

Background

- Up to **34%** of women in the UK require an induction of labour (IOL) every year¹
- With increasing service demands, there can be **delays** in this pathway that may impact patient outcomes and satisfaction
- Early amniotomy associated with **lower rates of chorioamnionitis, post-partum fever and NICU admissions** as well as **shorter duration of labour** and lower overall healthcare costs (Battarbee et al, Beckmann et al, Vadivelu et al.)^{2,3,4}

According to Chelsea & Westminster Hospital NHS Trust guidelines⁵:

Delays of 2+ hours in labour ward transfer after successful amniotomy are considered an Amber Alert and require senior escalation

Objectives

- To identify how frequently delays in labour ward transfer at Chelsea and Westminster Hospital are documented and escalated to a senior
- To assess the relationship between delayed amniotomy and poor labour outcomes.

Design & Methodology

 **DESIGN**

- Retrospective audit conducted at Chelsea and Westminster Hospital maternity unit between July and August 2023
- Standard:** Trust policy for Chelsea and Westminster NHS foundation trust, Ockenden report recommendations

 **DATA COLLECTION**

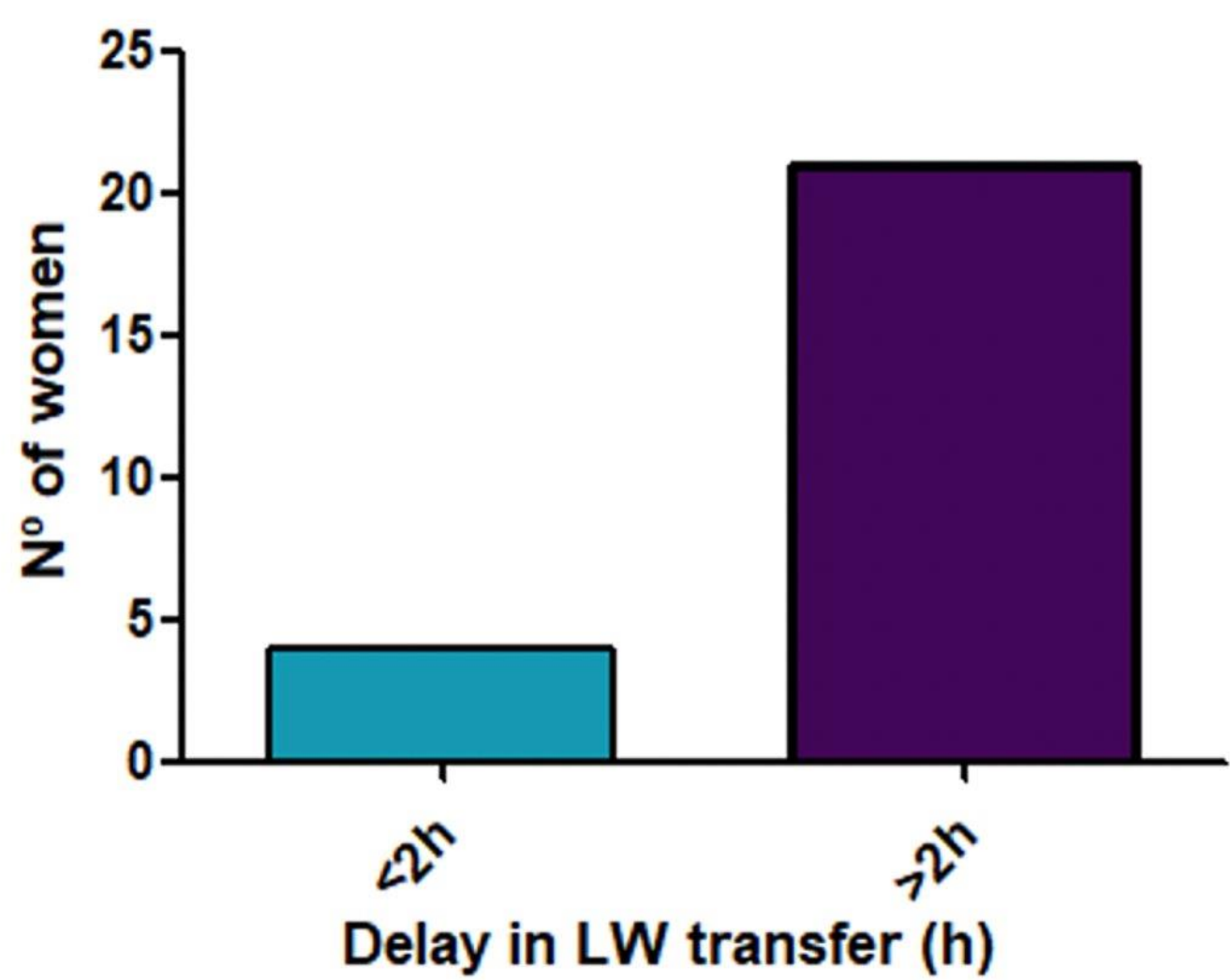
- Inclusion of all women undergoing IOL between 28/07/22 and 22/08/22.
- Screening of antenatal notes and electronic records (CERNER, K2, evolve)
- Data extracted: Patient demographics, pregnancy related factors, timeline of induction, delays in transfer and labour outcomes including type of delivery, labour complications and APGAR scores.

 **DATA ANALYSIS**

All statistical analyses were performed on Excel.

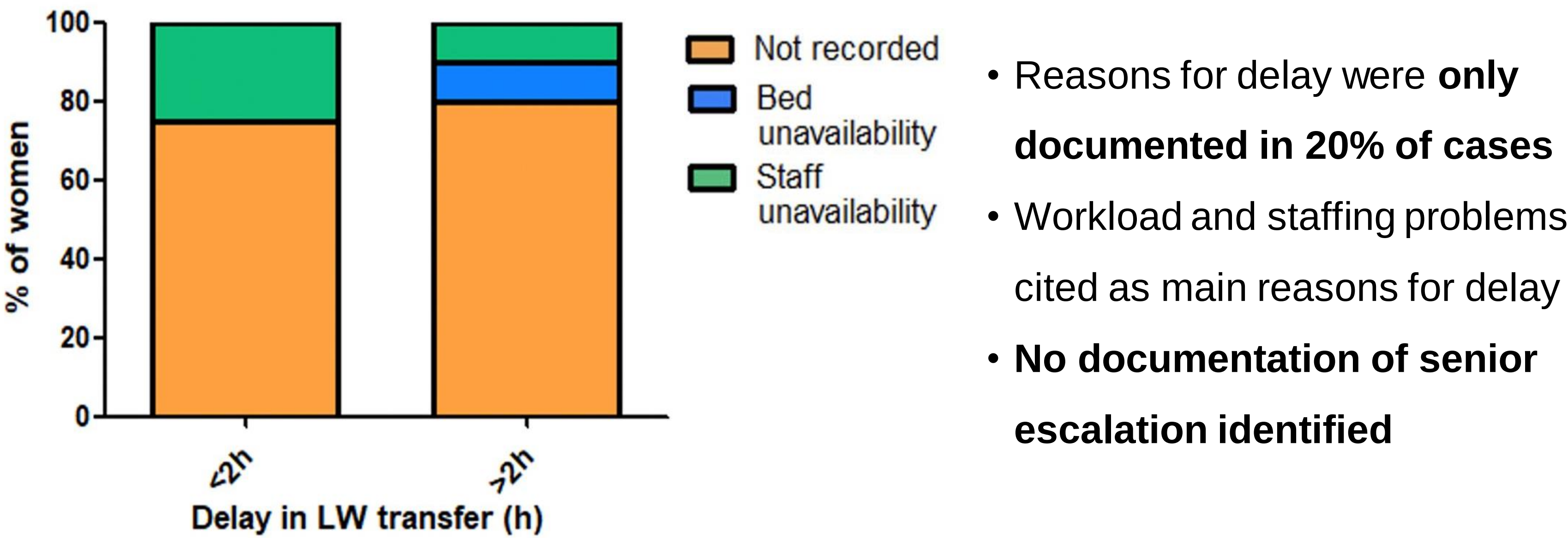
Results

Figure 1: Number of women waiting less or more than 2 hours for labour ward transfer.



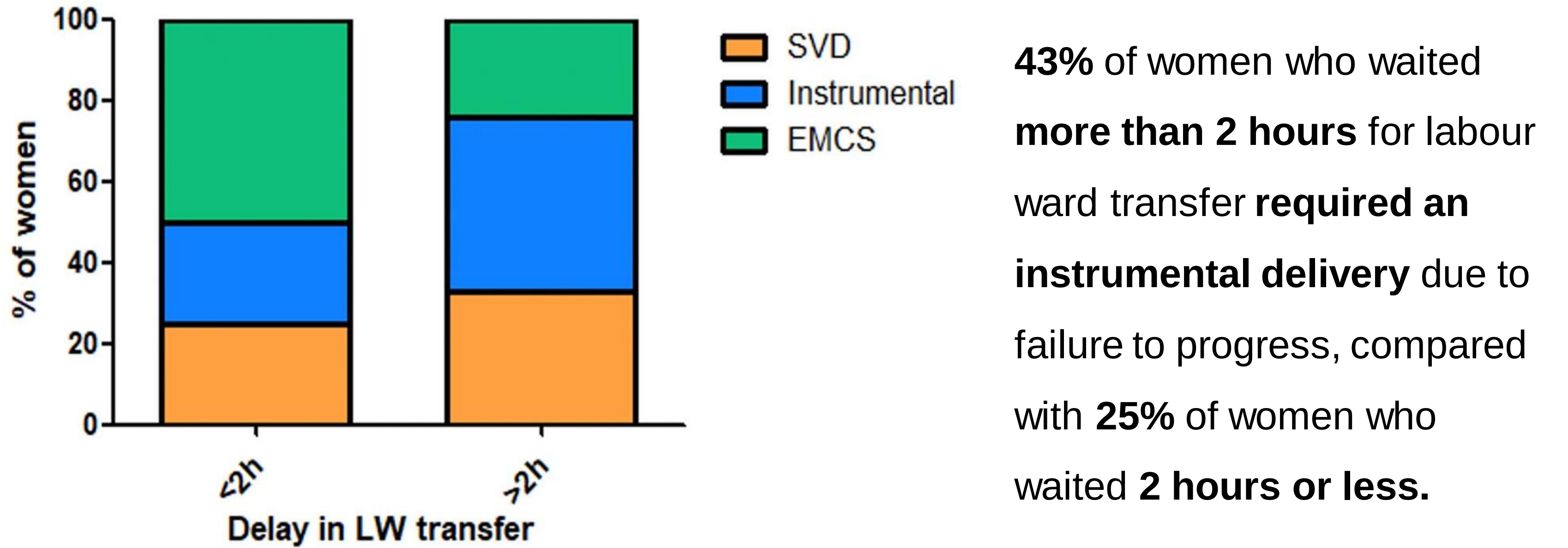
- 26 women** identified and included for analysis
- 84% of women waited more than 2 hours** for labour ward transfer
- Range of waiting times was 0-28h

Figure 2: Documentation of reasons for delay in women waiting less or more than 2 hours



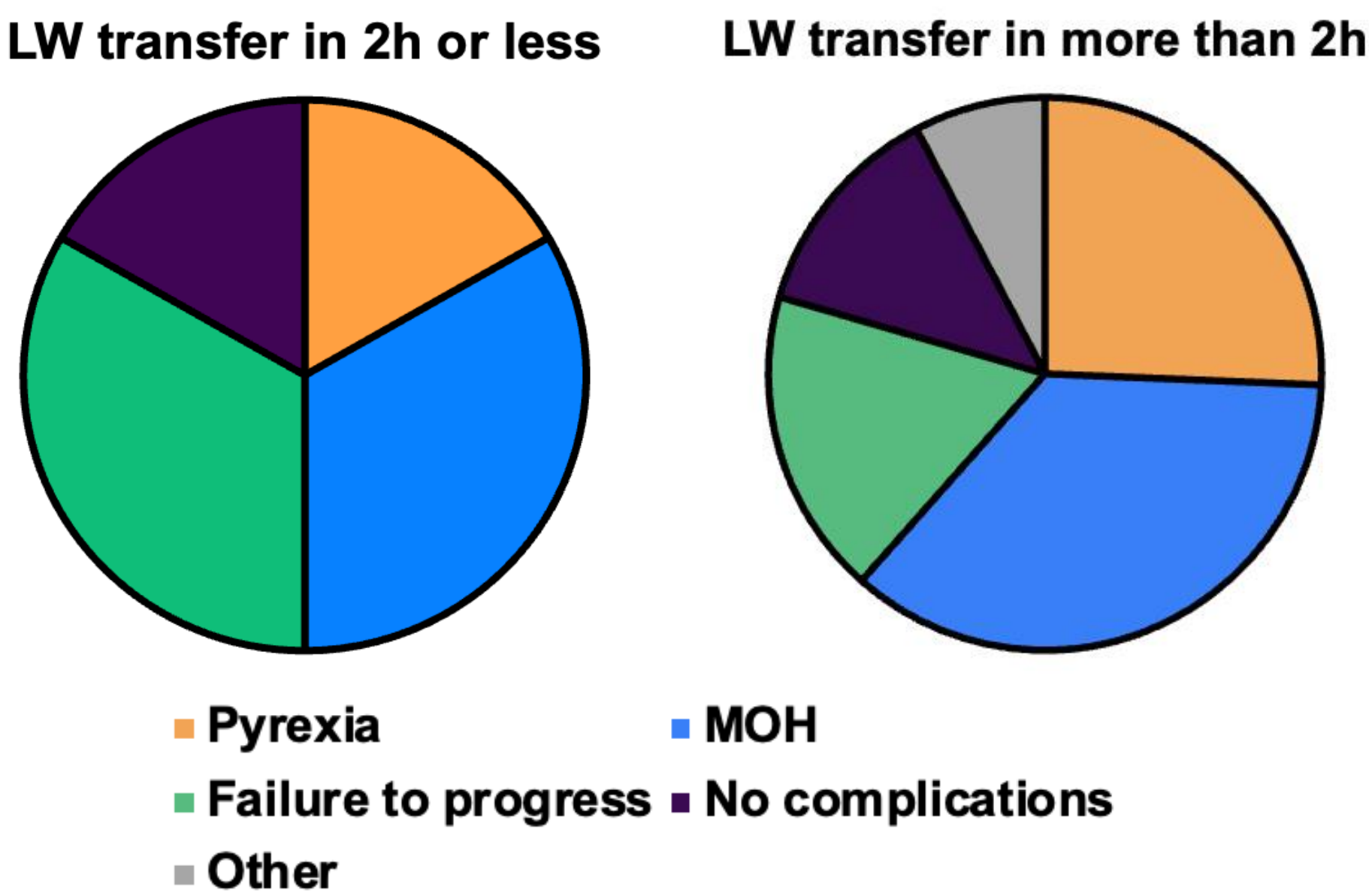
- Reasons for delay were **only documented in 20% of cases**
- Workload and staffing problems cited as main reasons for delay
- No documentation of senior escalation identified**

Figure 3: Mode of delivery in women waiting less or more than 2 hours



43% of women who waited **more than 2 hours** for labour ward transfer **required an instrumental delivery** due to failure to progress, compared with **25%** of women who waited **2 hours or less**.

Figure 4: Incidence of obstetric complications in women waiting less and more than 2 hours.



Complications in women who waited less than or two hours versus more than 2 hours:

- Intrapartum pyrexia** (48% vs 25%)
- Massive obstetric haemorrhage** (67% vs. 50%)

Positive correlations were observed between an increased delay in transfer to labour ward and:

- Total duration of labour
- Estimated Blood Loss
- APGAR scores at 1 minute.

However, correlations were not found to be statistically significant

Conclusions

- There are delays in the transfer of women to labour ward**
- Assessment of adherence to escalation policy could not be assessed due to lack of documentation**
- Longer waiting times were associated with higher risk of obstetric complications, instrumentation, longer labour, and EBL, although differences were not statistically significant**

RECOMMENDATIONS:

- Raise awareness about current suboptimal documentation of IOL pathway delays and importance of improving documentation**
- Introduction of escalation stickers to be completed and added to patient notes**

References:

1. 'NHS Maternity Statistics, England - 2020-21'.
2. Battarbee, Ashley N. et al. 'Association of Early Amniotomy After Foley Balloon Catheter Ripening and Duration of Nulliparous Labor Induction'. *Obstetrics and Gynecology* 128, no. 3 (September 2016): 592–97.
3. Beckmann, Michael et al. 'Induction of Labor Using Prostaglandin Vaginal Gel: Cost Analysis Comparing Early Amniotomy with Repeat Prostaglandin Gel'. *European Journal of Obstetrics & Gynecology and Reproductive Biology* 199 (1 April 2016): 96–101.
4. Vadivelu, Malarvizhi et al. 'Randomized Controlled Trial of the Effect of Amniotomy on the Duration of Spontaneous Labor'. *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics* 138, no. 2 (August 2017): 152–57.
5. Davidson, Claire et al. 'Maternity Unit Escalation and Temporary Suspension/Divert Policy Trust-wide'. V4.1. August 2021. Chelsea Westminster Hospital NHS Foundation Trust.