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**National Maternity and
Perinatal Audit**



There is substantial variation in maternity care processes and outcomes among maternity care providers: What can midwives do with the evidence from the 2016/17 clinical report from the NMPA?



The NMPA approach

- Audit of all mothers and babies cared for by NHS maternity services (2016/17)
- Extensive use of available sources of routinely collected data and record linkage to minimise burden on maternity services
- Not limited to traditional ‘auditable standards’, of which relatively few exist and are measurable

| NMPA measures for births in 2016/17 [§] | Number of trusts/boards for which the measure can be reported | | |
|--|---|---------------|-------|
| | England | Scotland | Wales |
| Induction of labour | 124/128 | 12/13 | 6/6 |
| SGA babies born at or after 40 weeks | 124/128 | 13/13 | 6/6 |
| Spontaneous vaginal birth | 124/128 | 13/13 | 6/6 |
| Instrumental birth | 124/128 | 13/13 | 6/6 |
| Caesarean birth | 124/128 | 13/13 | 6/6 |
| Birth without intervention - definition 1⁺ | 39/128 | | |
| Birth without intervention - definition 2⁺ | 84/128 | 12/13 | 2/6 |
| VBAC in secundiparous women | 124/128 | 12/13 | 6/6 |
| Smoking cessation | 114/130 | | 6/7 |
| Episiotomy | 123/128 | 13/13 | 5/6 |
| 3rd/4th degree tear* | 123/128 | 12/13 | 4/6 |
| Haemorrhage of 1500ml or more* | 113/128 | ≥500ml online | 6/6 |
| Maternal readmission | 127/128 | 13/13 | 6/6 |
| Skin to skin contact | 93/130 | | |
| Babies receiving breast milk for first feed | 101/130 | 10/14 | |
| Babies receiving breast milk at discharge | 101/130 | 10/14 | |
| Apgar score < 7 at 5 minutes* | 116/128 | 12/13 | 6/6 |
| Neonatal unit admissions | 117/128 | 11/13 | |
| Neonatal mechanical ventilation | 117/128 | 11/13 | |
| Neonatal encephalopathy | 113/128 | 11/13 | |

§) Many measures only include trusts/boards with at least one obstetric unit.

+) Definition 1 includes no augmentation with oxytocin as criterion while definition 2 does not

*) Potential outlier indicator

Data not currently available in format required for NMPA



The image shows a computer monitor displaying a table titled 'NMPA Data Received'. The table has five columns representing different trusts and boards: TRUST A, BOARD B, TRUST C, BOARD D, and TRUST E. There are three rows of data items: DATA ITEM 1, DATA ITEM 2, and DATA ITEM 3. Each cell in the table contains either a green checkmark (✓) indicating successful data receipt or a red question mark (?) indicating missing or poor quality data.

| | TRUST A | BOARD B | TRUST C | BOARD D | TRUST E |
|-------------|---------|---------|---------|---------|---------|
| DATA ITEM 1 | ✓ | ✓ | ? | ✓ | ✓ |
| DATA ITEM 2 | ? | ? | ✓ | ✓ | ? |
| DATA ITEM 3 | ✓ | ✓ | ✓ | ✓ | ✓ |

Data quality has improved but many trusts and boards are still excluded from one or more measures owing to poor data quality and completeness.

Variation in care

There remains variation, beyond that which would be expected due to chance, in the rates of key measures of maternity care...This suggests that there remains variation in clinical practice, decision making and outcomes across England, Scotland and Wales.

NMPA 2019:xviii

Birth without intervention measure

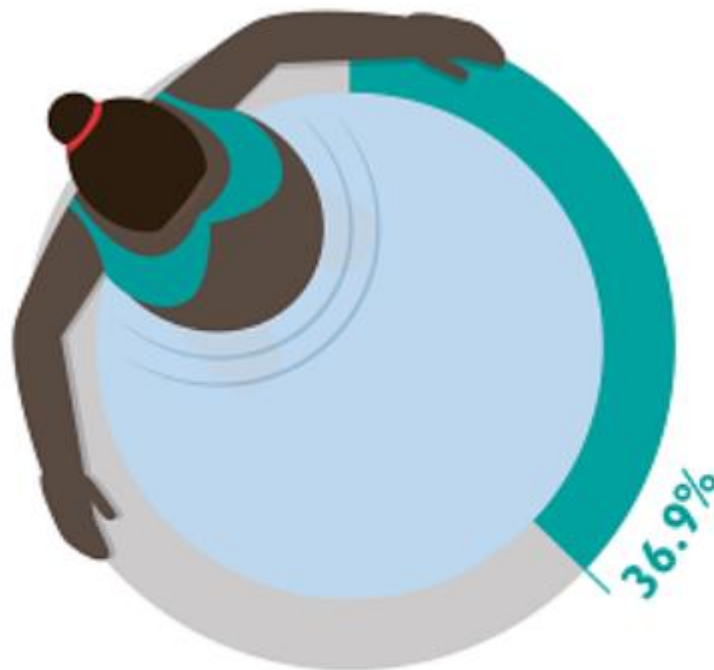
Women who give birth to a singleton baby between 37⁺⁰ and 42⁺⁶ weeks gestation, the proportion whose birth met the following criteria:

1. spontaneous labour onset (no surgical or medical induction)
2. spontaneous progress without oxytocin to augment labour
3. spontaneous vaginal birth
4. no epidural, spinal or general anaesthesia
5. no episiotomy

Findings - data quality

- Data quality & completeness mode of labour onset, mode of birth and episiotomy generally good
- Anaesthesia (England & Wales) and augmentation less so:

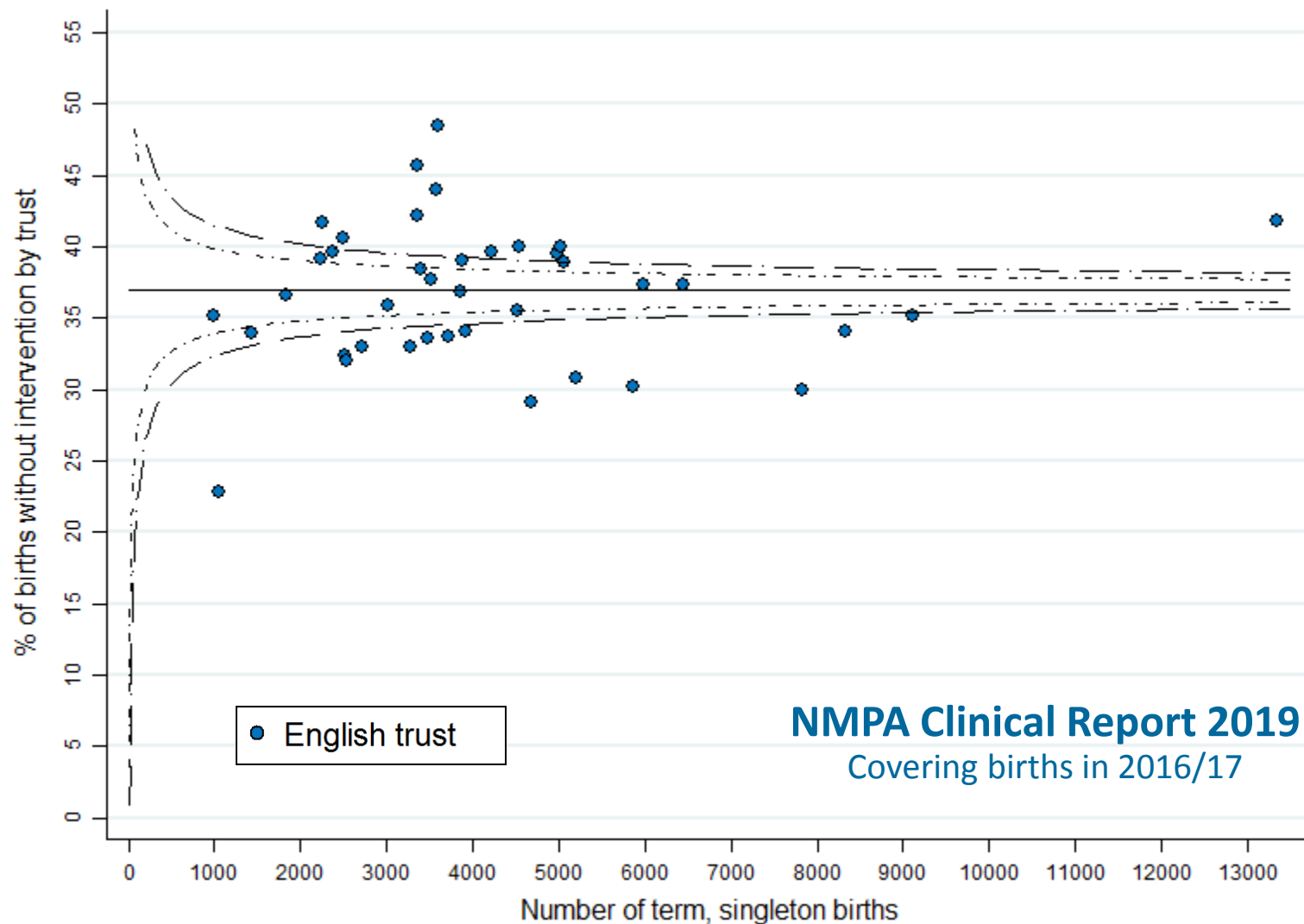
| | England | Scotland | Wales |
|--|---------------|------------------------|---|
| Number and proportion of trusts/boards with at least one obstetric unit, which passed data quality checks for | | | |
| 1. Mode of labour onset | 125/130 (96%) | 12/13 (92%) | 6/6 (100%) |
| 2. Augmentation with oxytocin | 56/130 (43%) | Not in central dataset | Not in central dataset in required format |
| 3. Mode of birth | 129/130 (99%) | 13/13 (100%) | 6/6 (100%) |
| 4. Epidural/spinal/general anaesthesia | 86/130 (66%) | 13/13 (100%) | 2/6 (33%) |
| 5. Episiotomy | 123/130 (95%) | 13/13 (100%) | 5/6 (83%) |
| Number and proportion of trusts/boards with at least one obstetric unit, which could be included in measure | | | |
| Birth without intervention – using criteria 1–5 | 39/130 (30%) | 0/13 (0%) | 0/6 (0%) |
| Birth without intervention – using criteria 1,3,4,5 | 84/130 (65%) | 12/13 (92%) | 2/6 (33%) |



36.9% of women with singleton term pregnancies had a **birth without obstetric intervention**.

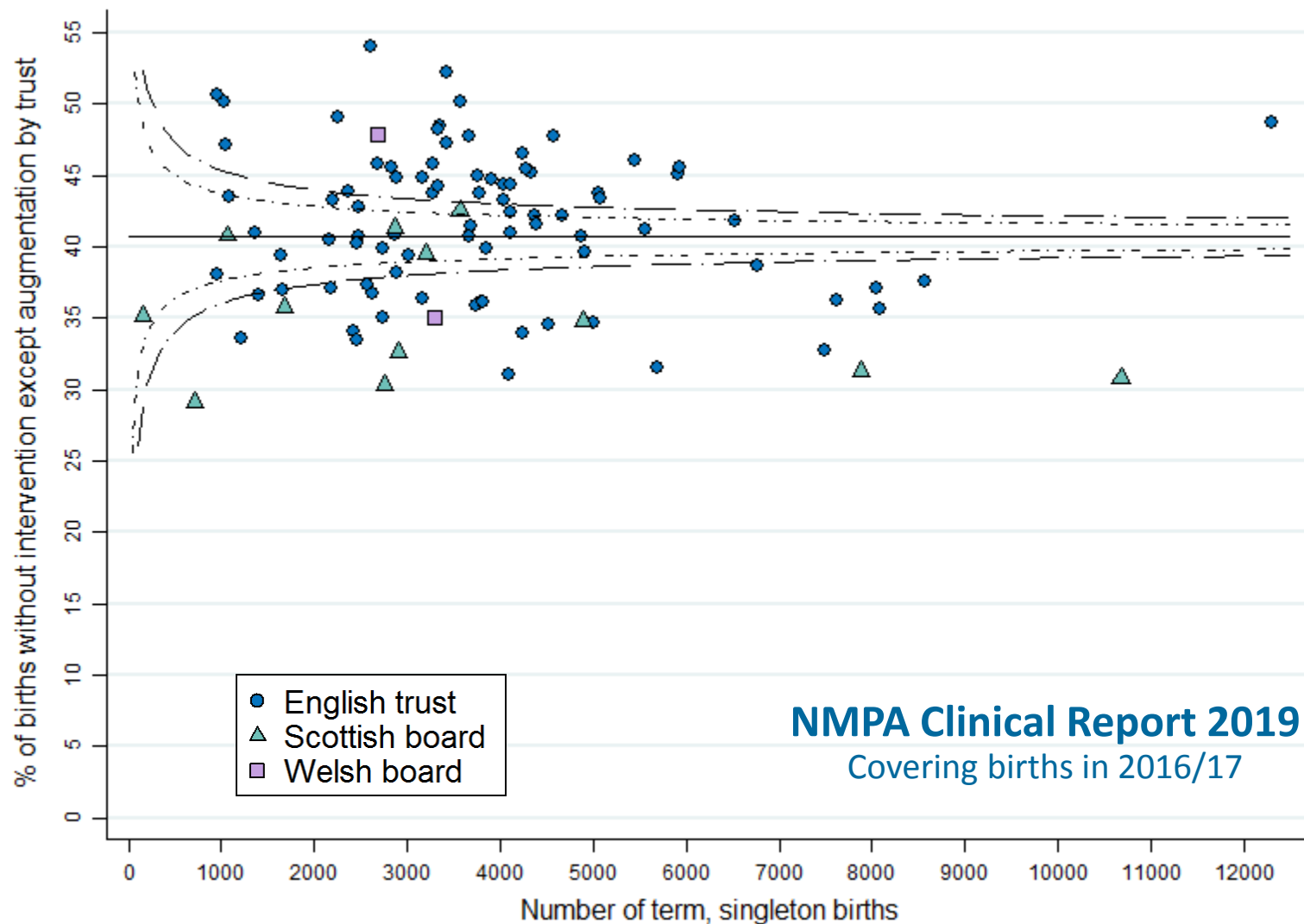
Birth without intervention 1

(spontaneous onset, progress and birth, without epidural/spinal/general anaesthesia or episiotomy)



Birth without intervention 2

(spontaneous onset and birth, without
epidural/spinal/general anaesthesia or episiotomy)



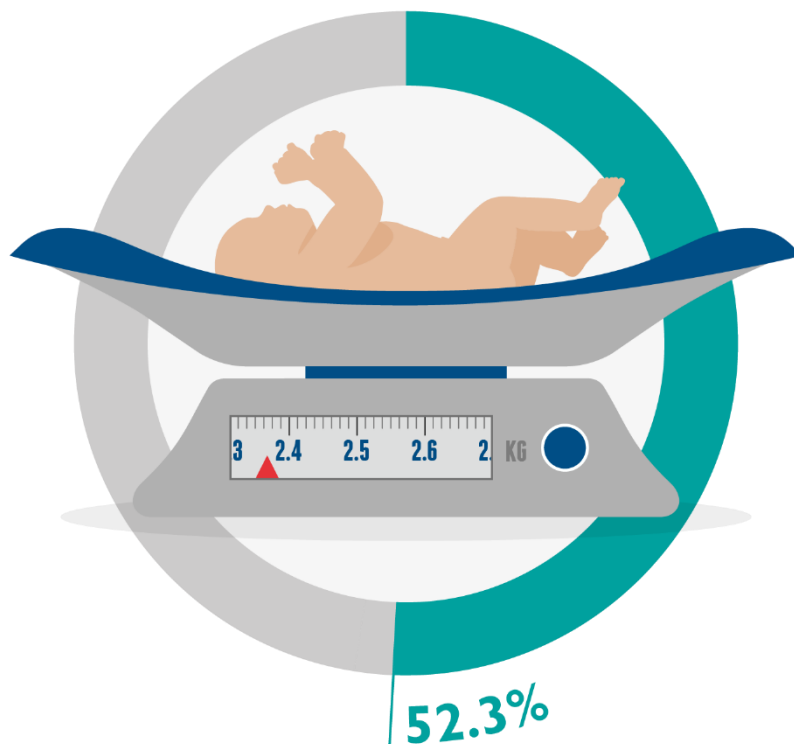
NMPA Clinical Report 2019
Covering births in 2016/17

Individual factors:

- Multiparity most important predictor of BWI, unless previous CS
- Age – the younger, the more likely BWI
- Normal BMI – the higher the BMI, the less likely BWI
- Non-white ethnicity – BWI more likely
- Birthweight between 3 and 3.5kg – BWI less likely if less or more
- Gestation 40 weeks – BWI less likely before and after

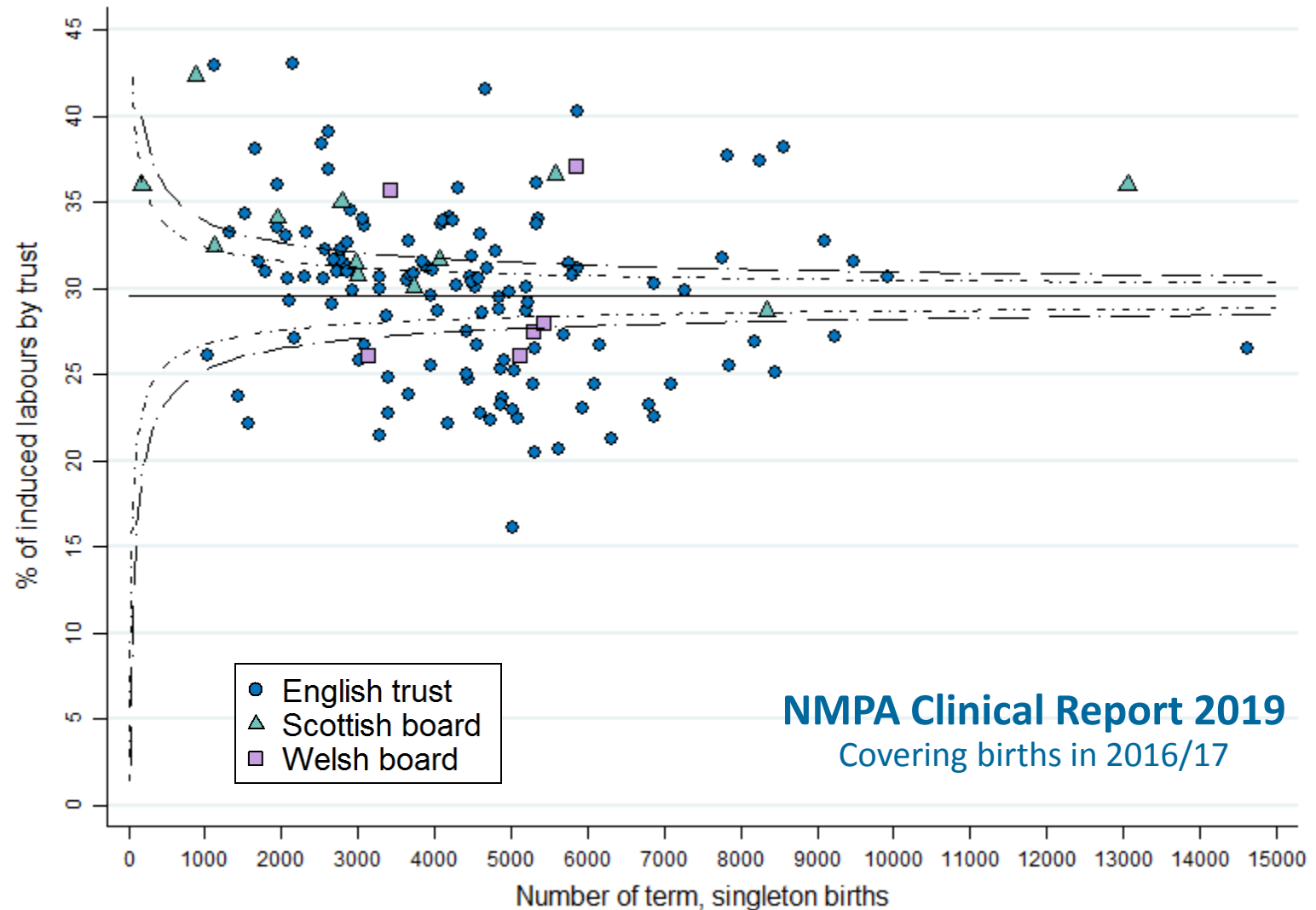
Organisational factors which make BWI more likely:

- Availability of FMUs within the trust
- High ratio of pools to birth rooms

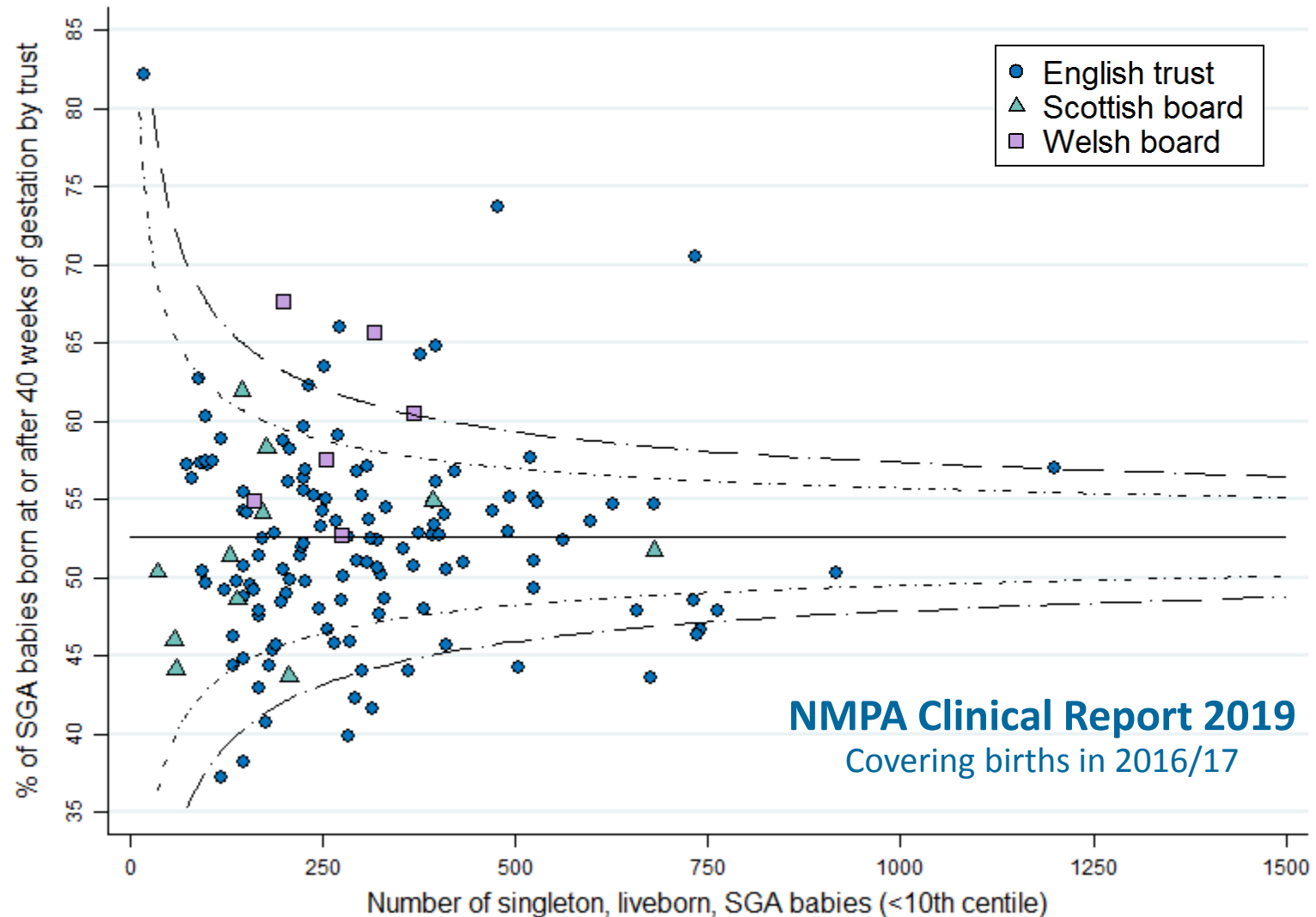


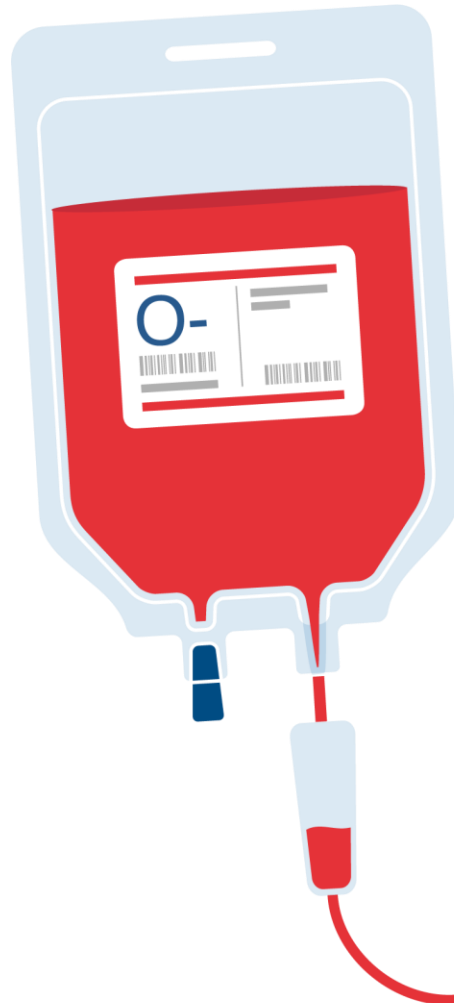
Induction rates increased from 27.9% to 29.2% and the **proportion of small-for-gestational-age babies born after 40 weeks decreased from 55.3% to 52.3% in England.**

Induction of labour



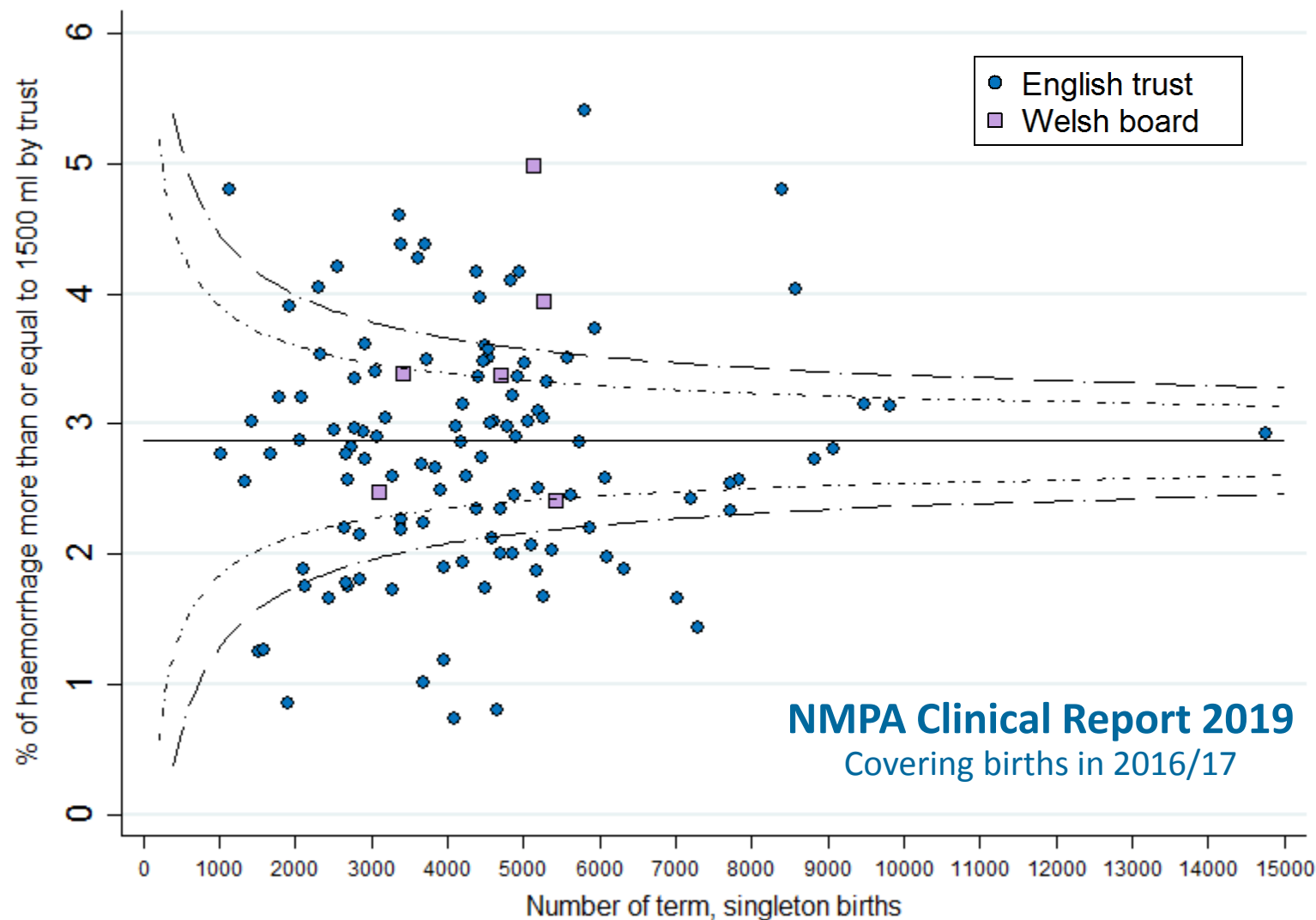
Small-for-gestational age babies born at or after 40 weeks



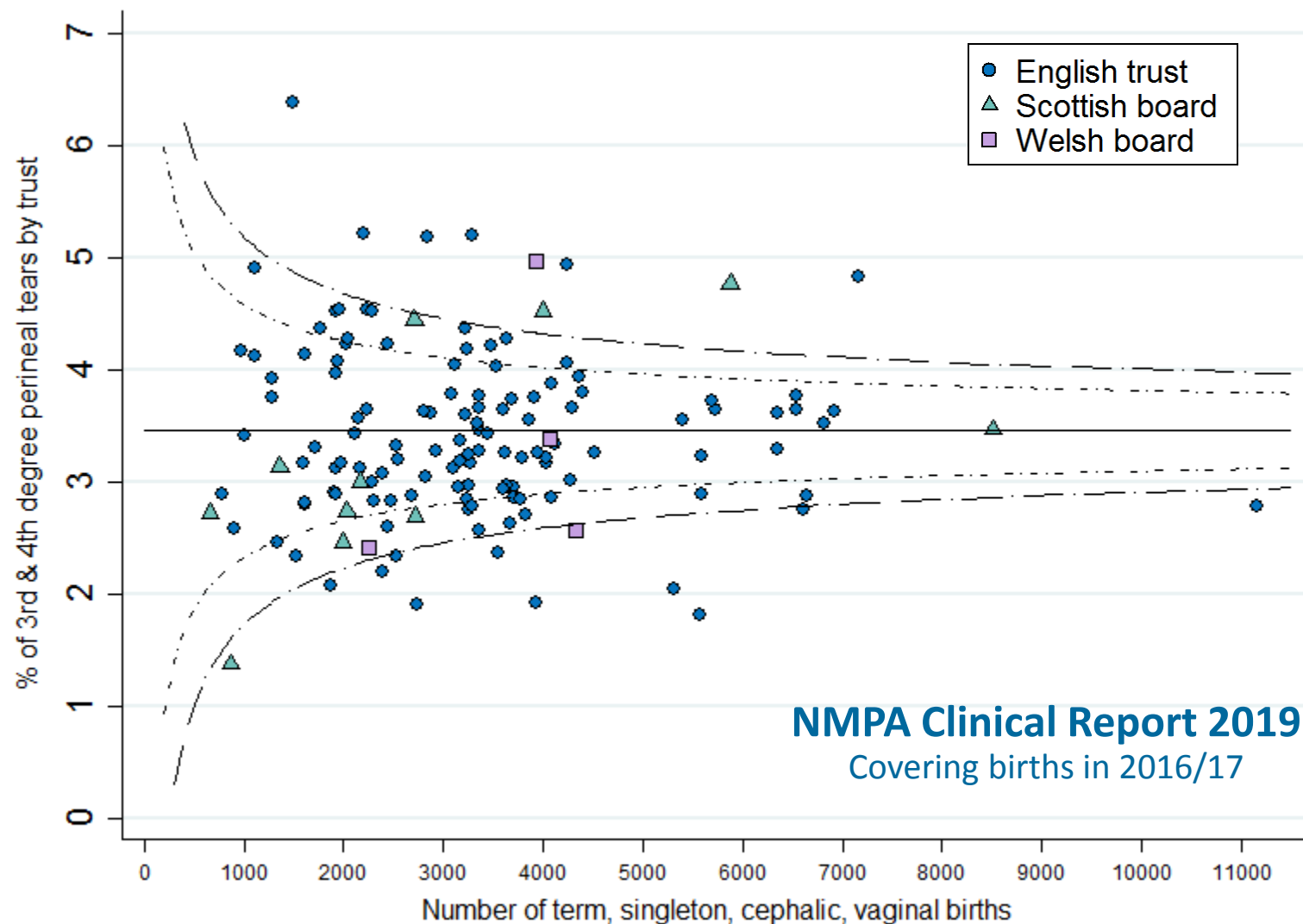


There remains variation in the proportion of women experiencing a **third or fourth degree tear**, or a **postpartum haemorrhage of 1500 ml or more**.

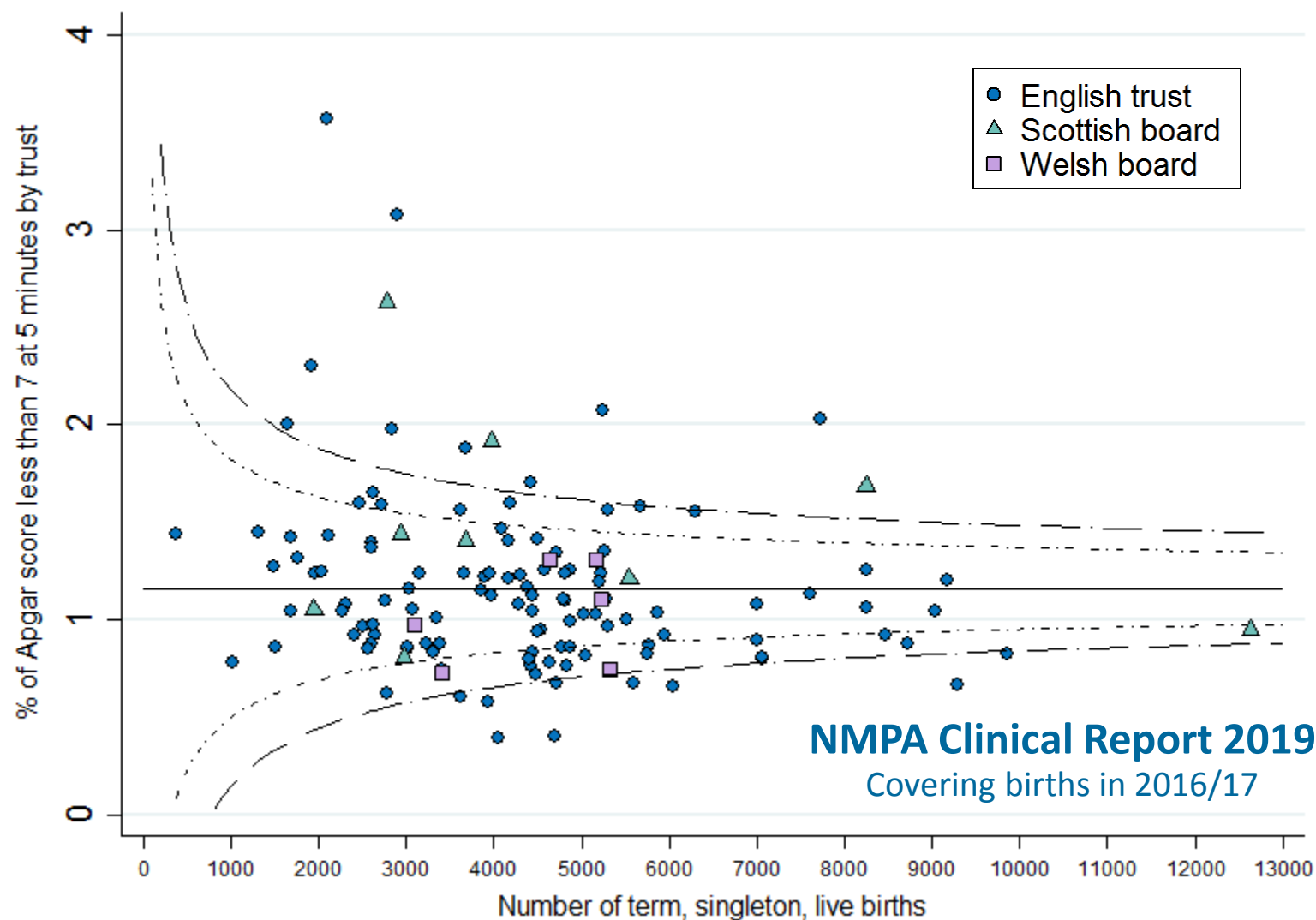
Haemorrhage of 1500 ml or more



Third and fourth degree tears

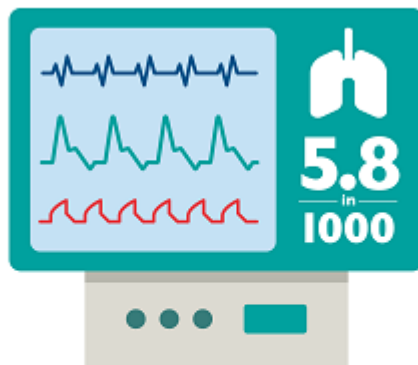


Apgar score <7 at 5 minutes

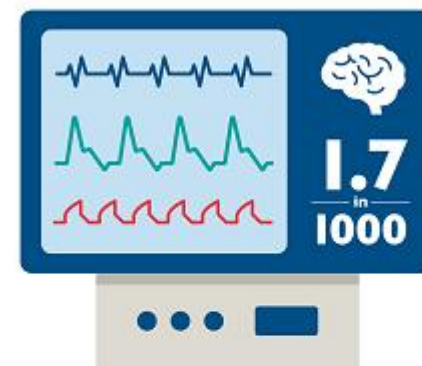




5.8% of babies born at term are admitted to a neonatal unit.



5.8 in 1000 babies born at term receive mechanical ventilation in the first 3 days of life.



1.7 in 1000 babies born between 35+0 and 42+6 weeks of gestation develop an encephalopathy in the first 3 days of life.

What can midwives do about unwarranted variation?

What can we as midwives do about it?

1. Know about it
2. Reflect on national variation
3. Compare your local findings against the national mean
4. As a result reflect on what the findings tell you about your service – what you are doing well, and areas that can be improved
5. Think about how you can get involved in QI initiatives that address unnecessary variation for the benefit of all women and babies

Let's look at the website.....

<https://maternityaudit.org.uk/pages/home>