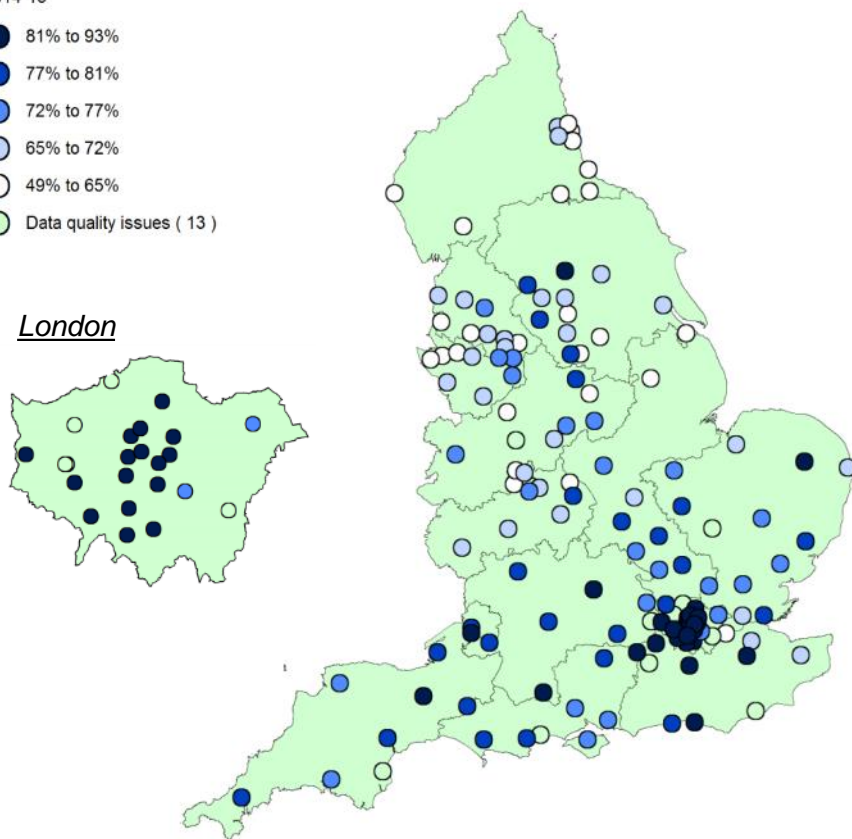
Comparison of provider and CCG level crude rates of breastfeeding initiation emphasises the geographical pattern in rates¹

Geographic variation in breastfeeding (by trust, 2014-15)

% Known Initiated Breastfeeding
2014-15

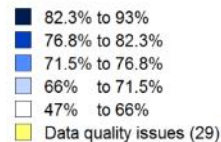


London

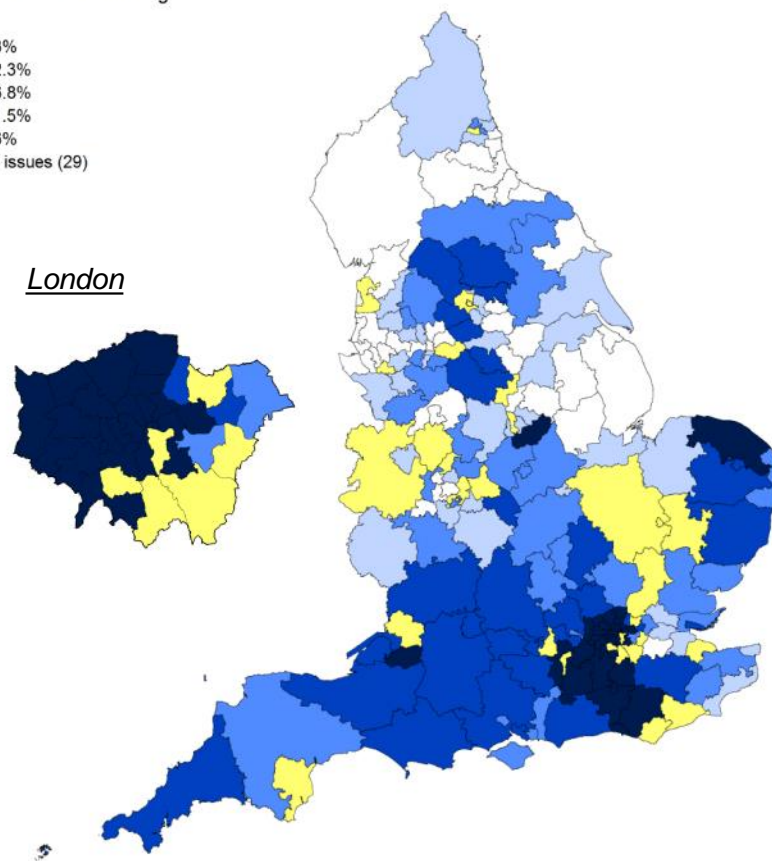


Geographic variation in breastfeeding (by CCG, 2014-15)

% Known Initiated Breastfeeding
2014-15



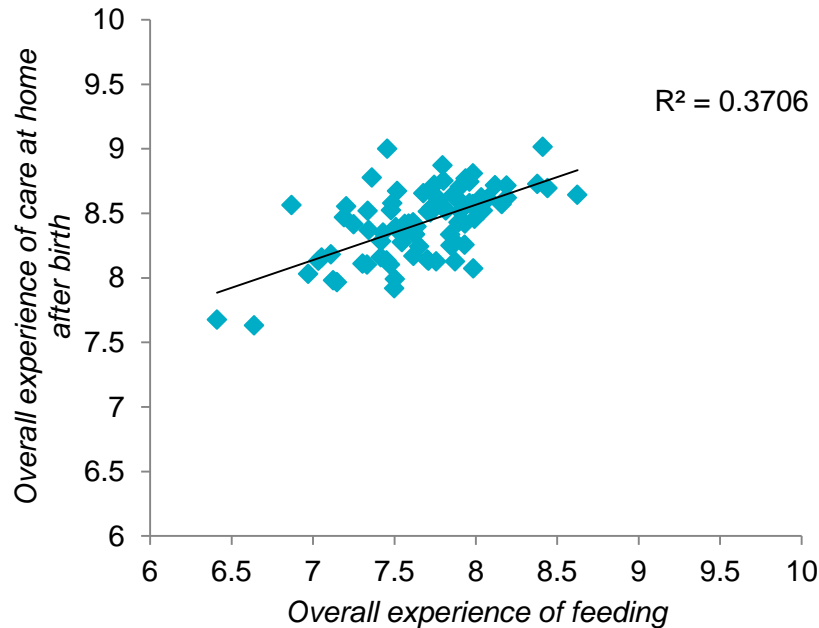
London



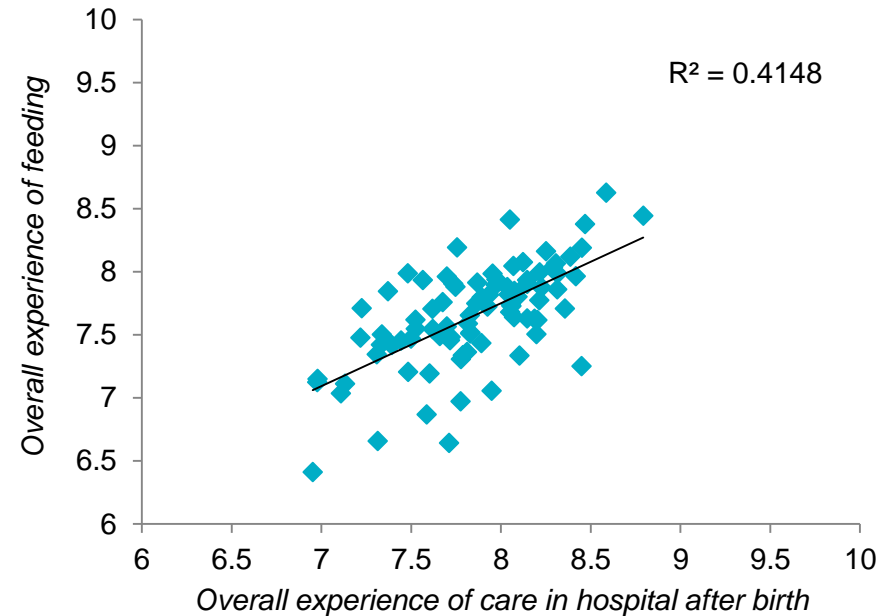
¹Data are experimental and non-standardised. See slide 142 for more information.

Around 40% of the variation in scores for patients experience of feeding is explained by their experience of care in hospital after birth; and care at home after birth, however the relationships between these indicators may not be causal

Overall experiences of feeding and care at home after birth

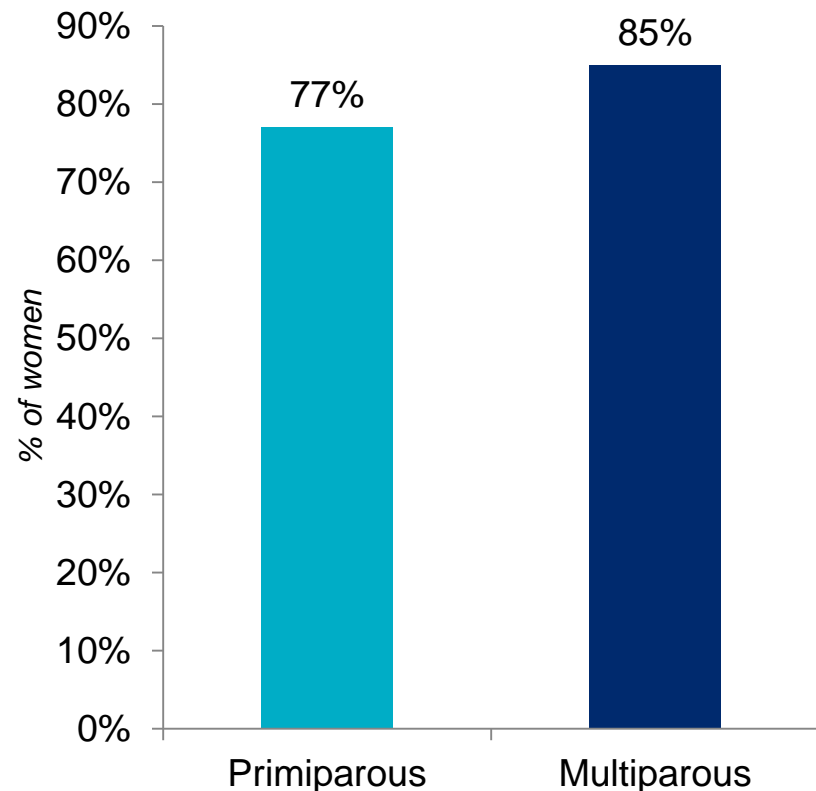


Overall experiences of feeding and care in hospital after birth



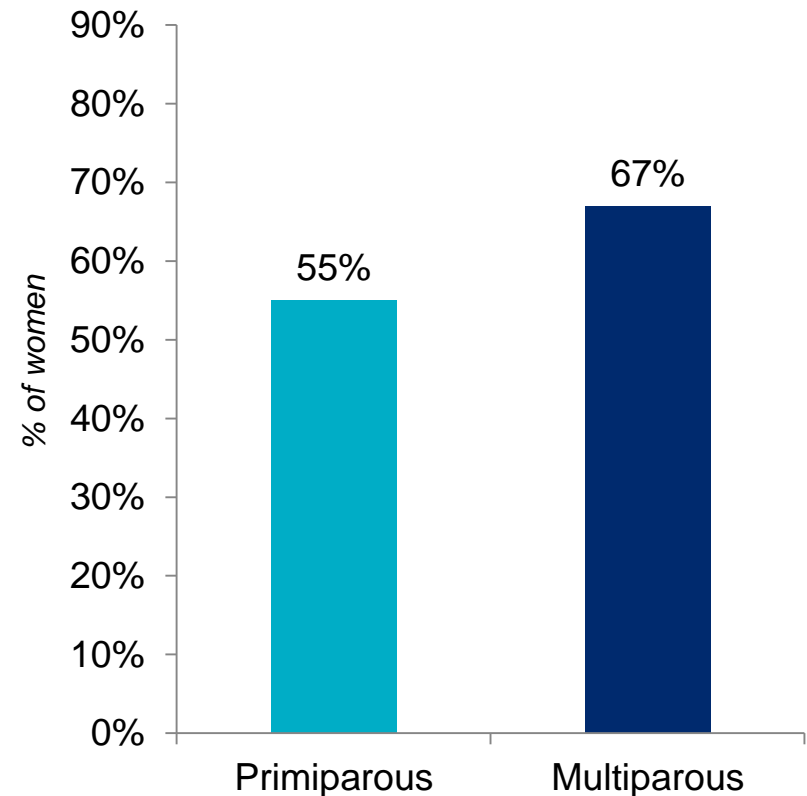
Fewer primiparous women felt that their decisions concerning feeding were always respected compared to multiparous women

Proportion of women who felt that their decisions concerning feeding were always respected, by parity



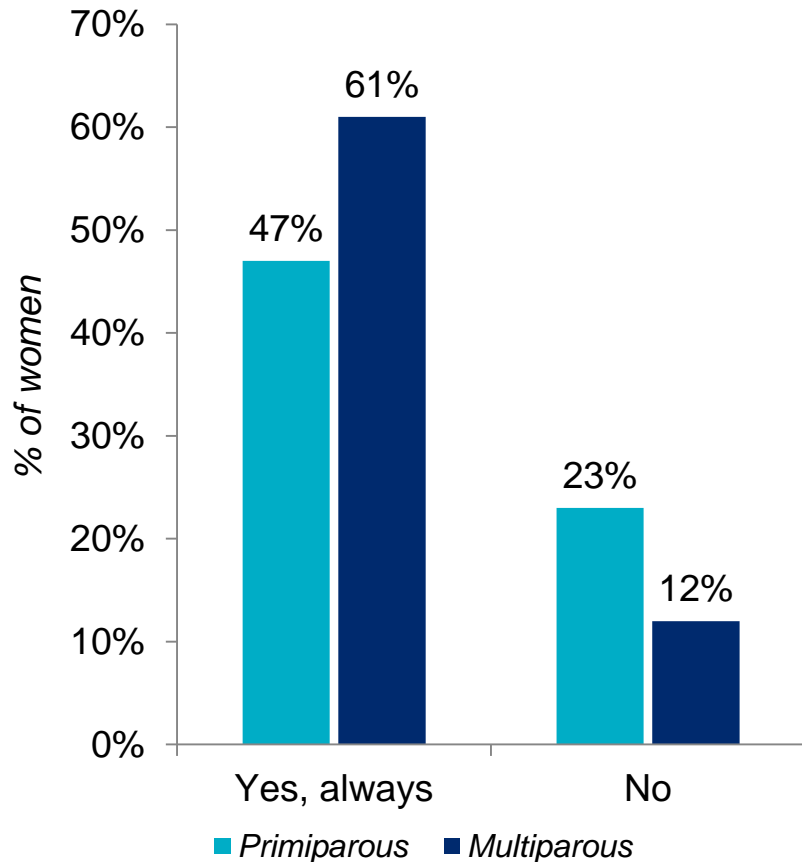
Fewer primiparous women felt that they received relevant information about feeding when compared to multiparous women

Proportion of women who felt that they always received relevant information about feeding their baby, by parity



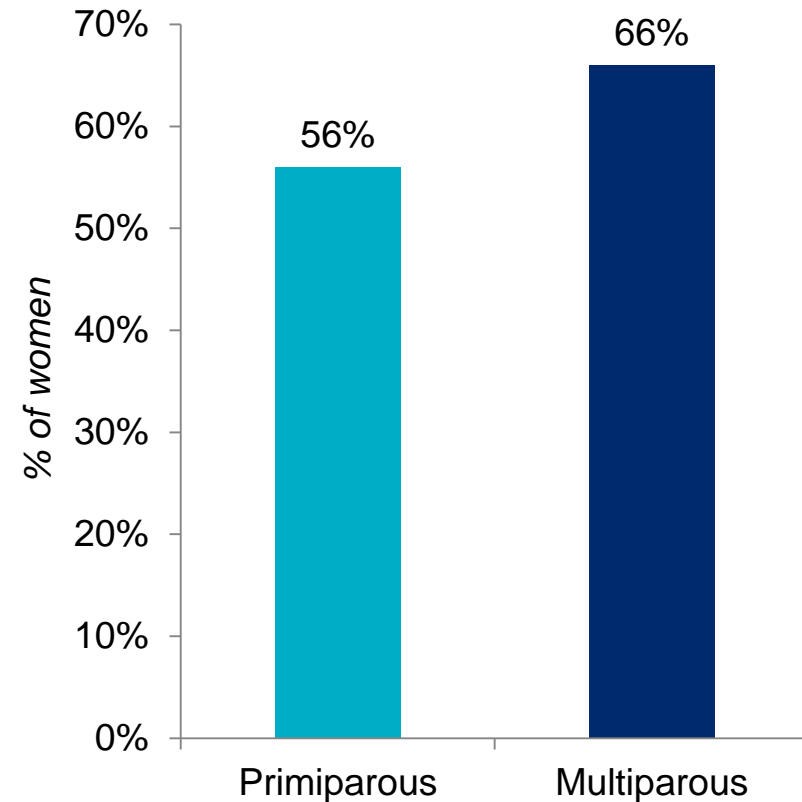
47% of primiparous women said yes they always received consistent advice on feeding compared to 61% of multiparous women

Responses to: 'did you always receive consistent advice on feeding your baby?'



56% of primiparous women felt they were always given support and encouragement around feeding compared to 66% of multiparous women

Proportion of women who felt that they were always given advice and encouragement around feeding their baby



Perinatal Mental Health

- Late maternal mortality in the period 2011-13 was 14 per 100,000 maternities. **Notably, 23% of these deaths were from mental health related causes, with one in seven dying through suicide.** (MBRRACE-UK Confidential Enquiries Report, 2015)
- **Depression and anxiety affects 15-20% of women in the first year after childbirth** (NICE Guidelines CG192 2015).
- Bauer et al (2014, p.5) believe “**about half of all cases of perinatal depression and anxiety go undetected** and many of those which are detected fail to receive evidence-based forms of treatment”.¹
- The **breadth of perinatal mental health illnesses** includes depression and anxiety, antenatal and postnatal depression, obsessive compulsive disorder, post-traumatic stress disorder (PTSD) and postpartum psychosis.
- Perinatal Mental Health is thought to cost the NHS up to **£8 billion per year, predominantly due to costs related to the child.**¹
- There are 15 Mother and Baby Units, over 20 Community Mother and Baby Teams, and a range of other specialist perinatal mental health services across England. However there is **large geographic variation** in service provision, with an estimated 40% of women in England without access to specialist perinatal mental health services.²
- **Around 40-50% of nurses working in Mother and Baby Units (MBUs) are unregistered.** The Cavendish Review (2013, p.5) states that 1.3 million frontline staff across the NHS are not registered nurses ‘but now deliver the bulk of hands-on care in hospitals, care homes and homes of individuals’.
- **Health Education England Mandate pledges to have a perinatal mental specialist for every birthing unit by 2017.**

Note: Within mental health services the ‘perinatal period’ refers to the period during pregnancy and the first year after birth.

¹Source: Bauer et al (2014) *The Costs of Perinatal Mental Health Problems*. Centre for Mental Health and London School of Economics.

²Source: Bespoke data collection and analysis carried out by the NHS Benchmarking Team on perinatal mental health provision (2015).

What provision is available for Perinatal Mental Health?

Mother and Baby Units (MBUs):

These provide support, care and accommodation for mothers suffering from mental illness, and are based within NHS mental health trusts.

Current provision is as follows¹:

- There are 115 MBU beds provided across 15 units (as of 31st March 2015);
- MBUs are geographically spread – 3 units are in the London area;
- Number of beds in MBUs ranges from 4 to 13;
- 11 trusts have beds and a community team, 4 trusts only have beds.

Community Mother and Baby Teams (CMBTs):

These provide services counselling support, medication advice, therapy and support for women who have a history of sexual abuse.

- According to the NHS Benchmarking Network's assessment, 24 mental health trusts in England (of 58 total) have a community mother and baby team. However, this sits alongside significant geographic variation in overall perinatal mental health provision available across the country (see next slide).¹

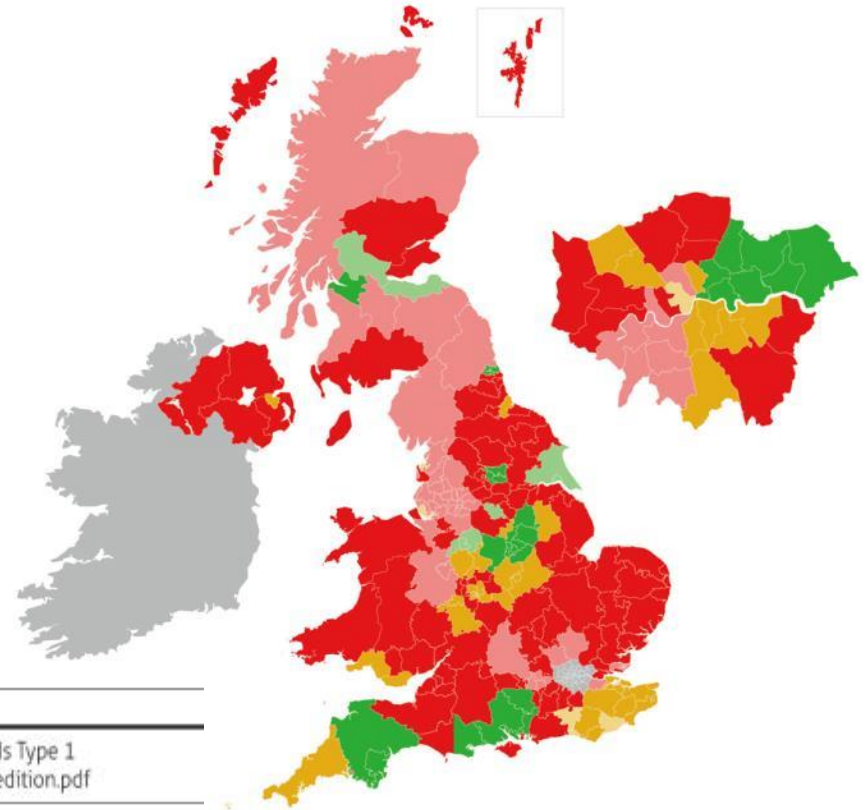
Note: The information provided relates to 'specialist and community' perinatal mental health. There are also other providers involved such as maternity and primary care which have not been included in the slide.

¹Source: Bespoke data collection and analysis carried out by the NHS Benchmarking Network on perinatal mental health provision (2015)

The Maternal Mental Health Alliance have recently mapped all specialist community perinatal health teams across the UK.

Many areas have no specialist provision available, but may have other types of mental health services available.

Geographic variation in the provision of specialist community perinatal health teams across the UK:



Map Legend:

LEVEL	COLOUR	CRITERIA
5	Dark Green	Specialised perinatal community team that meets Perinatal Quality Network Standards Type 1 http://www.rcpsych.ac.uk/pdf/Perinatal%20Community%20Standards%201st%20edition.pdf
4	Light Green	Specialised perinatal community team that meets Joint Commissioning Panel criteria http://www.rcpsych.ac.uk/pdf/perinata_web.pdf
3	Yellow	Perinatal community service operating throughout working hours with at least a specialist perinatal psychiatrist with dedicated time AND specialist perinatal mental health nurse with dedicated time, with access to a perinatal psychiatrist throughout working hours
2	Orange	Specialist perinatal psychiatrist AND specialist perinatal nurse with dedicated time
1	Pink	Specialist perinatal psychiatrist or specialist perinatal nurse with dedicated time only
0	Red	No provision

Women were more critical about their treatment by postnatal staff than in other phases of care with fewer women feeling listened to (68%) and treated as an individual (71%)¹

The NPEU 2014 Safely delivered survey also reported that:

- Although women were more critical about their treatment during post-natal care, only between 1 and 5% of women felt that they were not treated well at all in hospital with respect to the following aspects of care:
 - Being talked to in a way they could understand;
 - Being listened to;
 - Being treated with respect, kindness and as an individual.¹
- Most women (68%) felt that their length of stay in hospital after birth was 'about right', 12% thought it was too short and 15% thought it was too long.¹
- After discharge from hospital, 77% of women had the name and telephone number of a 'named midwife' or health visitor they could contact.¹

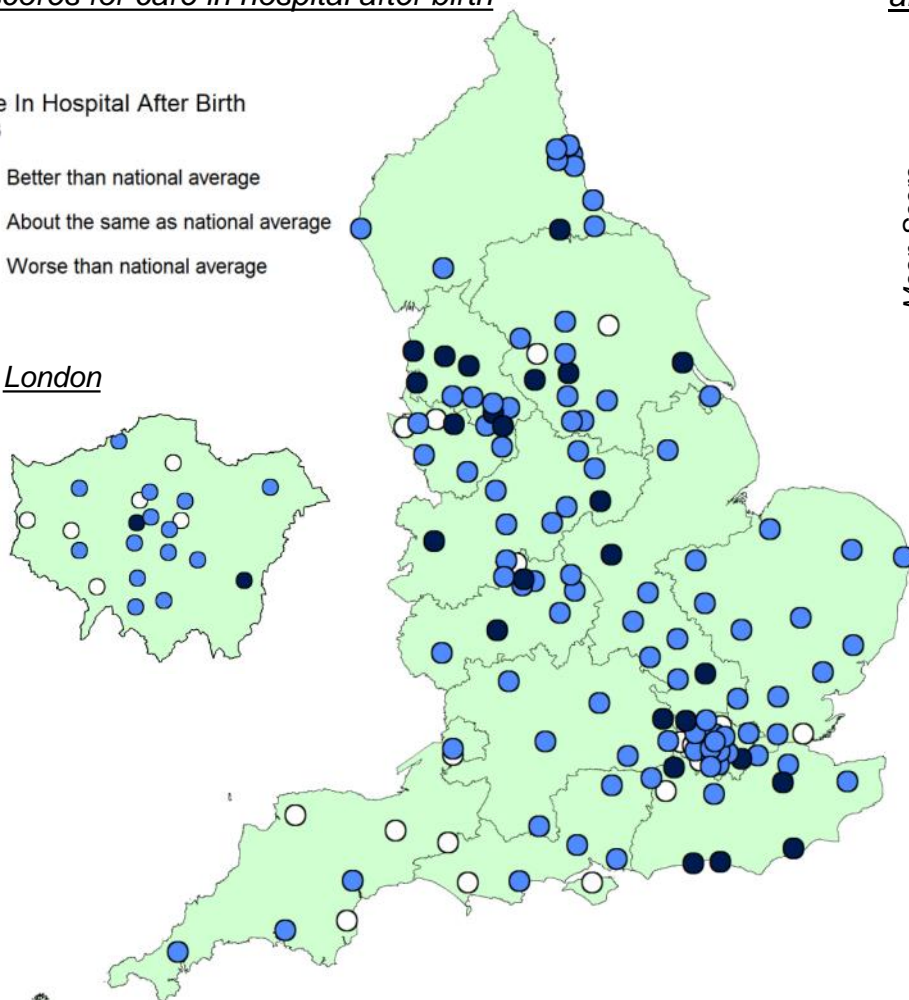
The CQC Survey shows some variation in trusts' maternity survey scores for patients' experience of care in hospital after birth, with 20 out of 137 trusts performing significantly lower than the national average¹

Geographic variation in maternity survey scores for care in hospital after birth

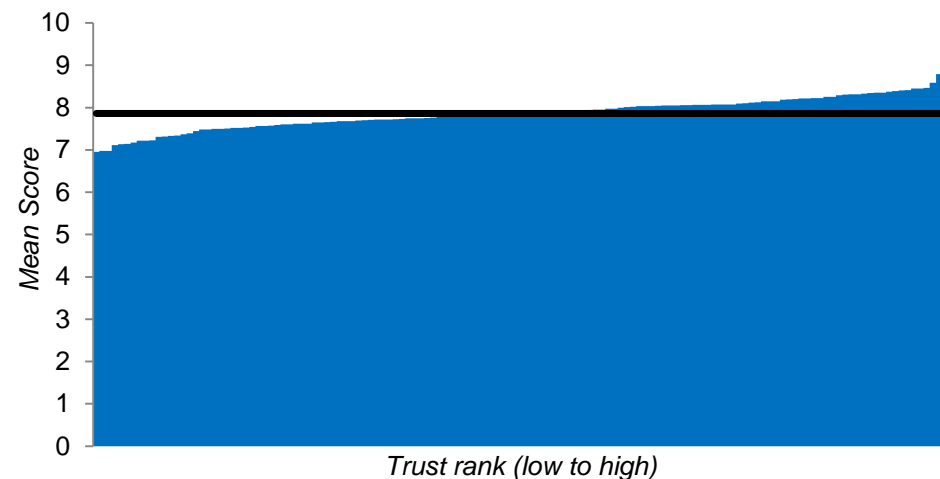
Care In Hospital After Birth
2013

- Better than national average
- About the same as national average
- Worse than national average

London



Trust level variation in maternity survey score for care in hospital after birth



Above: Composite scores for maternity survey questions around patient experience of care in hospital after birth show only small variation from 7.0 to 8.8 out of 10.

Left: There is no obvious geographical pattern in trust performance for patient experience of care in hospital after birth. (White spots on the map indicate locations of providers who are performing significantly worse from the national average for patient experience of labour and birth. Those performing significantly better are highlighted by dark blue spots.)

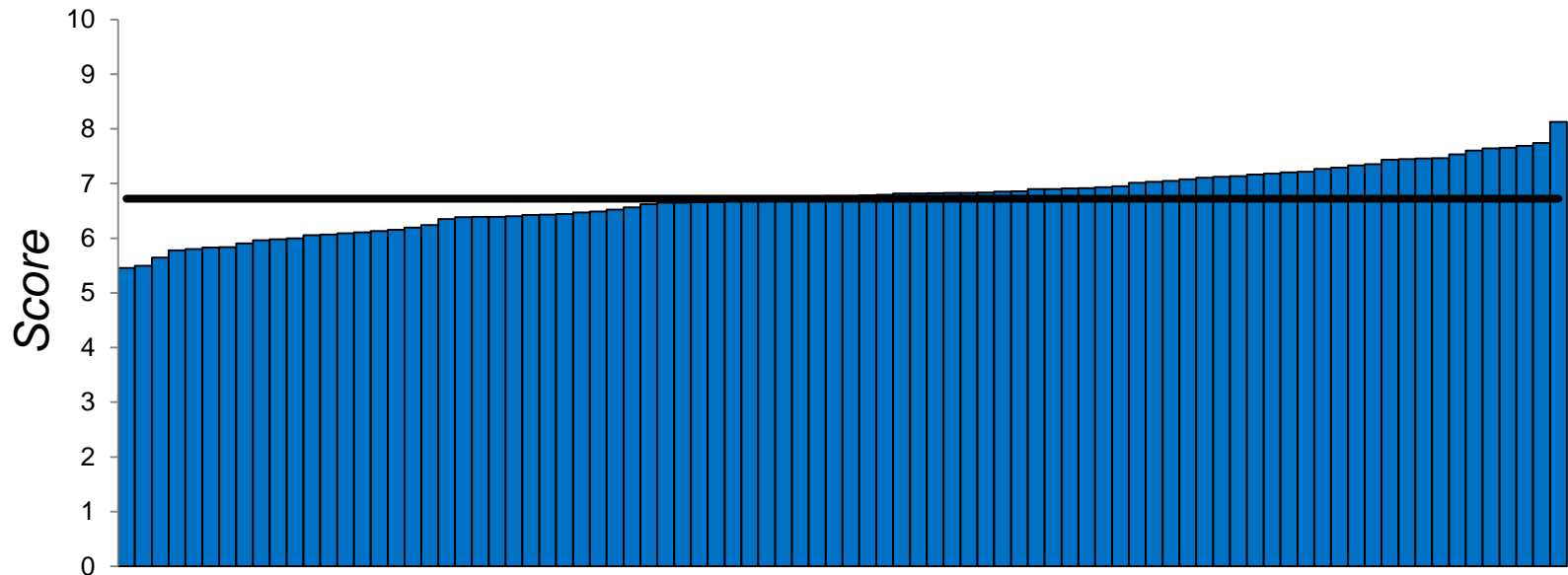
¹Source: CQC Maternity Survey 2013. See slide 144-147 for more information

Feeding: E5. Did you feel that midwives and other health professionals gave you consistent advice about feeding your baby?

Out of the questions contributing to the composite score for the "Feeding" section, question E5 demonstrated the highest variance based on the 90th:10th percentile ratio.

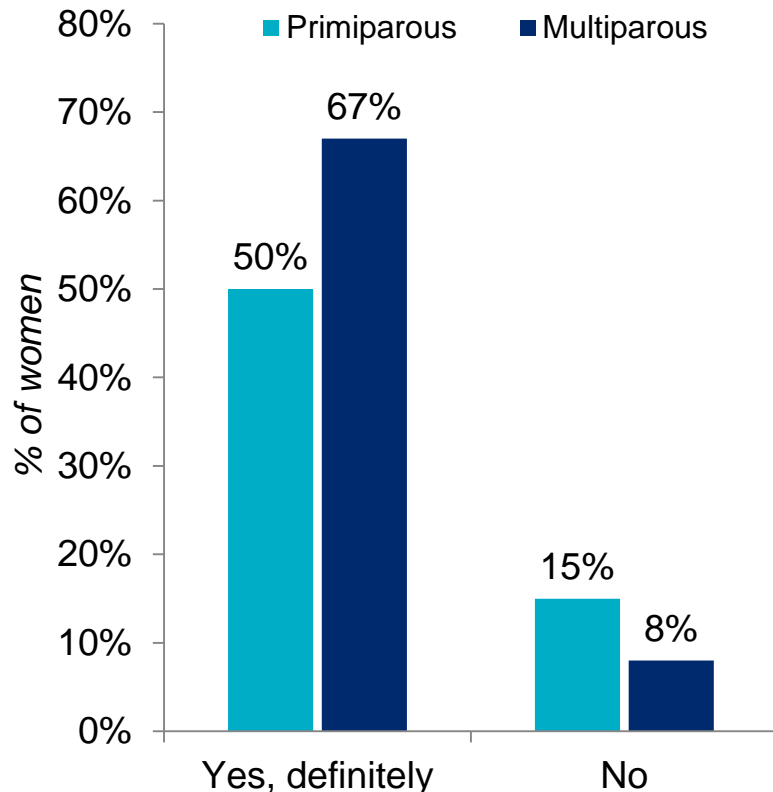
The trust score for the 90th percentile is approximately 1.25 times larger than the trust score for the 10th percentile.

Trust level variation in scores for question E5. "Did you feel that midwives and other health professionals gave you consistent advice about feeding your baby?"



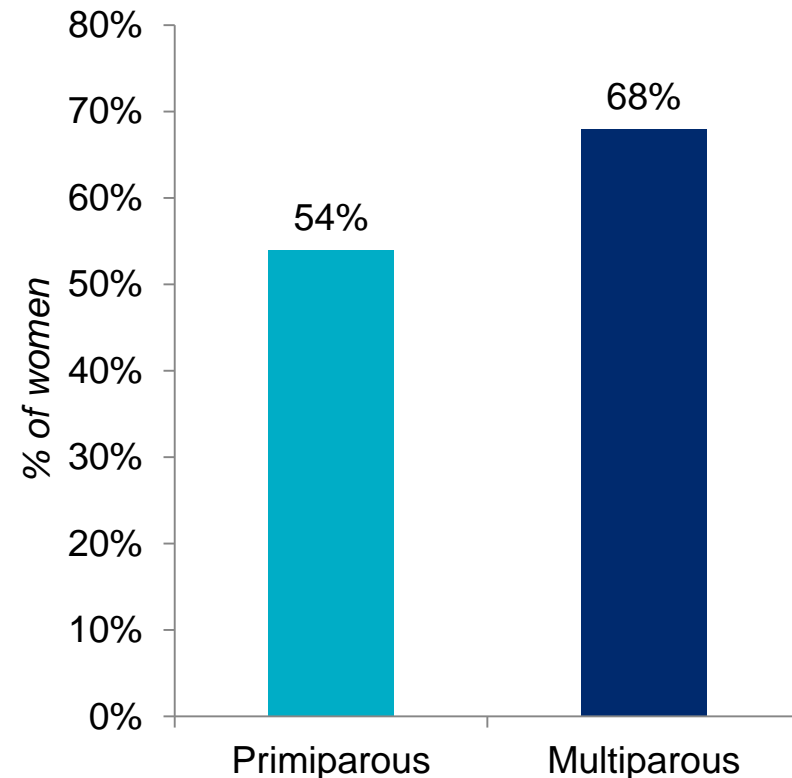
Fewer primiparous women felt they always received explanations and information needed in hospital after the birth of their baby

Responses to: did you always receive explanations and information needed in hospital after the birth of your baby, by parity



Fewer primiparous women felt they received enough information about their own recovery after the birth

Proportion of women who felt yes, they definitely received enough information about their own recovery after the birth, by parity



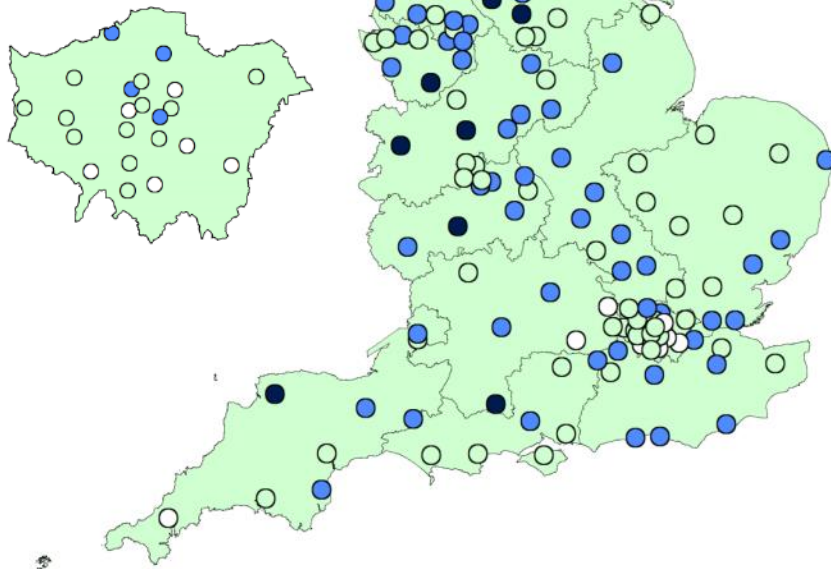
The CQC survey shows some variation in trusts' maternity survey scores for patients' experience of care at home after birth, with 10 out of 85 trusts having scores significantly lower than the national average

Geographic variation in maternity survey scores for care at home after birth

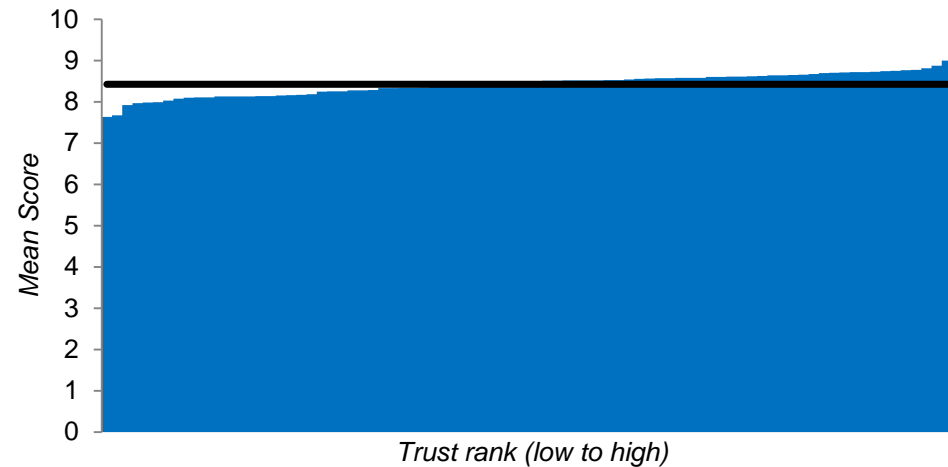
Care At Home After Birth
2013

- Better than national average
- About the same as national average
- Worse than national average
- No data

London



Trust level variation in maternity survey score for care at home after birth



Above: Composite scores for maternity survey questions around patient experience of care at home after birth show only small variation from 7.6 to 9.0 out of 10.

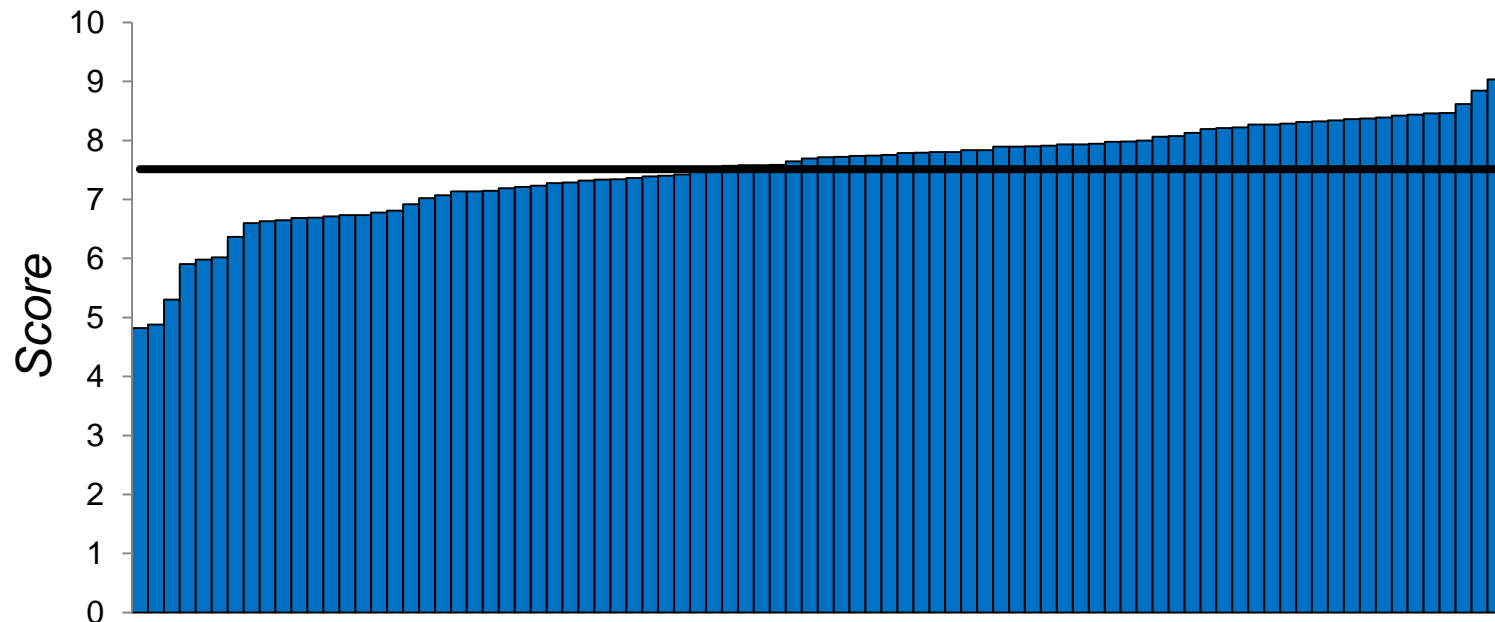
Left: There is a concentration of trusts performing better than the national average in northern and western regions. (White spots on the map indicate locations of providers who are performing significantly worse from the national average for patient experience of labour and birth. Those performing significantly better are highlighted by dark blue spots.)

Care at home after birth: F6. Would you have liked to have seen a midwife...more often/less often?

Out of the questions contributing to the composite score for "Care at home after birth", question F6 demonstrated the highest variance.

The highest trust score is approximately 1.87 times larger than the lowest trust score. The score for the trust in the 90th percentile was 1.26 times larger than for the 10th percentile.

Trust level variation in scores for question F1. "Would you have liked to have seen a midwife...more often/less often?"



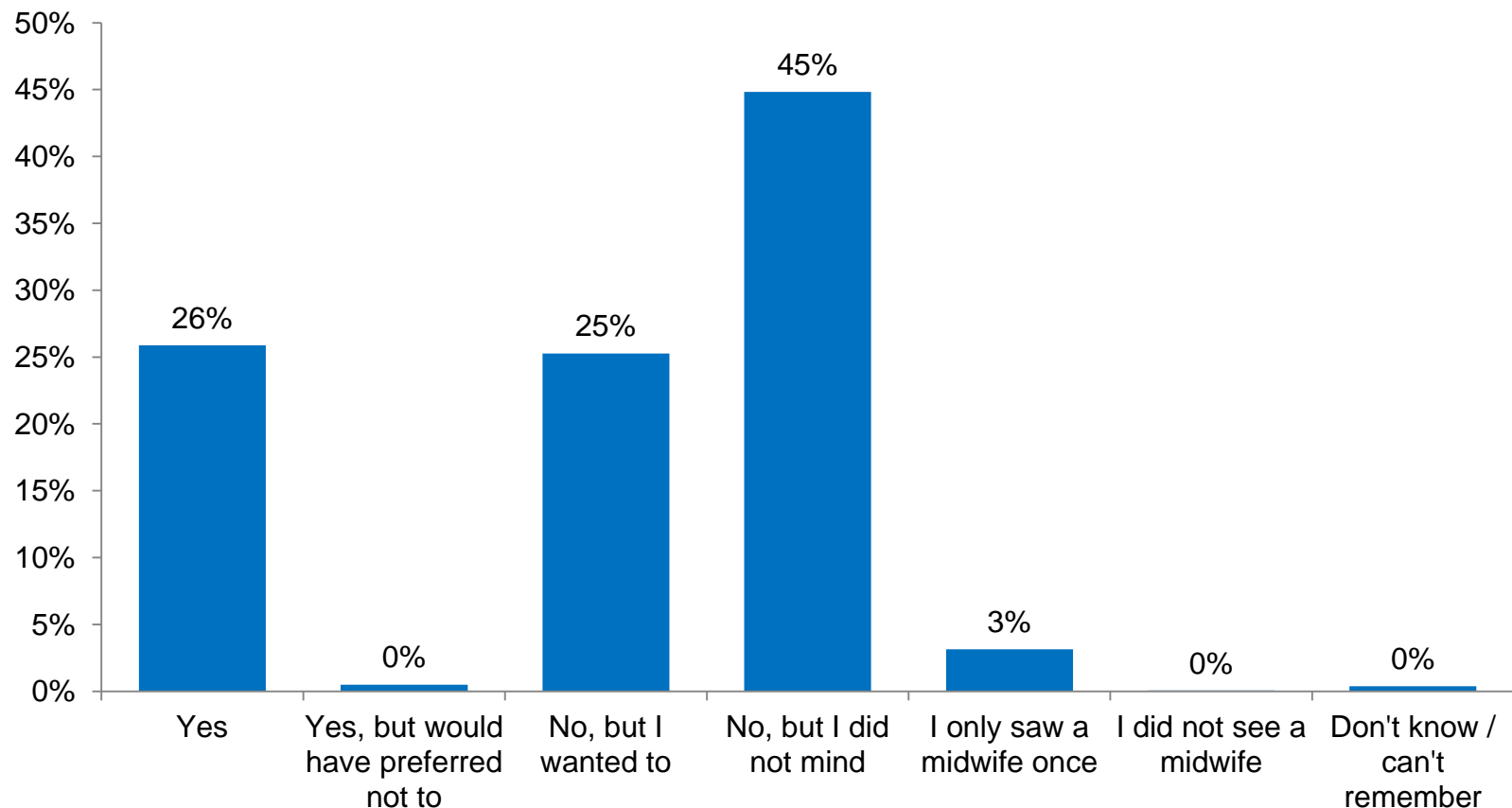
Women saw a midwife on average 3.1 times at home during the post-natal period, with 97% of women having at least one home visit from a midwife¹

The NPEU 2014 Safely delivered survey also reported that:

- A significant proportion (40%) of women had not met any of the midwives that made their home visits before, with a third seeing three or more different midwives.
- Overall, 23% of mothers felt that they would have liked more home visits, with this being more common in primiparous women. More than one in four women felt they would have liked more help with feeding their baby.
- Although 69% of women always had confidence in the staff caring for them after discharge, 27% only sometimes had confidence and 4% had no confidence at all.
- 90% of women had a postnatal check by their GP but of those that did not, 60% had not been offered one.
- Nine out of ten women had been asked about their emotional and mental health by a health professional since birth.

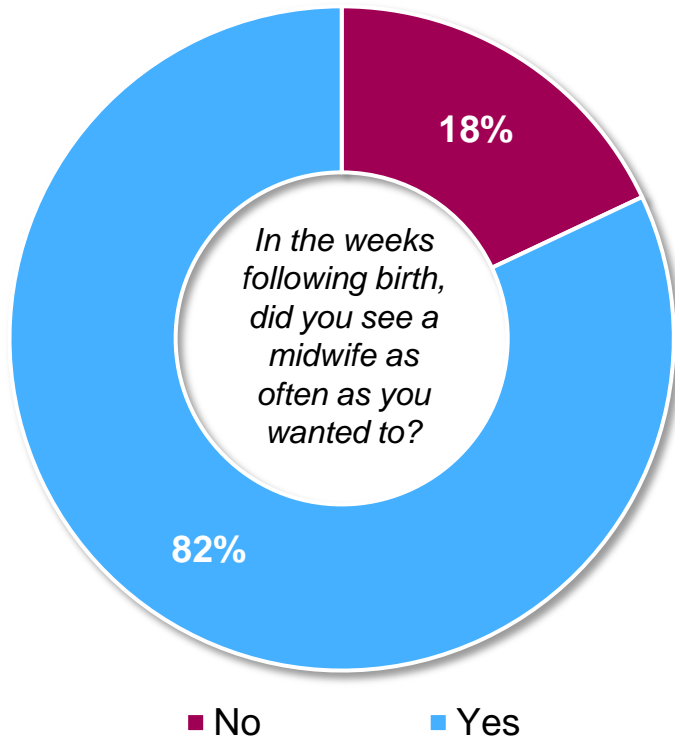
When asked if they saw the same midwife for all of their postnatal appointments only 25% of women responded 'no but I wanted to' and 45% responded 'no, but I did not mind'

Percentage of women who did, or did not, see the same midwife for all of their postnatal appointments



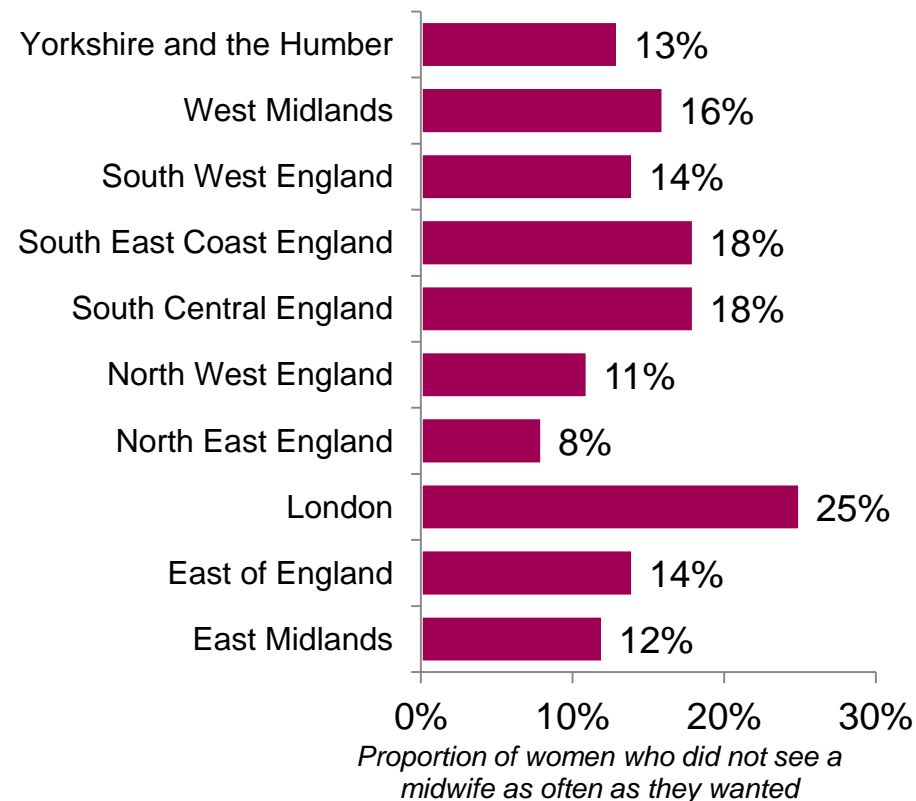
One in five women reported that they did not see a midwife as often as they would like to in the days and weeks following birth.

Proportion of women who reported seeing a midwife as often, or less often, than they would have liked postnatally.



The proportion of women who did not see a midwife as often as they would like ranged from 8% in the North East to 25% in London

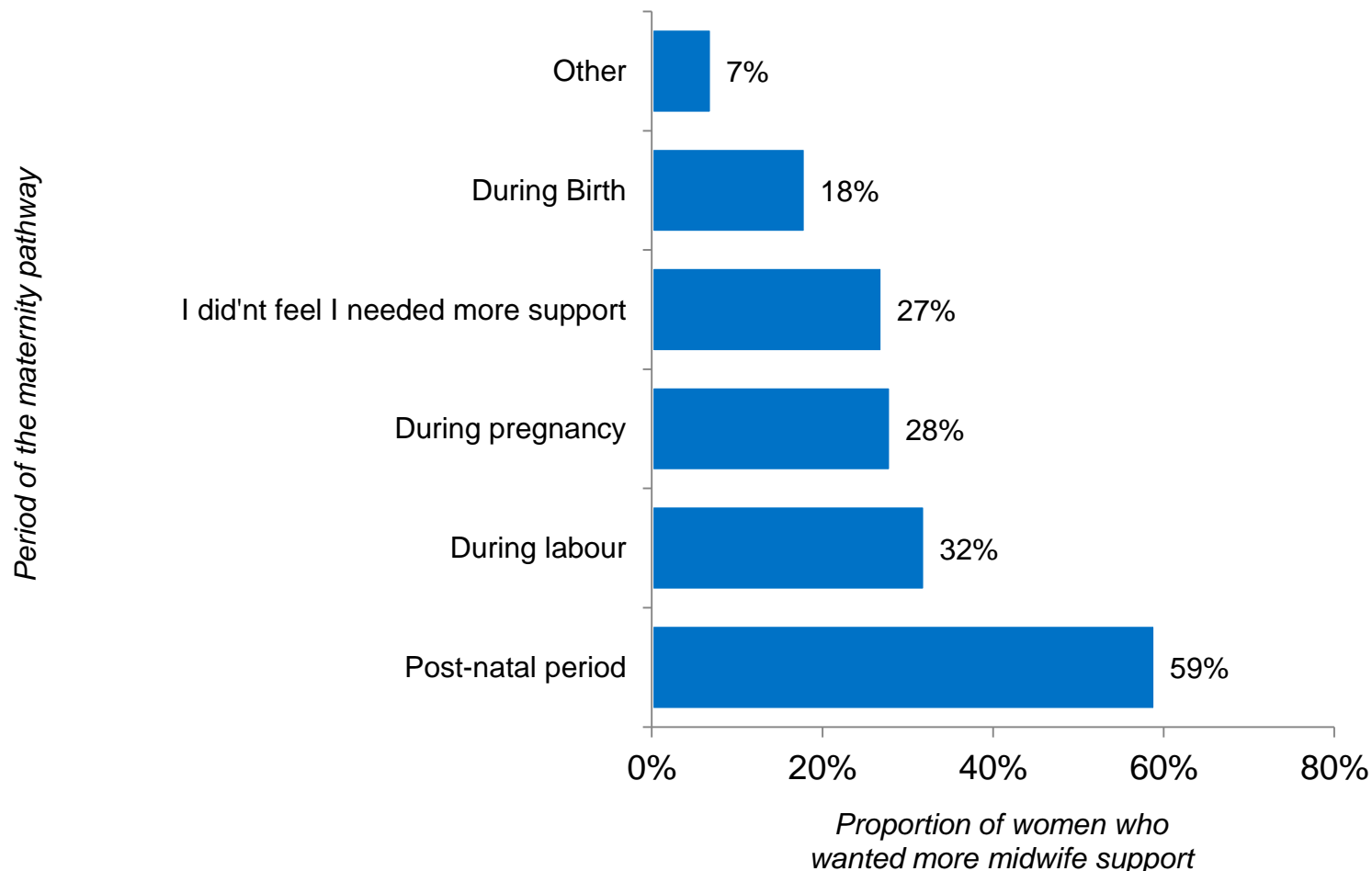
Geographic variation in the proportion of women who reported seeing a midwife less often than they wanted to.



Source: Support Overdue: Women's experiences of maternity services NCT WI. Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway. Furthermore, one third of results were from the London region. As a result, survey results may not be wholly reflective of all participants opinions and should be interpreted with caution. See slide 143 for more information.

When asked at what point they felt that they needed more support from midwives, almost 60% of women said the post-natal period

Percentage of women who felt they needed more support, by period of maternity pathway



Source: Support Overdue: Women's experiences of maternity services NCT and WI. Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway. One third of results were from the London region. As a result, survey results may not be wholly reflective of all participants opinions and should be interpreted with caution. See slide 143 for more information.

Workforce

- Patients' experiences of staff during labour and birth are generally positive. However, the 2013 CQC Maternity Survey highlighted a number of providers as performing worse than average for both labour and birth and staff during labour and birth.^{1,5}
- Almost half of all midwives reported witnessing potentially harmful errors in 2014, compared to 36% for nurses and 28% for all NHS staff². This appears at odds with rates of safety incident reporting.
- Fewer midwives were satisfied with the quality of their work compared to the overall NHS workforce.^{2,5}
- Midwives are slightly more likely to feel pressured at work than other NHS staff, with almost half reporting having suffered from work-related stress.²
- Midwives feel slightly more supported by their managers than in previous years². However, more trainee obstetricians report feeling unsupported in the workplace compared with other clinicians³.
- Marked variation is present in providers' actual-to-planned midwifery staffing ratios. There may be differences in safe staffing levels or in the effective planning of safe staffing levels.⁴

¹Source: CQC Maternity Survey 2013. See slides 144-147 for more information.

²Source: Royal College of Midwives NHS Staff Survey 2014 responses from midwives. See slides 115-118 for more information.

³Source: General Medical Council (2014) National Training Survey: Bullying and Harassment. See slides 119-120 for more information.

⁴Source: NHS England Safe Staffing. See slides 125-129 for more information.

⁵These findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. This should be taken into consideration. See slide 143 for more information.

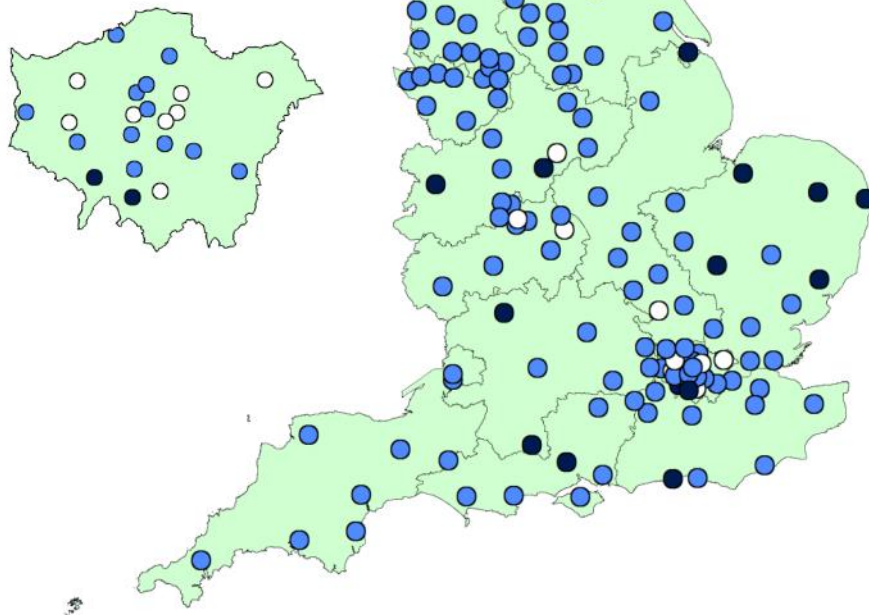
There is some variation in trusts' maternity survey scores for patients' experience of staff, with 12 out of 137 trusts having scores significantly lower than the national average

Geographic variation in maternity survey scores for section regarding staff

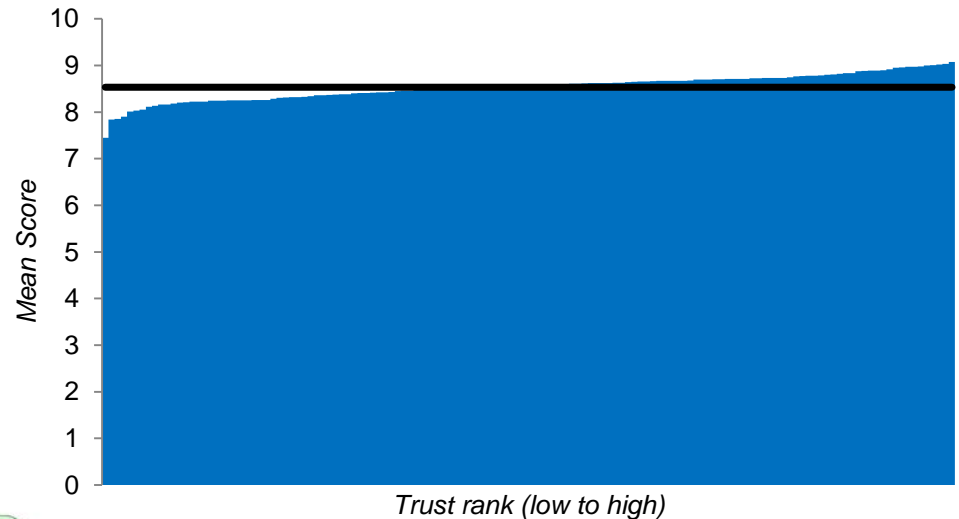
Staff
2013

- Better than national average
- About the same as national average
- Worse than national average

London



Trust level variation in maternity survey score for staff



Above: Composite scores for maternity survey questions around patient experience of staff show only small variation from 7.4 out of 10 to 9.0 out of 10.

Left: There is no obvious geographical pattern to trust performance for this indicator. (White spots on the map indicate locations of providers who are performing significantly worse from the national average for patient experience of labour and birth. Those performing significantly better are highlighted by dark blue spots.)

The variance in trust scores for women's overall experience of staff during labour and birth explains 41% of the variance in scores for women's experience of labour and birth.

Overall experience of labour and birth against overall experience of staff

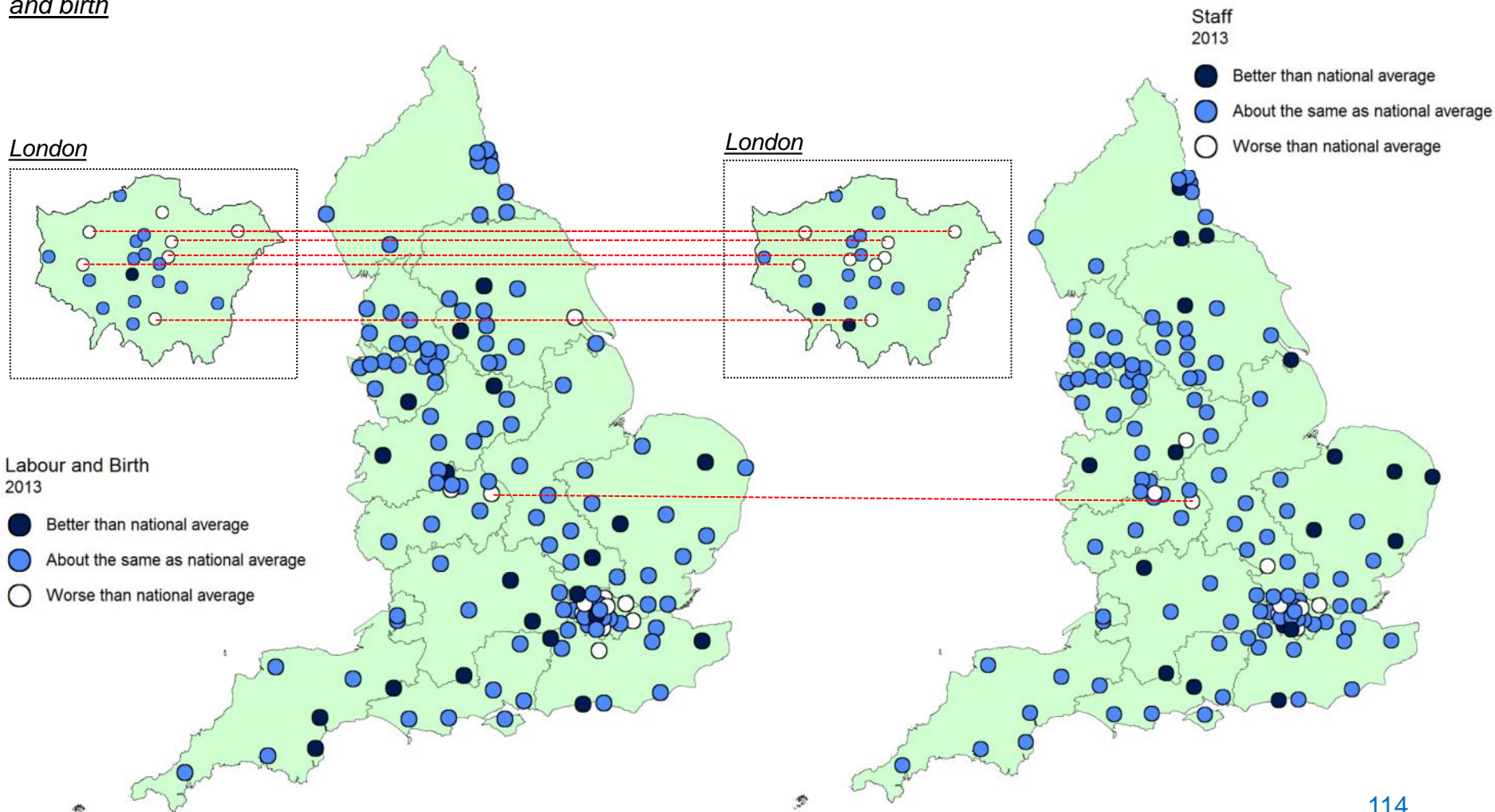


Further variables correlated from the the CQC maternity survey are included in Annex B

Comparing maps showing outliers for patient experience of labour and birth and experience of staff during labour and birth shows several trusts performing worse than average for both indicators, with these heavily concentrated in London

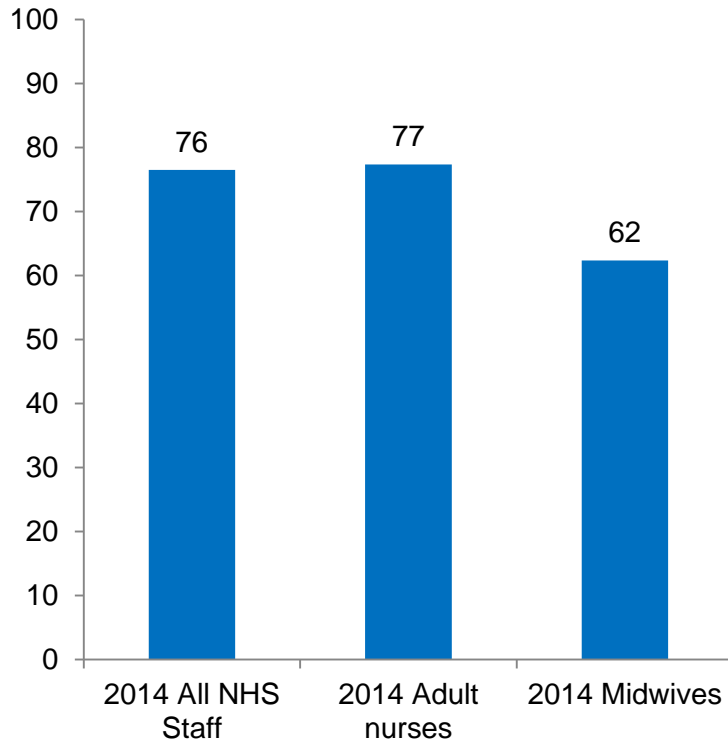
Geographic variation in maternity survey scores for labour and birth

Geographic variation in maternity survey scores for staff



In 2014, as in the previous three years, fewer midwives were satisfied with the quality of work and care they deliver to patients compared to nurses and NHS staff overall

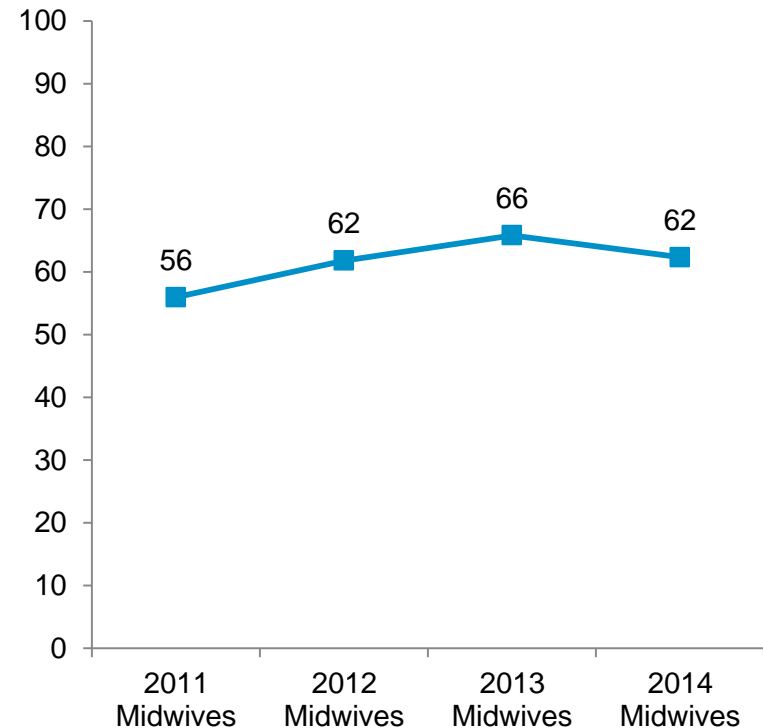
Proportion of staff who were satisfied with their quality of work, by specialty, and all staff, 2014



Percentage of staff feeling satisfied with the quality of work and patient care they are able to deliver
(Left: Comparison to all staff and adult nurses, Right National time series)

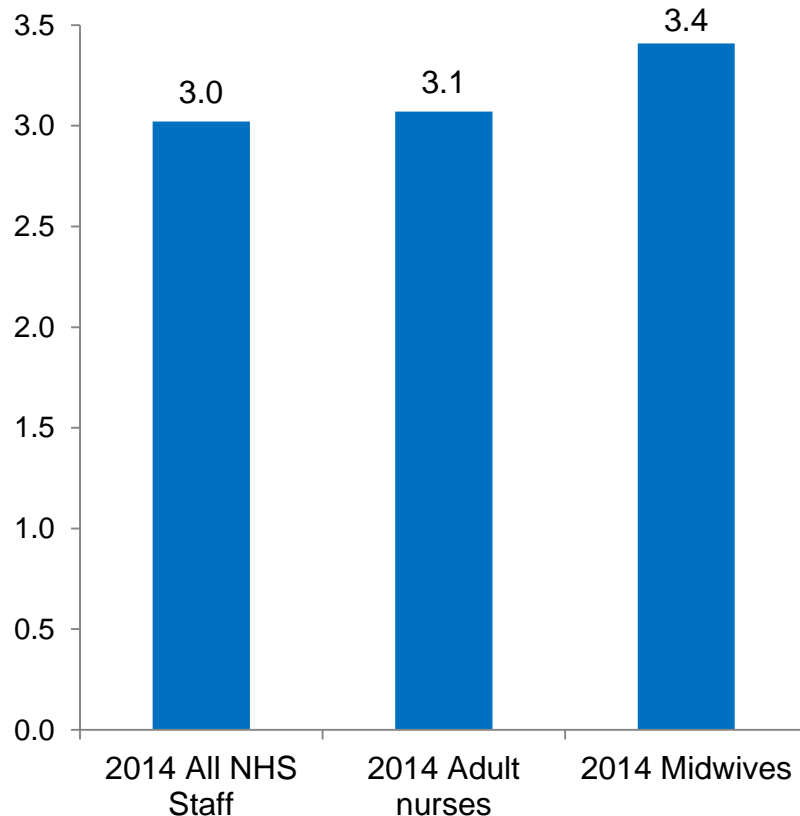
The proportion of midwives feeling satisfied with the quality of their work dropped in 2014, but is the same as 2012 and much higher than 2011

Proportion of midwives who were satisfied with the quality of their work, 2011-2014



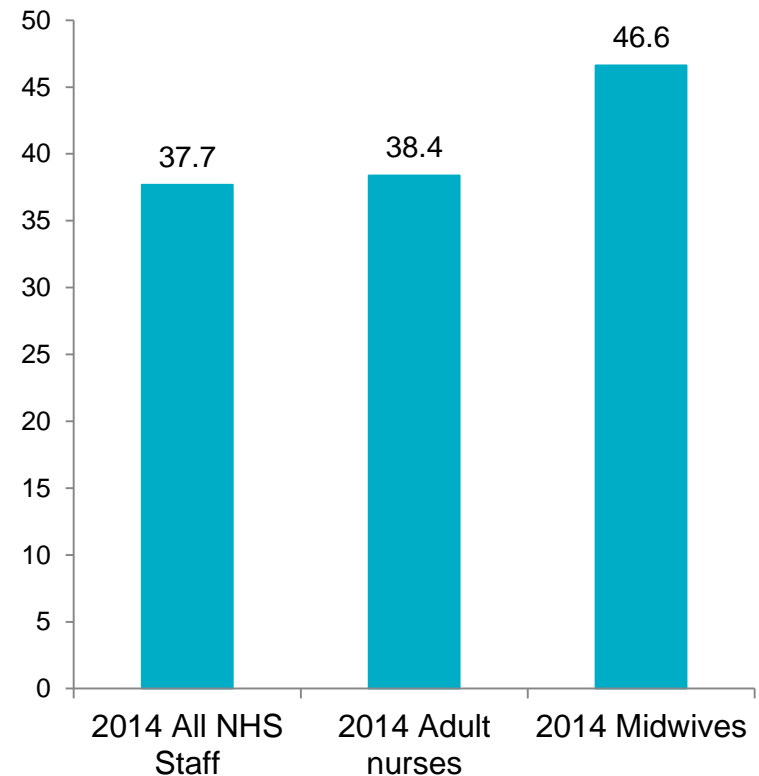
Midwives and all NHS staff are experiencing less workplace pressure than three years ago. However, midwives in 2014 are more likely to feel pressured at work compared to their NHS colleagues

Work pressure felt by staff (a lower score out of five is better)



Almost half of midwives reported suffering from work-related stress in the last 12 months. The figure for all NHS staff is 38%

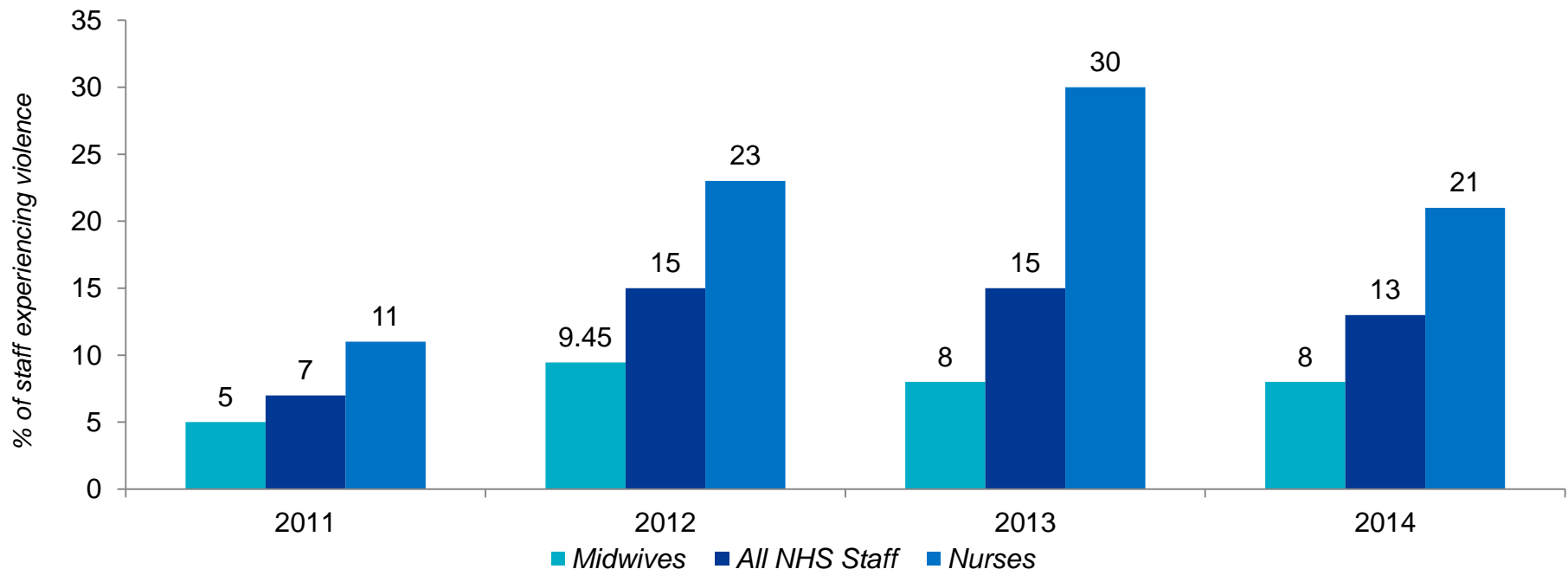
Percentage of staff suffering work related stress in last 12 months.



The proportion of staff experiencing violence from service users or the public remained stable at 8% from 2013 to 2014

The proportion of NHS staff who have suffered physical violence from patients, relatives or members of the public has slightly decreased from 15% in 2013 to 13% in 2014. There was no change to the figure for midwives.¹

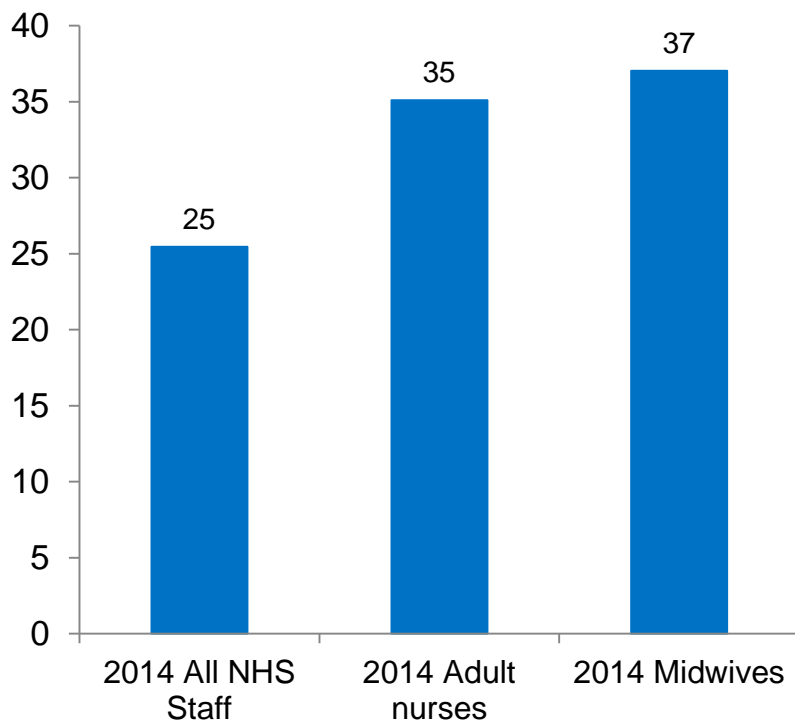
The proportion of NHS staff who have suffered physical violence from patients, relatives or members of the public, 2011-2014



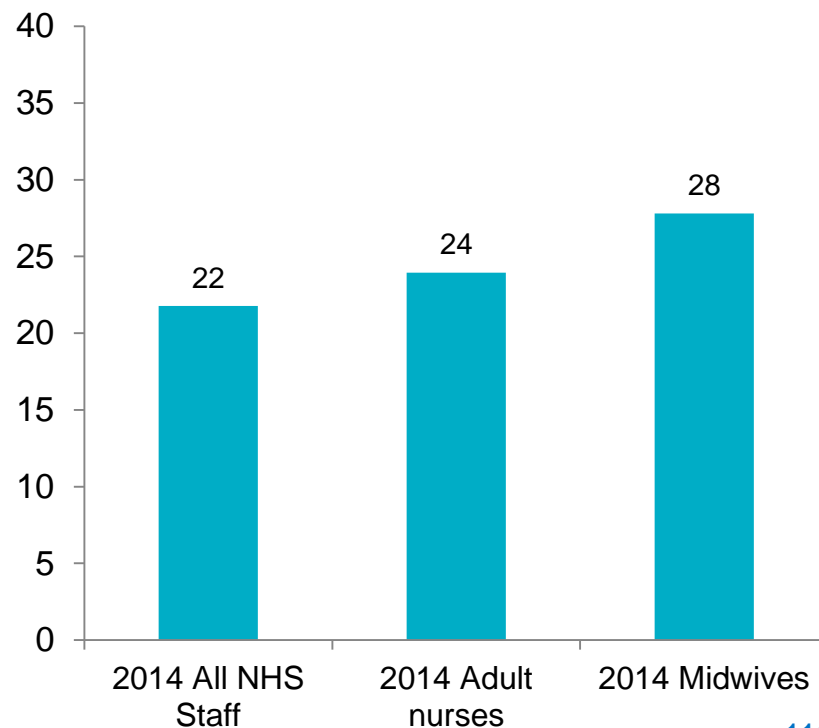
A quarter of NHS staff experienced bullying, abuse or harassment from patients or the public last year, and 35% of nurses. For midwives, this figure was 37%, but thankfully this is a reduction from 2013 and 2012.¹

'While violence from other NHS staff members is much rarer than that from the public, the levels of harassment or bullying from staff towards their colleagues is sadly almost as common. 28% of midwives last year were harassed or bullied by their colleagues, higher than experienced by all NHS staff (22%) and nurses (24%).'¹

% of staff experiencing harassment, bullying or abuse from patients, relatives or the public in the last 12 months



% of staff experiencing harassment, bullying or abuse from staff in last 12 months



The GMC 2014 National Training Survey results showed that Obstetrics and Gynaecology performed the worst out of all programme groups for the Undermining and Supportive Environment questions.

GMC National Training Survey scores, 'undermining' indicator, by programme group, 2014

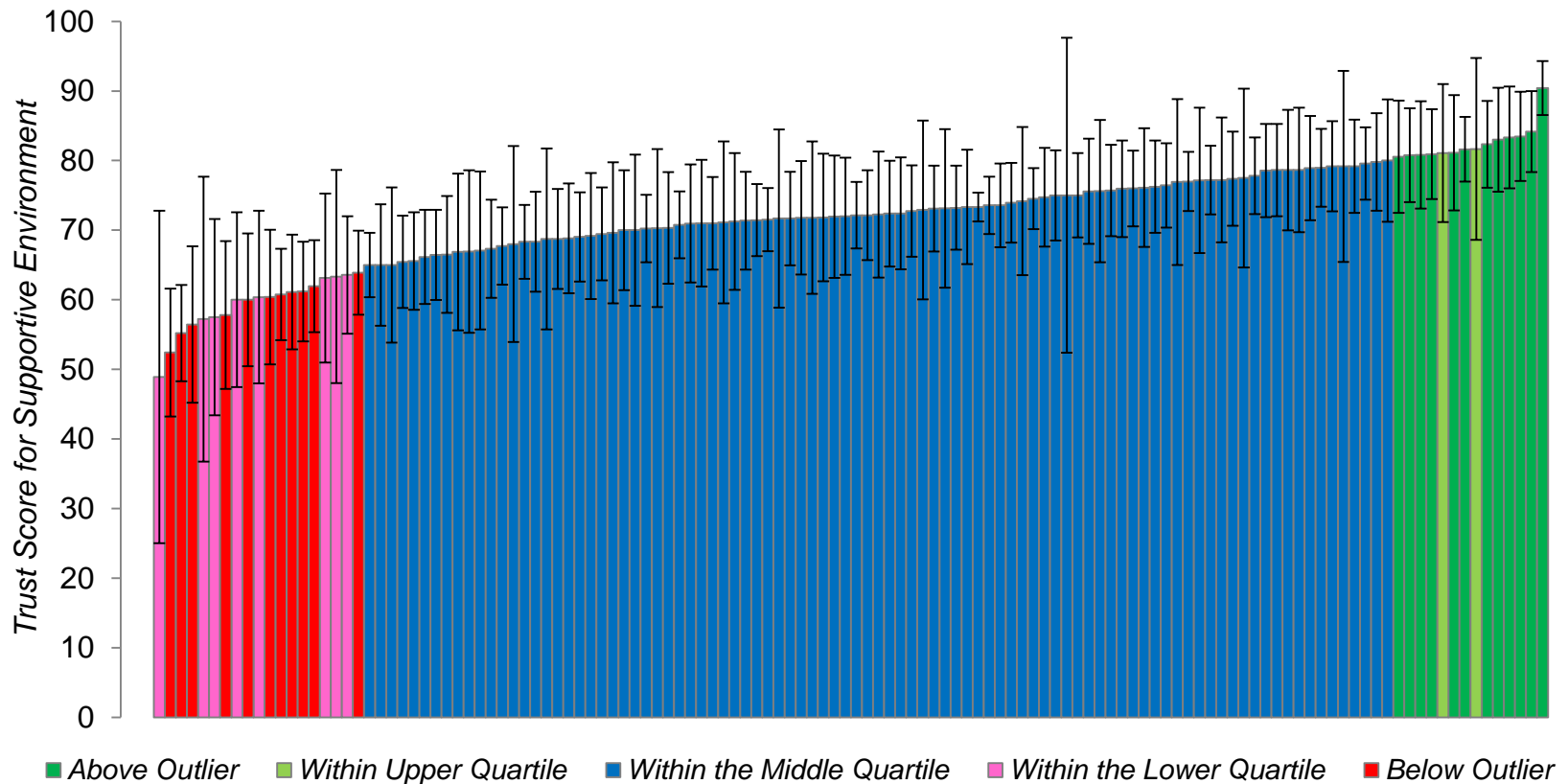
Undermining Indicator (2014)		
Programme Group	Score	n
Public Health	98.0	164
Psychiatry	98.0	2474
Occupational Medicine	97.9	53
GP	97.8	9270
Radiology	97.2	1318
Ophthalmology	97.1	542
Broad based training	96.7	38
Pathology	96.5	608
Paediatrics and child care	96.4	2872
Anaesthetics	96.3	3376
Surgery	96.2	4504
Medicine	96.1	7313
Acute care common stem	95.6	1263
Foundation	95.0	14455
Emergency Medicine	94.9	429
Obstetrics and gynaecology	91.5	1642

GMC National Training Survey scores, 'supportive environment' indicator, by programme group, 2014

Supportive Environment Indicator (2014)		
Programme Group	Score	n
Broad based training	82.9	38
Public health	81.5	167
Anaesthetics	78.4	3489
GP	78.3	9590
Psychiatry	77.7	2577
Occupational medicine	77.6	58
Radiology	77.5	1396
Acute care common stem	76.3	1311
Ophthalmology	75.8	575
Pathology	75.7	667
Paediatrics and child care	75.5	3003
Surgery	74.7	4777
Emergency medicine	74.2	450
Foundation	73.8	14983
Medicine	73.6	7727
Obstetrics and gynaecology	71.2	1780

The GMC Trainee Doctor Survey showed significant variation in trust scores for 'Supportive Environment' based on trainees within the Obs and Gynae specialty. There are 11 trusts negative outliers (red), and 12 positive outliers (bold green).

National training survey 2015: trust scores and outliers for the supportive environment category for trainees with an obstetrics and gynecology specialty¹



¹Scores were calculated as an aggregate score out of 100 based on whether respondents agreed (or strongly agreed etc.) with the following statements: 'In general, the working environment is a supportive one'; 'staff, including doctors in training, are treated fairly'; 'staff, including doctors in training, treat each other with respect'; 'the working environment is one which helps build the confidence of doctors in training'; 'if I were to disagree with senior colleagues, they would be open to my opinion. Caution is required over the data as some trusts had 5-10 respondents while others had 30+ respondents. The Supportive Environment replaces the previous Bullying and Harassment Indicator seen in 2014

Hours of work and pressure to attend

‘89% of midwives worked extra hours in 2014, compared to only 81% of nurses and 72% of NHS workers’.¹

‘Almost a third of midwives said they'd felt pressure to attend work when they were feeling unwell in the last three months (while for NHS staff altogether it was less than a quarter). However, the 2014 figure for midwives is less than that recorded in the last three years’.¹

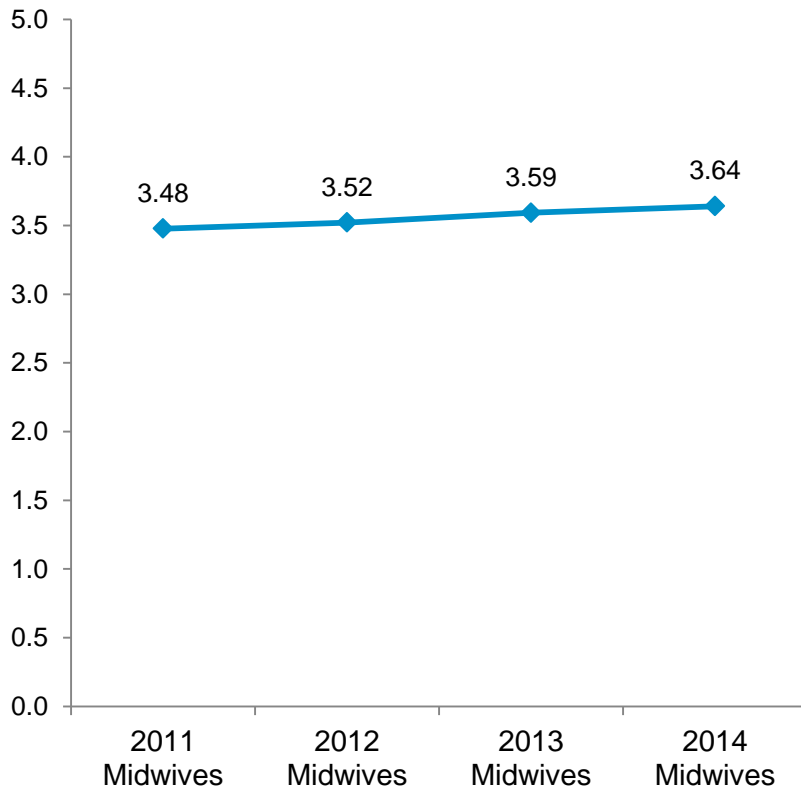
¹Source: Royal College of Midwives analysis of NHS Staff Survey 2014 responses from midwives.

‘Despite initiatives around whistleblowing, there has been little change in recent years amongst midwives and NHS staff in believing that reporting procedures are fair and consistent.’¹

A new question was added in 2014 under the theme of 'raising concerns'. 70% of NHS staff said they would feel secure when raising concerns about unsafe clinical practice; the figure was 77% for midwives and the same for nurses.’¹

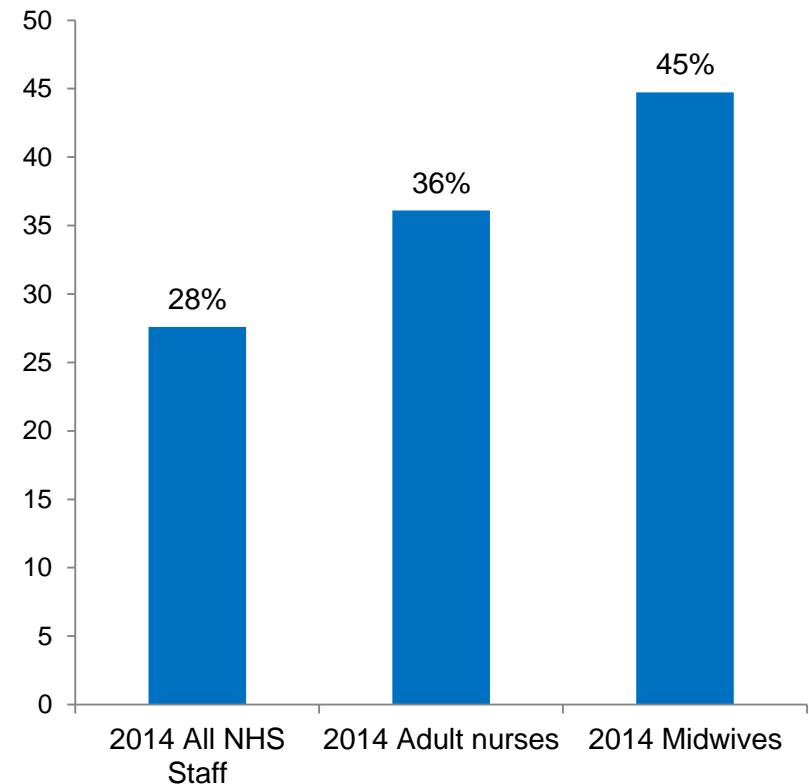
Midwives are feeling slightly more supported by their managers than in previous years. Midwives are also slightly more likely to feel supported than other NHS workers

Support from immediate managers (scored out of five)



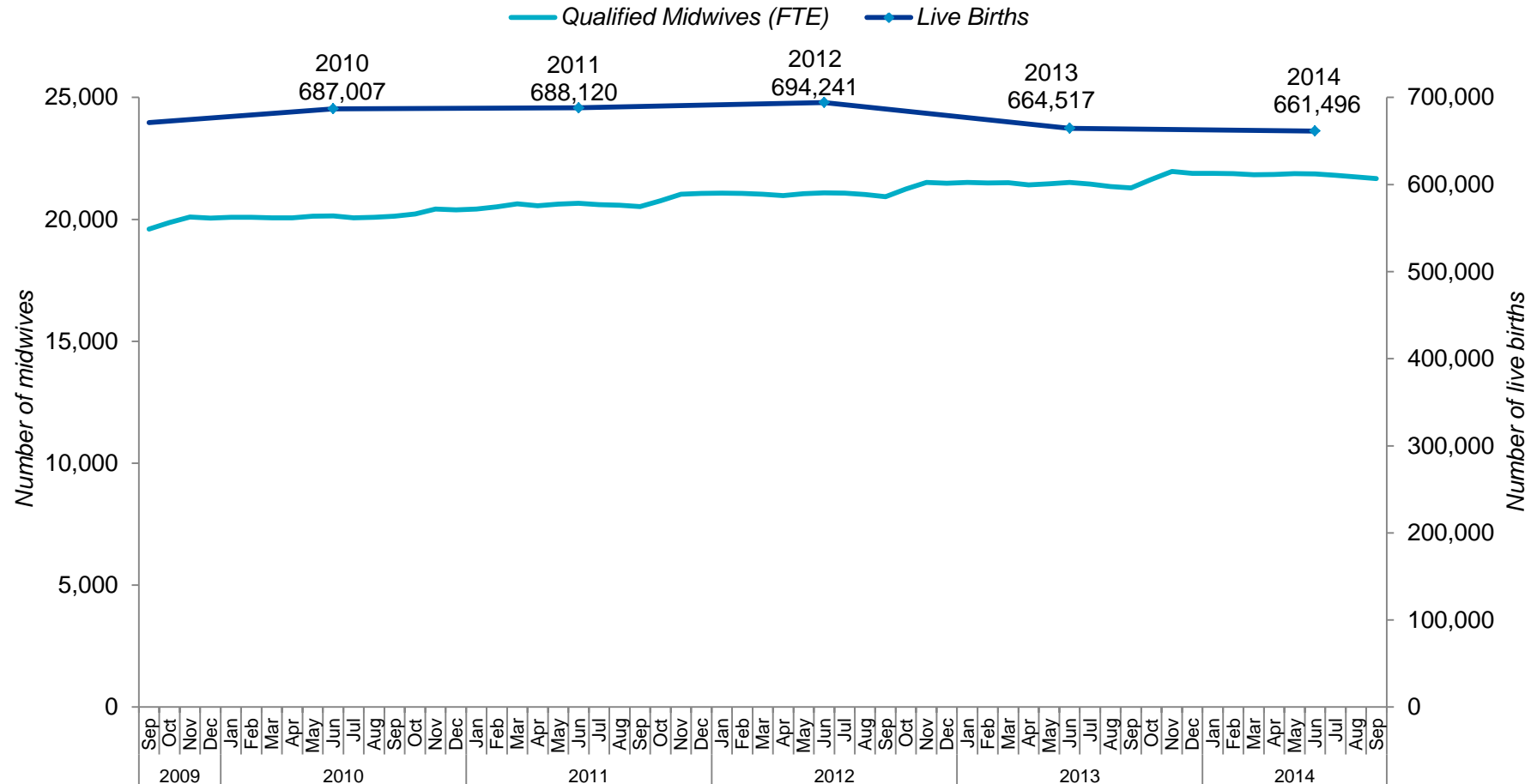
Almost half of midwives had witnessed potential harmful errors in 2014, while the figure for nurses was 36% and for all NHS staff was only 28%

Percentage of staff witnessing potentially harmful errors, near misses or incidents in last month



There has been a gradual but small increase in the number of qualified midwives year on year, whilst the number of births¹ has plateaued and then fallen slightly in recent years

Number of qualified midwives (FTE) and number of live births, 2009-2014



¹Births are for England only.

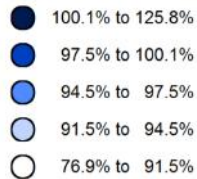
Ratios of actual to planned staff hours for midwives and nurses¹ are around 95% to 96% nationally. There is notable variation at Trust level suggesting either variation in safe staffing levels or variation in effective planning of staffing levels

Below right: At a national level, day and night nurse/midwife fill rates are around 95% to 96%. However, day rates (right) vary from 76% to 126% at Trust level suggesting either variation in safe staffing levels or variation in effective planning of staffing.

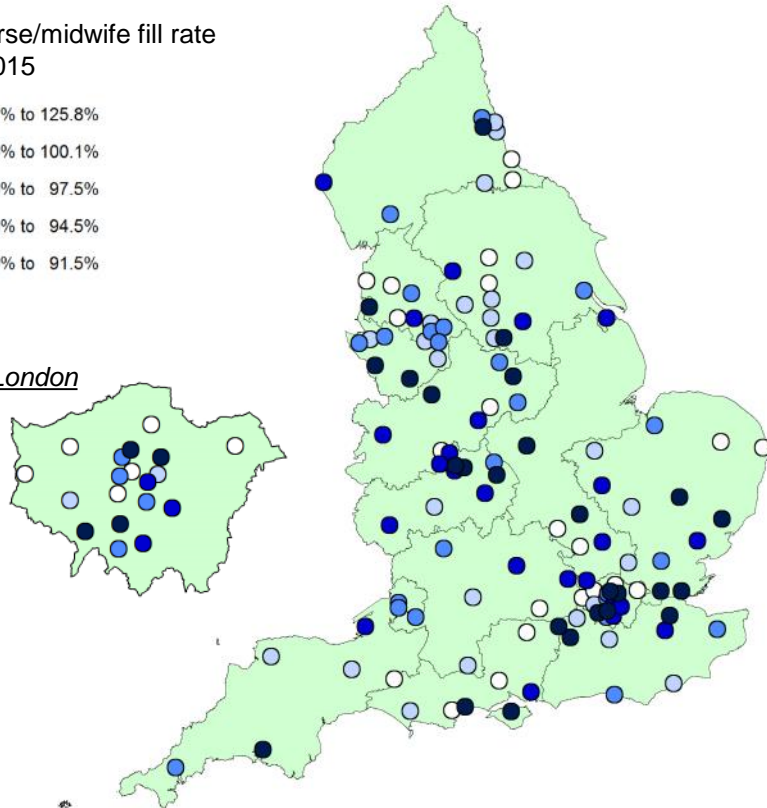
Below: There is no clear geographical pattern in fill rates across Trusts.

Geographical variation in day nurse/midwife fill rates

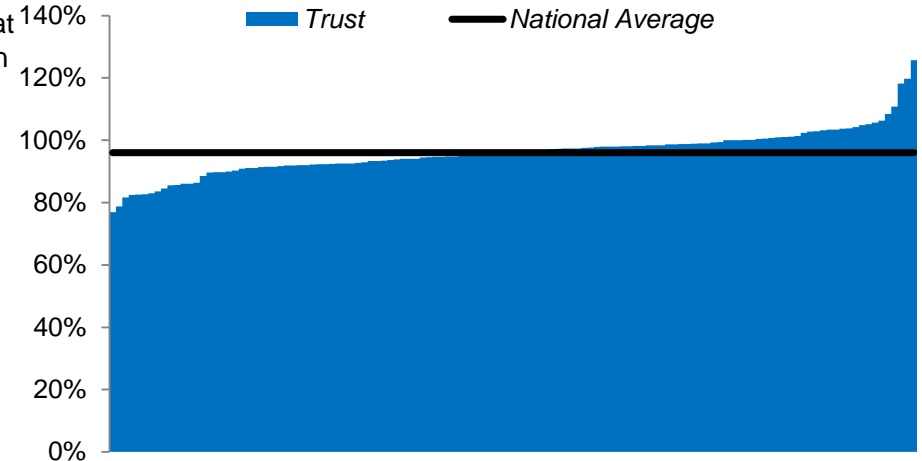
Day nurse/midwife fill rate
June 2015



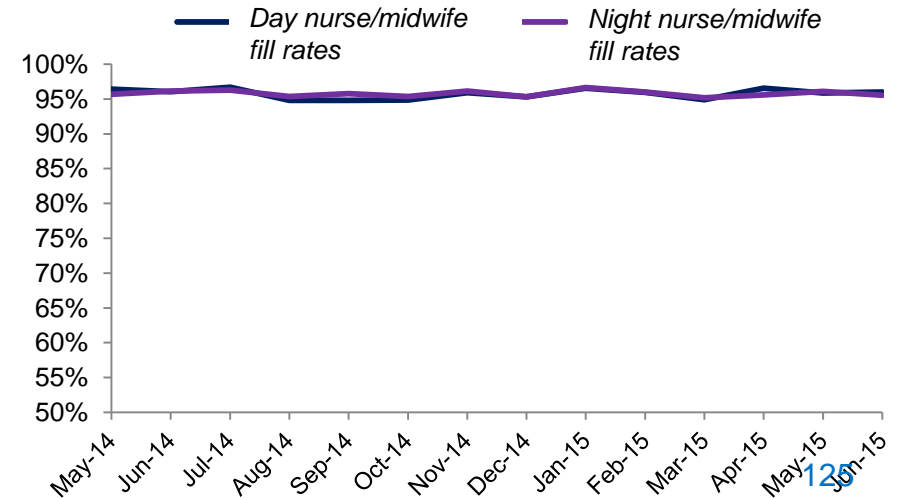
London



Trust level variation for day nurse/midwife fill rates in obstetric units



National trend in nurse/midwife fill rates for obstetric units

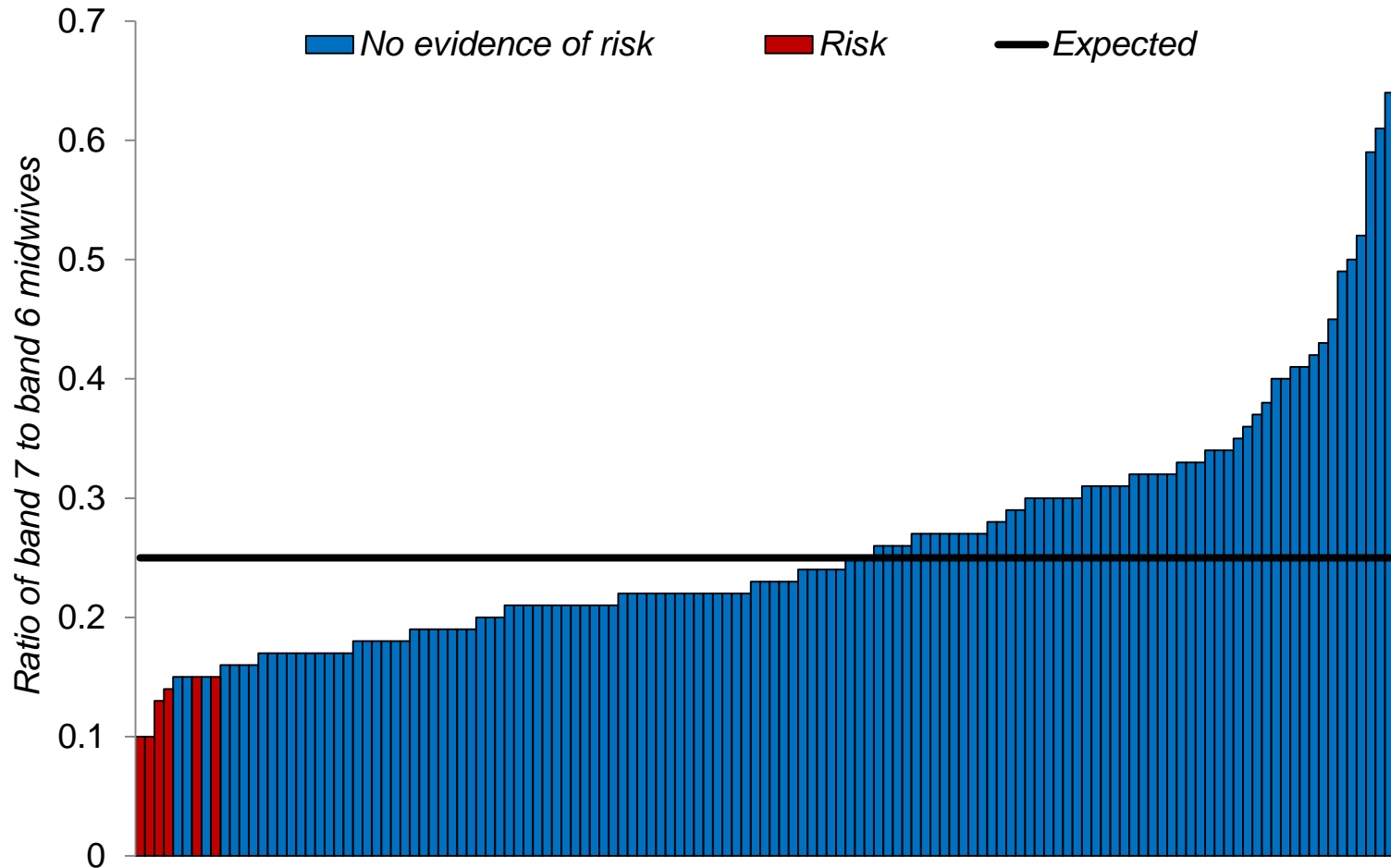


Source: NHS England Safe Staffing 2015

¹It is not possible to separate midwives and nursing staff in obstetric units within the NHS England Safe Staffing Data collection.

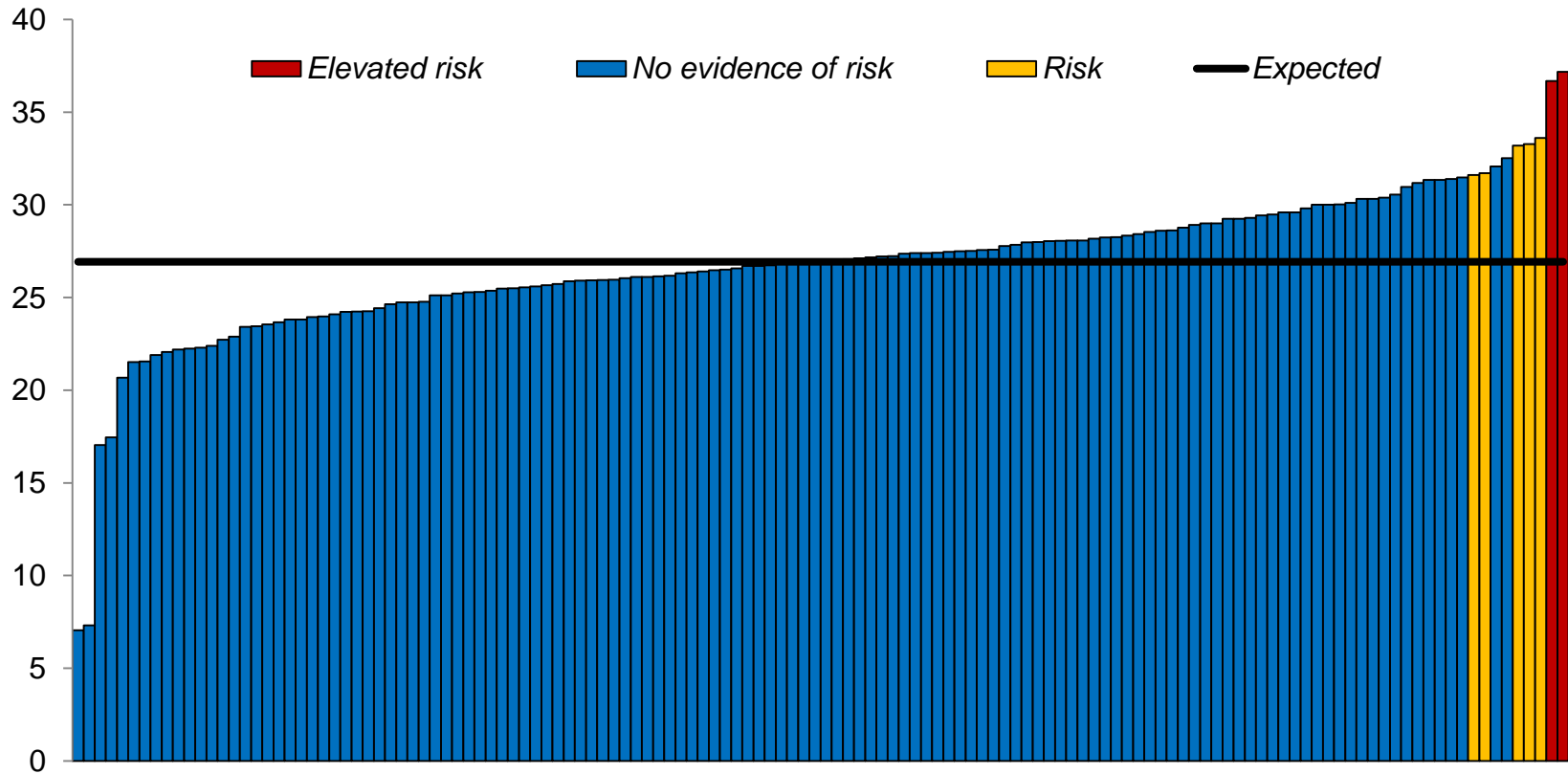
CQC Intelligent Monitoring flags six trusts as a risk for having a low ratio of band 7 to band 6 midwives

Trust level variation in the ratio of band 7 to band 6 midwives



CQC Intelligent Monitoring of the ratio of all births to midwifery staff for 2014 flagged five providers as a risk and two providers as an elevated risk

Trust level variation chart for births to midwife ratio¹



¹The crude ratio does not account for differences in clinical risk factors and patient characteristics.

Consultant ward presence

The NAO's 2013 report on Maternity Services in England found that:

- 'The chance of injury to the baby varied from 1 in 68 on weekdays to 1 in 60 at weekends'.¹
- By September 2012, 73% of obstetric units provided 60 hours or more of consultant presence per week, compared with just 8% of units in March 2007. However, more than half of the units were not meeting the levels of consultant presence recommended by RCOG.
- 'Where the demand for maternity services might outstrip capacity, some trusts were restricting access through pre-emptive caps on numbers or reactive short-term closures in order to safeguard the quality and safety of care...The main reason for closing was a lack of either physical capacity or midwives'.²
- 28% of units reported that they closed for half a day or more between April and September 2012. Of these units, 11% had been closed for the equivalent of a fortnight or more.
- 'Caps and closures are designed to manage demand and safeguard the quality and safety of care. However, they limit choice and also indicate a service that can, at times, be overstretched.'

¹These differences remain after adjusting for maternal characteristics and the type of cases.

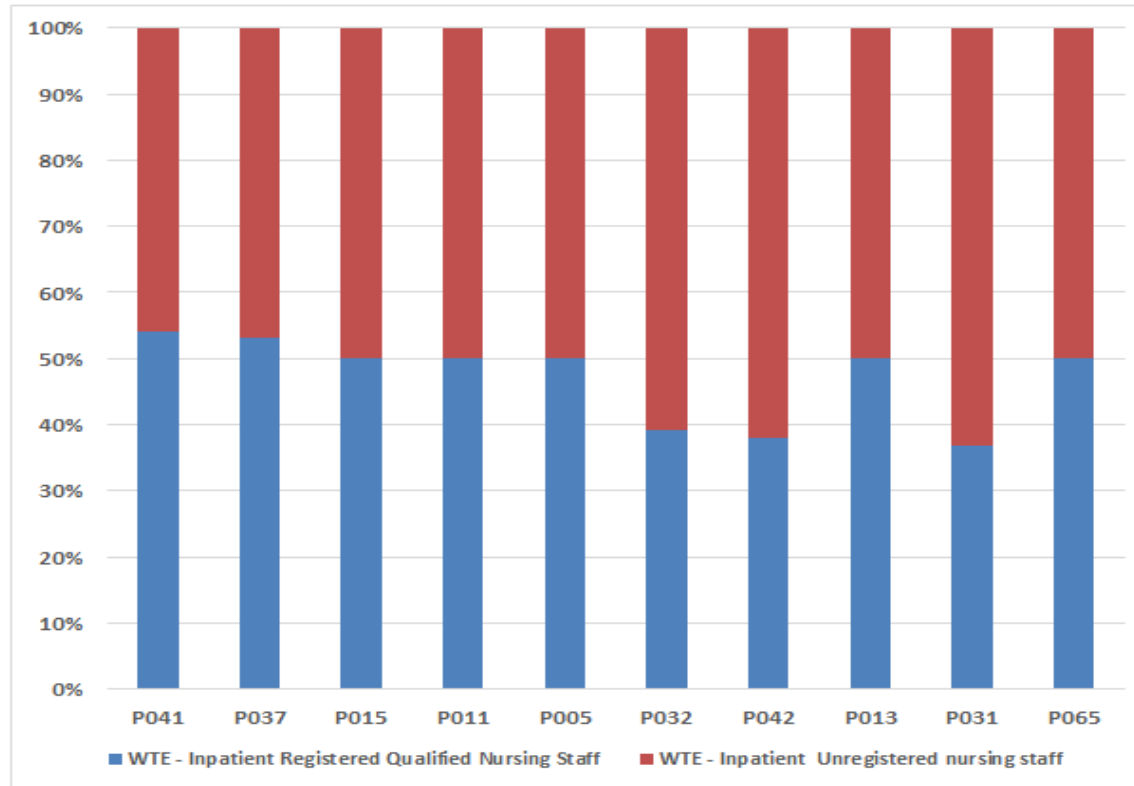
²Closure does not mean that a woman who needs urgent care is turned away but that, where appropriate, women are moved to an alternative maternity unit within the same trust or to another provider within the locality.

Source: Comptroller and Auditor General, Maternity Services in England, Session 2013-14 HC 794, National Audit Office November 2013.

Many nurses working in inpatient MBUs are unregistered¹

Unit variation in the proportion of registered qualified and non-registered nursing staff, by staff grade.

Inpatient Nursing Staff Ratios



The Cavendish Review (2013, p.5) states that 1.3 million frontline staff across the NHS are not registered nurses 'but now deliver the bulk of hands-on care in hospitals, care homes and homes of individuals'. The report recommends more co-ordinated (common) nursing training across the NHS, linked to appropriate training certificates (Certificates of Care).²

¹Source: Graph taken from the NHS Benchmarking Network's Perinatal Mental Health Toolkit (2015)

²Source: [The Cavendish Review](#)

Annex A - Additional information on data sources

MBRRACE-UK: Perinatal Surveillance Report

Background

The report represents the first UK perinatal surveillance report produced under the support of the Maternal, Newborn and Infant Clinical Outcome Review Programme (MNI-CORP). The report has been produced by MBRRACE-UK – a collaboration led from the National Perinatal Epidemiology Unit at the University of Oxford with members from the University of Leicester, University of Liverpool, University of Birmingham, University College London, a general practitioner from Oxford, and Sands, the stillbirth and neonatal death charity.¹

The report focuses on:

“The surveillance of all late fetal losses (22+0 to 23+6 weeks gestational age), stillbirths and neonatal deaths.”¹

MBRRACE-UK: Perinatal Surveillance Report

Data methodology and caveats¹:

The Cause of Death and Associated Conditions death classification system was used as it provided a greater understanding of the factors associated with antepartum stillbirths and sufficient detail about the cause of death to allow the effect of serious congenital anomalies to be identified and excluded where appropriate. This system had not been used in previous surveillance reports.

Inclusion criteria included all late fetal losses as well as neonatal deaths at 22+0 to 22+3 weeks gestational age. Such losses are not recorded part of the statutory 'death certification' process, however there is evidence these babies contribute significantly to local variation in mortality rates.

Data within the report is shown both as crude mortality rates as well as after 'stabilisation and adjustment', which takes into account the effects of chance variation and allows for key factors known to increase the risk of perinatal mortality in order to identify those organisations that have mortality rates above or below a particular benchmark. Babies born at less than 24+0 weeks gestation have been excluded.

Data were based on the mother's address at the time the death occurred. Data were adjusted for socio-demographic factors, sex and multiplicity (and gestational age for neonatal rates only).

CQC Inspections – Background

CQC's inspectors use professional judgement, supported by objective measures and evidence, to assess services against their five key questions:

Are they safe?

Are they effective?

Are they caring?

Are they responsive to people's needs?

Are they well-led?

CQC's inspection teams are formed from a national team of clinical and other experts, including people with experience of receiving care. In-depth inspections are carried out in the evenings and at weekends when people can experience poorer care.

To direct the focus of their inspection, CQC inspection teams use a standard set of key lines of enquiry (KLOEs) that directly relate to the questions above.

CQC Maternity outlier alerts

CQC use statistical analysis of the most recent health and social care information to identify unexpected performance (outliers) that may be linked to problems with the quality of care.¹

CQC use five outlier alerts directly relating to maternity services in its Intelligent Monitoring of providers, each of which are measured on a three year rolling aggregate basis:

- Elective Caesarean sections
- Emergency Caesarean sections
- Puerperal sepsis and other puerperal infections within 42 days of delivery
- Maternal non-elective readmissions within 42 days of delivery
- Neonatal non-elective readmissions within 28 days of delivery

For each indicator, providers are classified either as ‘no evidence of risk’, ‘risk’ or ‘elevated risk’

¹Following the identification of outliers, other existing information is assessed to establish whether there is a likely explanation that is not due to the quality of care; and what questions should be raised with the organisation if a decision is made to contact them.

A panel of experts decide whether to follow up a case with the organisation, and how it will be followed up. The panel then assess the organisation's response to the alert, and decides whether the trust has provided sufficient evidence that either:

- the outlier was not related to the quality of care
- the concerns are no longer current, or
- they have issued a suitable improvement plan (around half of all cases)

CQC provider level outlier alerts for indicators of reporting culture

CQC also use several trust level outlier alert indicators relating to reporting of patient safety indicators that may provide some insight into the reporting culture within the provider:

- Potential under-reporting of patient safety incidents resulting in death or severe harm;
- Potential under-reporting of patient safety incidents;
- Consistency of reporting to the National Reporting and Learning System (NRLS);
- Composite of Central Alerting System (CAS): Dealing with (CAS) safety alerts in a timely way.

The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013¹

Set up in January 2006 to assess the consistency of care across neonatal units across England.

Addresses ten questions and collects data on every baby admitted to a neonatal unit (NNU).

Includes data from all 179 English and Welsh neonatal units (NNU) open in 2013.

Four questions were chosen as performance indicators based on

- Their relationship with the quality of care;
 - The frequency of events occurring being able to provide sufficient statistical power.
1. Do all babies of less than or equal to 28+6 weeks gestation have their temperature taken within an hour after birth?
 2. Are all babies with a gestational age at birth <32+0 weeks or <1501g at birth undergoing first Retinopathy of Prematurity (ROP) screening in accordance with the current national guideline recommendations?
 3. What proportion of babies of <33+0 weeks gestation at birth are receiving any of their mother's milk when discharged from a neonatal unit?
 4. Is there a documented consultation with parents by a senior member of the neonatal team within 24 hours of admission?

The Royal College of Paediatrics and Child Health National Neonatal Audit Programme 2013 – Technical and methodological details

All data for the Royal College of Paediatrics and Child Health National Neonatal Audit Programme (NNAP) audit is drawn from the National Neonatal Research Database (NNRD). This was developed, and is managed and hosted by, the Neonatal Data Analysis Unit (NDAU). NDAU carries out analysis for the NNAP and a wide range of other analyses relating to perinatal services.¹

Targets were set based on external sources i.e. national guidelines from professional bodies. In the absence of national standards, the NNAP board set sensible and achievable standards for analysis.

Three aspects of data quality were considered:

- Case ascertainment;
- Data completeness;
- Data accuracy.

Case-mix (risk) adjustment:

- Adjustments were carried out to take differences between patient groups into account using existing statistical models at the Neonatal Data Analysis Unit (NDAU), specific to the selected indicator and clinical context.

No case-mix adjustment was conducted for the following indicators because all eligible babies should have these procedures performed:

- Temperature being taken within the first hour;
- First consultation with parents;
- Screening for ROP.

¹NDAU carries out analysis for the NNAP together with direct analyses, for example the national review of mortality of preterm babies admitted to neonatal care. NDAU also undertake analyses for other organisations, for example in relation to the admissions of full term babies for NHS England.

See: [NNAP](#) and [NDAU](#) websites for more information

National Reporting and Learning System

The National Reporting and Learning System (NRLS) captures all patient safety incidents, defined as:

‘Any unintended or unexpected incident that could have led or did lead to harm for one or more patients receiving NHS-funded healthcare.’

When reporting patient safety incidents to the NRLS the actual (not potential) level of harm caused must be reported.

The Strategic Executive Information System (STEIS) captures all Serious Incidents. Serious Incidents (as defined in the Serious Incident Framework) can include but are not limited to patient safety incidents. Whilst almost all patient safety incidents that have been reported to the NRLS with correct use of the NRLS categories for death or severe harm would be likely to meet the definition within the Serious Incident Framework, the Serious Incident definition must be directly applied when considering if reporting via STEIS is required.

Serious Incident Reporting

NHS England published an overarching framework for serious incident reporting from 2015/16 onwards. This replaced the National Reporting and Learning Framework for Incidents Requiring Investigation, produced by the National Patient Safety Agency in 2010 and NHS England's supplementary 2013 Serious incident reporting framework.

The fundamental principle of serious incident management, which the framework is intended to reinforce, is to learn from incidents to prevent the likelihood of recurrence of harm. Under the new framework all incidents meeting the threshold of a Serious Incident must be investigated and reviewed according to principles set out in the framework.

A single timeframe (60 working days) has been agreed for the completion of investigation reports. This is intended to allow providers and commissioners to monitor progress in a more consistent way; and provide clarity for patients and families in relation to completion dates for investigations.

Whilst it may be appropriate to performance-manage or even regulate organisations on the basis of their responses to serious incidents, it is not appropriate to performance-manage or regulate organisations only on the basis of the number or type of serious incidents that they report. Doing so will only discourage reporting, dis-incentivise information sharing and inhibit learning.

Nor is it appropriate to sanction organisations simply for reporting serious incidents or to set performance targets based on decreasing the number of serious incidents that are reported. Simply counting the number of serious incidents reported by an organisation is not indicative of how safe they are; and should not be used to make isolated judgements about the safety of care.

Differences between Safety Incidents and Serious Incidents

Reporting incidents to STEIS and NRLS:

- STEIS and the NRLS currently serve different purposes, as outlined in the previous slides.
- All Serious Incidents that meet the definition of a patient safety incident should be reported to both STEIS and NRLS; Serious Incidents may be reported when staff or the public, rather than patients, are affected.
- Some incidents may be defined as Serious Incidents, and therefore be reported to STEIS, but have not actually caused serious harm. As a result, a lower level incident would be reported to NRLS. Examples would be Never Events from which the patient made a full recovery (e.g. retained vaginal swab) which would be a Serious Incident, but would be a moderate harm rather than severe harm incident in the NRLS.
- Serious Incidents may also be reported due to potential for serious harm rather than actual harm; the NRLS requires actual harm to be reported.
- STEIS incident categorisation prior to May 2015 was complex and further incident types could be added by local request. Although some incident categories (e.g. stillbirth) could only occur in maternity providers, it was appropriate for maternity services to report Serious Incidents under other incident types (e.g. medication incident) and the complex choice of incident types meant maternity incidents could have been captured in many other incident fields. As a result of this, analysis of STEIS data prior to May 2015 in this slide pack may not fully capture all maternity-related incidents reported.
- STEIS categories were revised via database changes from May 2015 onwards and maternity services can be identified by service type rather than relying on type of incident reported.
- NRLS reporting relies on 'mapping' local incident categories to a national taxonomy. Where particular types of incident do not appear to be reported to the NRLS, this may relate to 'mapping' placing these incidents within a broader category group rather than failure to report such incidents.

Interpretation of STEIS and NRLS data requires some caution due to several factors:

- Both STEIS and NRLS data show only incidents that were reported. This may differ from incidents that actually occurred so the data should not be used as a measure of the safety of maternity services in a trust.
- Where data appears to show potential underreporting of incidents to STEIS and/or NRLS on a monthly basis, this should be treated as a flag for further investigation. There are cases where reporting may be occurring locally but there is a failure to upload information to central systems due to issues with data collection or administrative systems.
- Changes to reporting criteria/categories and inconsistency in reporting thresholds for serious incidents also mean that comparisons over time and between trusts must be made with caution.
- Up to and including April 2015-16, it was only possible to identify serious incidents occurring in maternity services through the 'Incident type field' so incidents not falling into the categories specific to maternity services are not included in figures.
- Developments to safety reporting frameworks and criteria are intended to encourage improvements to reporting and learning culture on the ground.
- Analysis of the data recorded in STEIS and NRLS can be useful as a starting point to identify potentially incorrect reporting practices and trigger further investigation on the ground as to the drivers of low or high numbers of incidents being reported. However, due to the factors described above, analysis of the data alone does not enable definite conclusions to be drawn around either safety, under-reporting or incorrect reporting of incidents at provider level.

NHS Statistical Work Areas Breastfeeding Dataset – caveats

Data regarding known initiated rates of breastfeeding was extracted from the NHS 12 week Maternal Assessment, Breastfeeding Initiation and 6-8 Week Breastfeeding Q4 2014/15 data collection¹.

These statistics are classified as experimental, defined under the UK Code of Practice of official statistics principle 4² as “new official statistics undergoing evaluation”. Figures are concerned with the number mothers known to have initiated breastfeeding within the first few days after birth. The actual number of mothers breastfeeding may be higher, however their breastfeeding status is not known. Given this data should be interpreted with caution.

Data were not standardised to take into account socio-economic factors and data may be influenced by these as a result.

The Infant Feeding Survey 2010 highlighted factors that heavily influenced breastfeeding initiation:

- Whether the mother received support around breastfeeding;
- Ethnicity;
- How the mother was fed herself as a baby;
- Whether skin-to-skin contact was achieved between mother and baby within 24 hours after birth;
- How a mother’s peers fed their babies;
- Awareness of the health benefits of breastfeeding;
- Region;
- Socio-economic classification (NS-SEC);
- Maternal age.

¹See [NHS England Maternity and Breastfeeding Statistics](#) for more information.

²See the [UK Statistics Authority Code of Practice guidance](#) for more information.

Patient Experience – Sources of Evidence

Key messages from the 2013 CQC National Maternity Survey, NPEU's Safely Delivered survey 2014, and the 2013 Support Overdue: Women's Experiences of Maternity Services report by NCT and WI:

The CQC survey included over 23,000 service users who had given birth during January to March 2013 and had a response rate of 46%. Questions in the survey covered seven parts of the maternity pathway including antenatal check-ups, labour and birth, staff and care at home after birth.

The NPEU survey was carried out using a random sample of 10,000 women giving birth in England over a two week period selected from birth registration records. The response rate was 47%, with usable responses from 4571 women. Key findings covered maternity care from pregnancy through to postnatal care and the early months at home.

The NCT and WI Support Overdue report was based on a sample of 5,500 NCT members who had given birth over five years up to 2012, with three quarters of these being in 2012. 90% of responses were from first time mothers and one third of responses were from the London region. The questions focused on the relationships respondents were able to build with their midwives, the types of extra support they would have wanted and when they would have wanted it.

Findings are reflective of respondent's own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway (e.g. what constitutes one-to-one midwifery care or a 'named' midwife). As a result, survey findings may not always wholly reflect all participants opinions and will only reflect the experiences of the survey's population. Due to this results should be interpreted with caution.

CQC Maternity Survey 2013 – Technical Details and Methodology

- For different parts of the maternity pathway (i.e. antenatal, labour and birth, postnatal etc.), the CQC have given each trust an aggregated score out of 10 based on several pooled questions in the survey. They then give trusts a banding of 'worse than national average', 'better than national average' or 'about the same as national average'. Questions themselves are reflective of respondents' own interpretations of their experiences of the maternity pathway. Respondents may have naturally differing opinions regarding elements of the pathway (e.g. what constitutes one-to-one midwifery care). This should be considered when interpreting the survey data.
- Scores and bandings have been standardised to reflect geographic variation in age and parity of women across trusts (CQC note how younger women tend to respond more critically, while parity will affect experience and needs).
- This means that the thresholds (i.e. upper and lower limits) for 'worse'/'better' than or 'same as' the national average are unique for each trust. That is, the CQC have adjusted their trust scores and bandings based on what might be expected given local population characteristics and after statistical weighting has been applied from the standardisation process. The banding methodology (which involves the calculation of z-scores, standardisation, standard errors etc.) is not therefore based on a fixed, absolute national average for each question (although that is involved in the calculation), but on expected scores given local and national population characteristics and the spread of the data.
- There are different levels of national coverage for each theme in the survey due to the range of responses and variability in data quality. For ante and post-natal care questions, some trusts have been assigned 'no data', which in most cases is due to the fact that the trust could not verify whether the women surveyed are referring to the same trust across the questions (for instance some women may have received their antenatal care in a different provider or trust than where they gave birth).
- What is considered 'national average', or 'better' or 'worse' than 'national average' therefore should be treated with caution – and perhaps better read as performing 'better than/worse than' or 'same as' expected, given local and national estimates.

CQC Maternity Survey 2013 Questions

ANTENATAL

Were you offered any of the following choices about where to have your baby?

Did you get enough information from either a midwife or doctor to help you decide where to have your baby?

During your pregnancy were you given a choice about where your antenatal check-ups would take place?

During your antenatal check-ups, were you given enough time to ask questions or discuss your pregnancy?

During your antenatal check-ups, did the midwives listen to you?

During your pregnancy, did you have a telephone number for a midwife or midwifery team that you could contact?

If you contacted a midwife, were you given the help you needed?

Thinking about your antenatal care, were you spoken to in a way you could understand?

Thinking about your antenatal care, were you involved enough in decisions about your care?

LABOUR AND BIRTH

At the very start of your labour, did you feel that you were given appropriate advice and support when you contacted a midwife or the hospital?

During your labour, were you able to move around and choose the position that made you most comfortable?

Did you have skin to skin contact (*baby naked, directly on your chest or tummy*) with your baby shortly after the birth?

If your partner or someone else close to you was involved in your care during labour and birth, were they able to be involved as much as they wanted?

CQC Maternity Survey 2013 Questions

THE STAFF CARING FOR YOU

Did the staff treating and examining you introduce themselves?

Were you (and/or your partner or a companion) left alone by midwives or doctors at a time when it worried you?

If you raised a concern during labour and birth, did you feel that it was taken seriously?

If you used the call button how long did it usually take before you got the help you needed?

Thinking about your care during labour and birth, were you spoken to in a way you could understand?

Thinking about your care during labour and birth, were you involved enough in decisions about your care?

Thinking about your care during labour and birth, were you treated with respect and dignity?

Did you have confidence and trust in the staff caring for you during your labour and birth?

FEEDING YOUR BABY

During your pregnancy did midwives provide relevant information about feeding your baby?

Were your decisions about how you wanted to feed your baby respected by midwives?

Did you feel that midwives and other health professionals gave you consistent advice about feeding your baby?

Did you feel that midwives and other health professionals gave you active support and encouragement about feeding your baby?

CQC Maternity Survey 2013 Questions

POSTNATAL

Care in hospital after the birth (postnatal care)

Looking back, do you feel that the length of your stay in hospital after the birth was...

Thinking about the care you received in hospital after the birth of your baby, were you given the information or explanations you needed?

Thinking about the care you received in hospital after the birth of your baby, were you treated with kindness and understanding?

Thinking about your stay in hospital, how clean was the hospital room or ward you were in?

Thinking about your stay in hospital, how clean were the toilets and bathrooms you used?

CARE AT HOME AFTER THE BIRTH

When you were at home after the birth of your baby, did you have a telephone number for a midwife or midwifery team that you could contact?

If you contacted a midwife were you given the help you needed?

Would you have liked to have seen a midwife...

Did the midwife or midwives that you saw appear to be aware of the medical history of you and your baby?

Did you feel that the midwife or midwives that you saw always listened to you?

Did the midwife or midwives that you saw take your personal circumstances into account when giving you advice?

Did you have confidence and trust in the midwives you saw after going home?

Did a midwife tell you that you would need to arrange a postnatal check-up of your own health with your GP? (Around 4-8 weeks after the birth)

Did a midwife or health visitor ask you how you were feeling emotionally?

Were you given enough information about your own recovery after the birth?

In the six weeks after the birth of your baby did you receive help and advice from a midwife or health visitor about feeding your baby?

In the six weeks after the birth of your baby did you receive help and advice from health professionals about your baby's health and progress?

Were you given enough information about any emotional changes you might experience after the birth?

Were you given information or offered advice

HSCIC Hospital Episode Statistics (HES)¹

HES is:

- A data warehouse containing details of all admissions, outpatient appointments and A&E attendances at NHS hospitals in England.
- This data is collected during a patient's time in hospital and is submitted to allow hospitals to be paid for the care they deliver. HES data is designed to enable secondary use, that is use for non-clinical purposes, of this administrative data.
- It is a records-based system that covers all NHS trusts in England, including acute hospitals, primary care trusts and mental health trusts. HES information is stored as a large collection of separate records - one for each period of care - in a secure data warehouse.
- Strict statistical disclosure controls are applied in accordance with the HES protocol to all published HES data. This suppresses small numbers to stop people identifying themselves and others to ensure that patient confidentiality is maintained.

As over 96% of all births occur in NHS facilities, HES data provides the ability to:

- Monitor trends and patterns in NHS hospital activity;
- Assess effective delivery of care;
- Provide the basis for national indicators of clinical quality;
- Reveal health trends over time.

Potential data quality and comparability issues:

- HES data were found to lack information regarding the status of over 10% of births. This may introduce discrepancies between, and hinder comparability with, other sources of information. Also, interpretations of HES definitions may differ between locations. This should be considered when making comparisons and conclusions around the quality of maternity services and care.

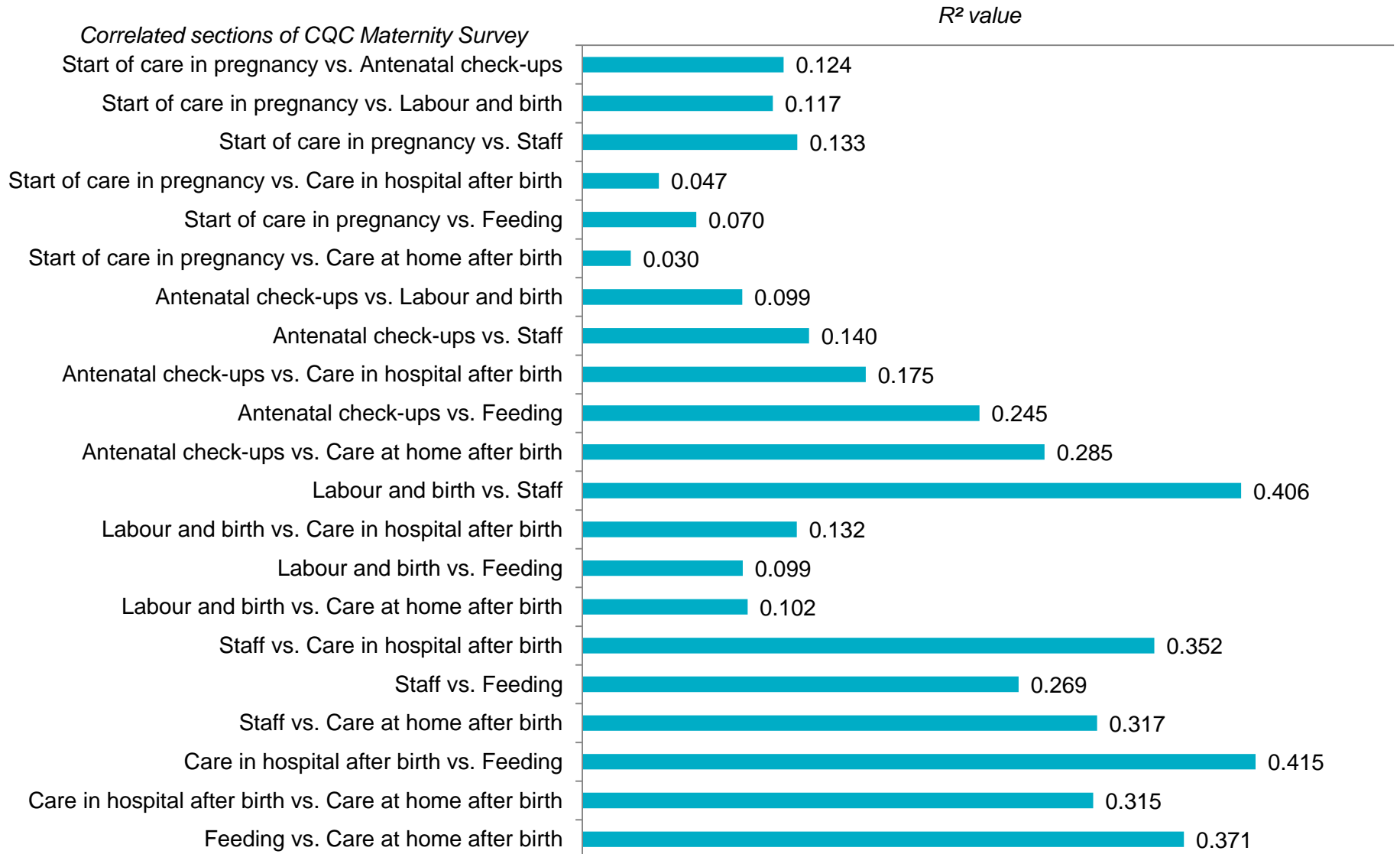
NHS Litigation Authority maternity claims

Ten Years of Maternity Claims: An Analysis of NHS Litigation Authority Data 2012 report:

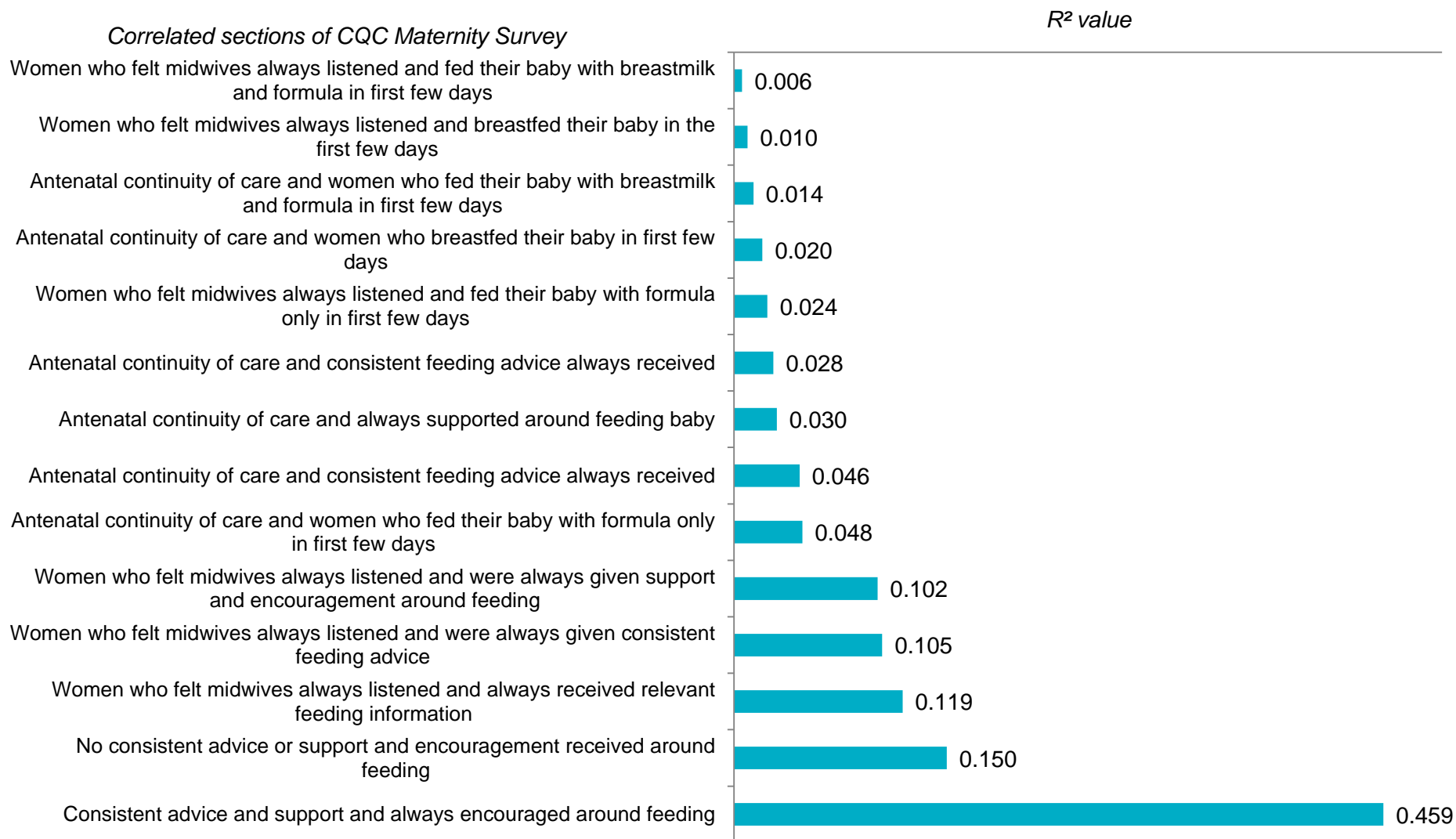
NHSLA examined maternity claims between 2000 and 2010 categorised by clinical situation. In a secondary study – they surveyed NHSLA solicitors after examination of claim files in four specific claim areas, including cardiotocograph (CTG) interpretation.

Annex B – Correlation between scores in the CQC Maternity Survey

Correlation between overall sections of CQC Maternity Survey



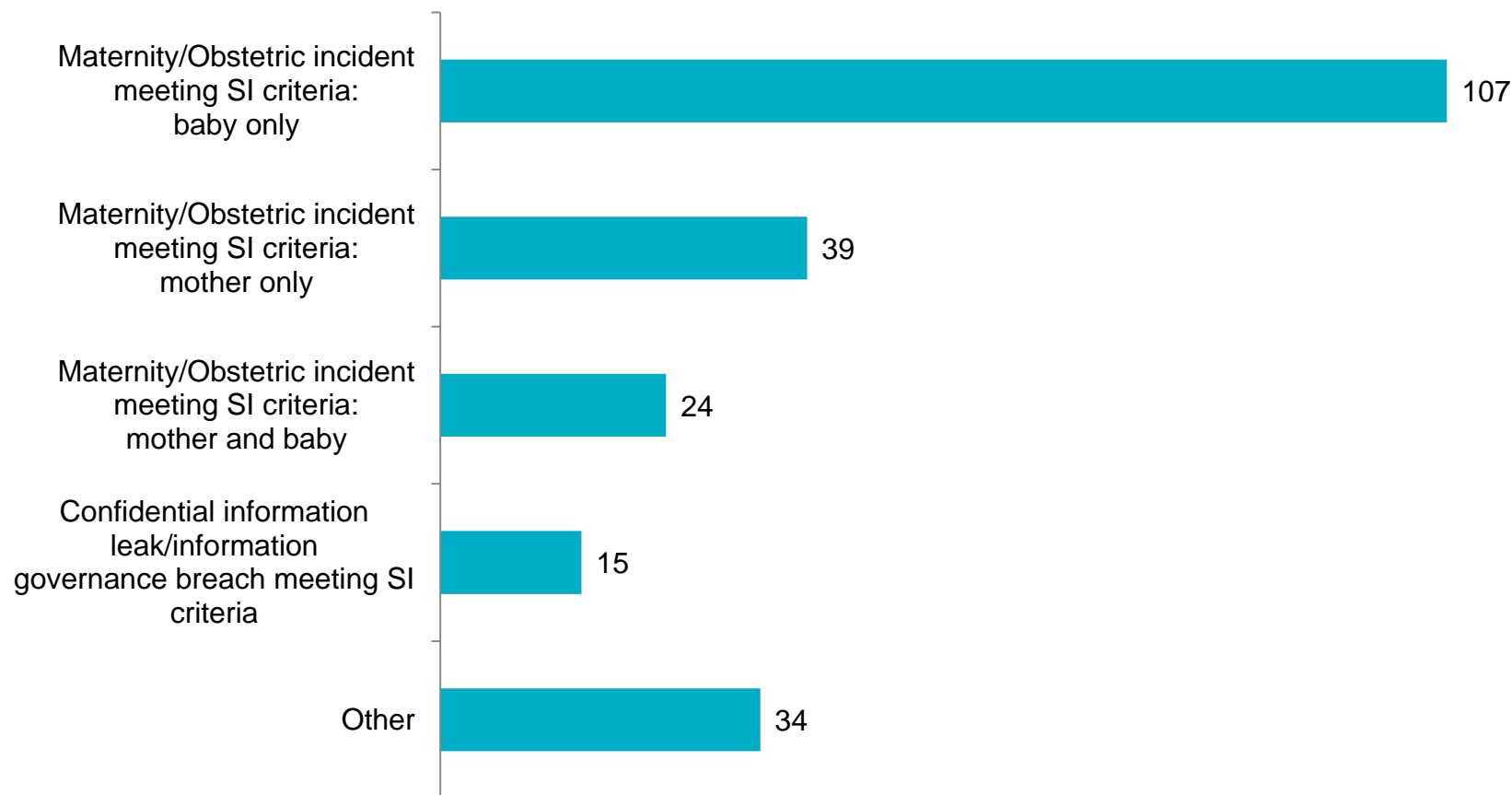
Correlation between experience of the antenatal pathway and postnatal feeding



Annex C – Charts for incident reporting and safety indicators

There were 219 Serious Incidents reported in maternity services in Q2 2015-16, the majority of which related to babies only.

Categorisation of Serious Incidents reported to have been reported in 2015-16 Q2¹⁻²



1. Reporting capabilities may be influenced by factors beyond a unit's control. As a result, incidents reported may differ from incidents occurring. See slides 139-141 for more information.

2. Maternity categories highlighted in blue on slide 155 were aggregated in to the 'Other' category due to small numbers.

Source: Source: NHS England STEIS database - Serious Incidents identifiable as in Maternity Services with a created date between 01 July 2015 and 30 Sep 2015. 154

Changes in maternity Serious Incident categorisation in STEIS from May 2015-16

Before May 2015-16¹:

- Maternity Services - Intrauterine death
- Maternity service
- Maternity Services - Unexpected neonatal death
- Maternity Services - Unexpected admission to NICU (neonatal intensive care unit)
- Maternity Services - Maternal unplanned admission to ITU
- Maternity Services - Intrapartum death
- Maternity Services - Maternal Death
- Maternity Services - Suspension of maternity services
- Maternity/Obstetric incident meeting SI criteria: mother only
- Maternity/Obstetric incident meeting SI criteria: baby only (this include foetus, neonate and infant)
- Maternity/Obstetric incident meeting SI criteria: mother and baby (this include foetus, neonate and infant)

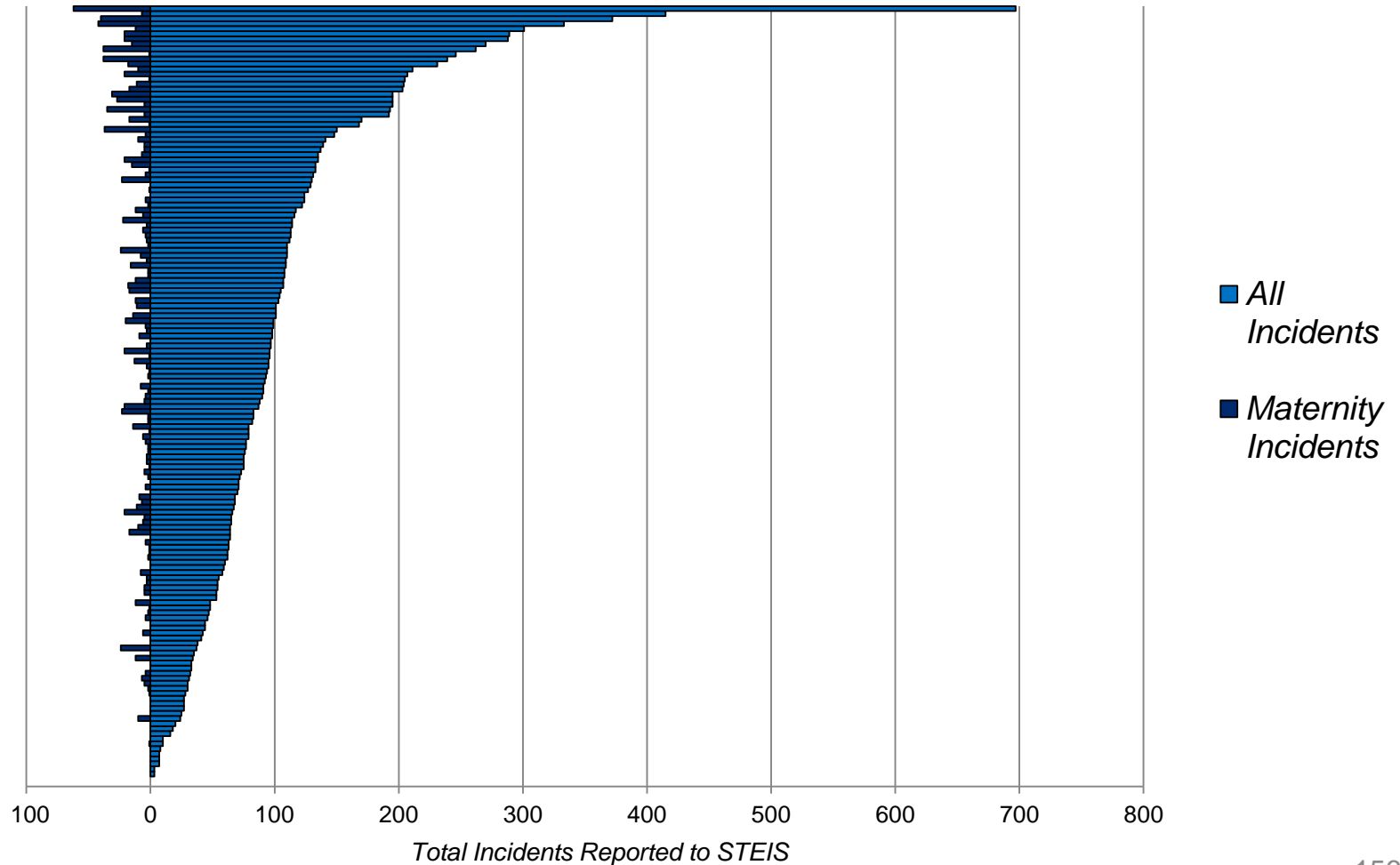
From May 2015-16:

- Adverse media coverage or public concern about the organisation or the wider NHS
- Apparent/actual/suspected homicide meeting SI criteria
- Confidential information leak/information governance breach meeting SI criteria
- Diagnostic incident including delay meeting SI criteria (including failure to act on test results)
- HCAI/Infection control incident meeting SI criteria
- Major incident/ emergency preparedness, resilience and response/ suspension of services
- Maternity/Obstetric incident meeting SI criteria: baby only (this include foetus, neonate and infant)
- Maternity/Obstetric incident meeting SI criteria: mother and baby (this include foetus, neonate and infant)
- Maternity/Obstetric incident meeting SI criteria: mother only
- Medication incident meeting SI criteria
- Pending review (a category must be selected before an incident is closed)
- Pressure ulcer meeting SI criteria
- Screening issues meeting SI criteria
- Slips/trips/falls meeting SI criteria
- Sub-optimal care of the deteriorating patient meeting SI criteria
- Surgical/invasive procedure incident meeting SI criteria
- VTE meeting SI criteria

1. Serious Incidents relating to maternity services may are not fully captured under the categories used up to and including April 2015-16. A change in categorisation was introduced for May 2015-16 onwards to help to address this.

2. Categories in blue were aggregated in to 'Other' category on chart on slide 154.

Trust level relationship between reported Serious Incidents in maternity services and all Serious Incidents being reported (including maternity-related Serious Incidents).

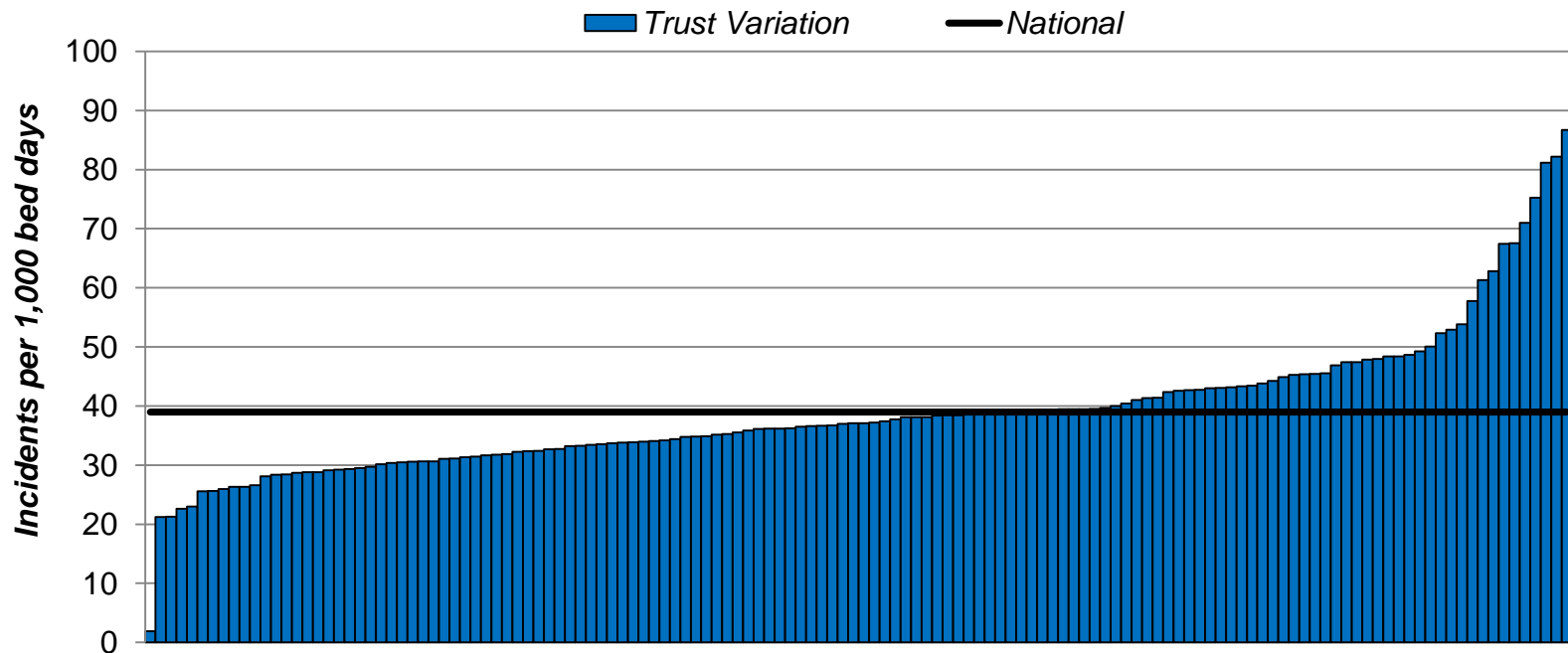


Potential under-reporting of safety incidents at provider level

This indicator reflects incident rate per 1,000 bed days based on a ratio between observed and the national rate, which takes into account national incident rates and trust bed day rates.

A low incident rate may be indicative of under-reporting, where the observed incident level is significantly lower than the national rate.¹

Trust level variation in safety incident reporting, per 1,000 bed days



¹See slide 141 for information on interpreting safety incident data .

Annex D – Appendix - Findings from qualitative work

Findings from qualitative work

To supplement the quantitative analysis, representatives from the Quality Working Group visited a number of maternity units. The purpose of the visits was to meet groups of staff to discuss their experiences and gain greater insight and understanding from the frontline about the qualitative factors that foster a culture of learning and improvement within a maternity service.

Recognising the limited number of visits, discussions with staff nonetheless helped to identify the following themes:

- Women's expectations of birth have changed over time – the services women expect today are different from the past. Reviewing and focusing on women's wants and needs can help to foster strong teamwork, and crucially effective communication, across staff groups.
- Despite variation in terms of size of unit, staff ratios, numbers of births, case-mix between the units visited, in general staff shared their thoughts and insights about the current climate in maternity units and many members of staff spoke of feeling stretched and overworked.
- Key factors that help create a strong learning culture include good communication, strong team working and accessible leadership.
- An open and supportive culture of continual learning can be facilitated by:
 - effective incident reporting;
 - senior staff actively listening to concerns from staff members;
 - effective communication methods that enable all staff to quickly learn from mistakes;
 - visible and accessible senior members of staff;

Findings from qualitative work continued

- provision of continual learning opportunities , e.g. PROMPT training, rotation of staff between different wards to enable skills retention, lunchtime seminars, newsletters, mandatory training, workshops, support and guidance.
 - commitment from senior staff to attend incident reporting/governance meetings.
 - using data from incidents to identify patterns and action to address any emerging issues; and
 - a culture where all staff feel responsibility for learning and improving.
-
- During the occasions where things do go wrong, we heard about the importance of involving women and their families from the beginning in helping to make improvements and better understand what has happened as well as helping to improve the learning for staff in the future.
 - When improvements to local processes are identified, it can be time consuming and difficult to navigate internal committees and processes to secure the necessary approvals to introduce necessary changes.
 - Valuable training sessions require appropriate time and resourcing from staff to design and deliver them. When planned effectively, the insight and learning that is gathered is extremely valuable and can help staff identify potential issues before any problems arise.
 - Staff feel like they spend lots of time completing paperwork but do not feel that they receive feedback on how their unit is performing relative to others. We heard that it is often difficult for units to benchmark their performance, or really understand the significance of what their data is telling them.
 - We were impressed by the enthusiasm, team-working and learning culture that was evident where incident reporting was high, and the commitment to improvement.

Annex E – Update on recent MBRRACE-UK confidential enquiries

Update on recent MBRRACE-UK confidential enquiries

Since the assessment of quality was conducted for the National Review of maternity services, MBRRACE have published two reports based on UK confidential enquiries of Maternal deaths and Still Births:

Confidential Enquiry into Maternal Death 2015

Saving Lives, Improving Mothers' Care - Surveillance of maternal deaths in the UK 2011-13 and lessons learned to inform maternity care from the UK and Ireland
Confidential Enquiries into Maternal Deaths and Morbidity 2009-13

The following slides detail some of the main findings from these enquiries.

MBRRACE-UK confidential enquiry into stillbirths – Key findings

MBRRACE's audit of term, singleton, normally-formed, antepartum stillbirths found that:

- National guidance for screening and monitoring the growth of the baby had not been followed in two thirds of women whose babies were stillborn;
- Two thirds of women with a risk factor for developing diabetes in pregnancy were not offered testing which could have identified the need for treatment;
- Half of all term, singleton, normally-formed antepartum stillbirths had at least one element of care that required improvement and that may have made a difference to the outcome;
- Almost half of the women had concerns over reduced or altered movements by the baby, and in half of these there were missed opportunities that may have saved the baby, such as lack of investigation, misinterpretation of the baby's heart trace or a failure to respond appropriately to other factors;
- Documentation indicating that an internal review had taken place was present in only one quarter of cases following stillbirth, and the quality of these reviews was highly variable.

MBRRACE-UK confidential enquiry into stillbirths

– Key findings (Continued)

The MBRRACE report on term antepartum stillbirths highlights key areas for action, including:

- Obstetric and midwifery care during labour for women following stillbirth should be of the same in quality and content to that of women having a healthy birth.
- All parents of a stillborn baby should be offered a post-mortem. This offer should be clearly documented in the mother's notes.
- All parents should be offered a timely follow-up appointment with a consultant obstetrician to discuss their care, the actual or potential cause, chances of recurrence and plans for any future pregnancy.
- A summary of the follow-up appointment should be written in plain English and sent to the parents and their GP.

MBRRACE-UK Confidential Enquiry into maternal death – Key findings

The MBRRACE Confidential Enquiry into Maternal Death 2015 found that:

- Maternal mortality has declined progressively over time, to a level of nine deaths per 100,000 maternities in the UK in 2011-13. ¹
- This number of deaths is too low for variation between different services to be meaningful, however about half of deaths would have had a different outcome with better care.
- Late maternal mortality in the period 2011-13 was 14 per 100,000 maternities. Notably, 23% of these deaths were from mental health related causes, with one in seven dying through suicide.
- Maternal mortality in the UK has reduced from 14 deaths per 100,000 maternities in 2003/05 to 9 deaths per 100,000 maternities in 2011/13.