



Link to NUH Peripartum Hyponatraemia Guideline

Monitoring and Prevention of Peripartum Hyponatraemia within a Tertiary Maternity Unit: a multi-disciplinary approach

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Introduction

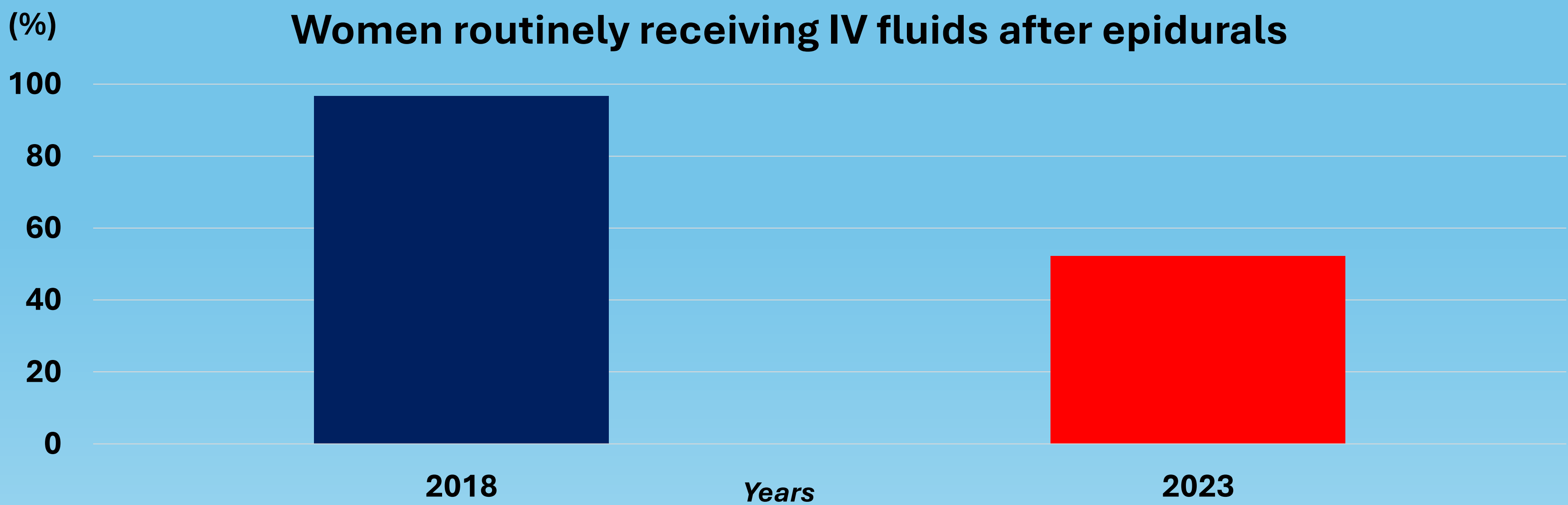
- Women in labour have an increased risk of hyponatraemia linked to excess fluid intake.
- Guidance from the Guidelines and Audit Implementation Network (GAIN)¹ and a local Trust guideline were published following several severe cases.

Methods

- Audit approval obtained to assess adherence to Trust hyponatraemia guideline.
- Data collection via retrospective review of intrapartum notes, fluid balance charts and multiple electronic databases used in the Trust.
- Fluid prescriptions in drug charts are cross-checked against documentation in fluid balance charts
- Results are compared to a pilot audit performed in 2018 using similar methodology.

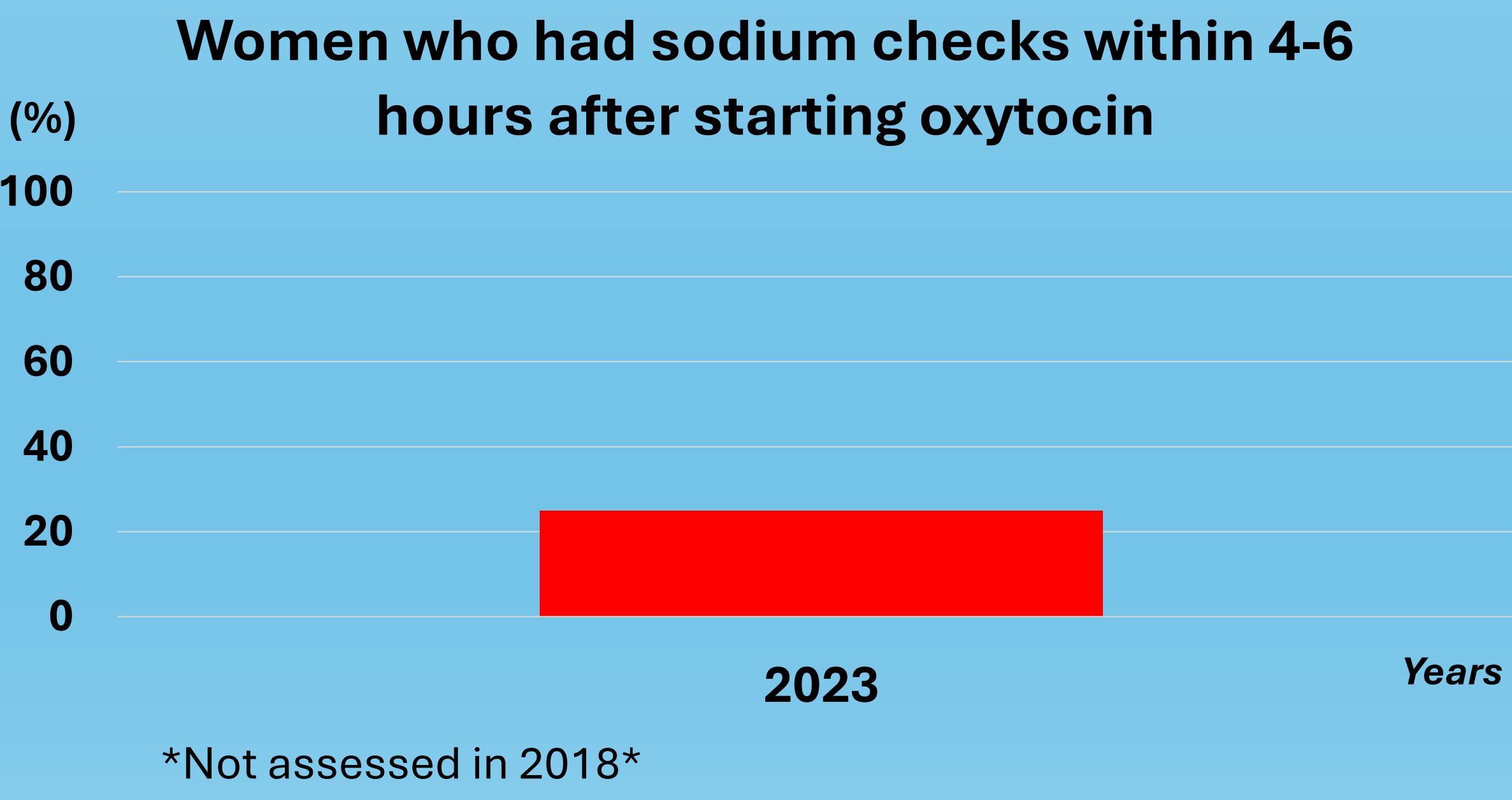
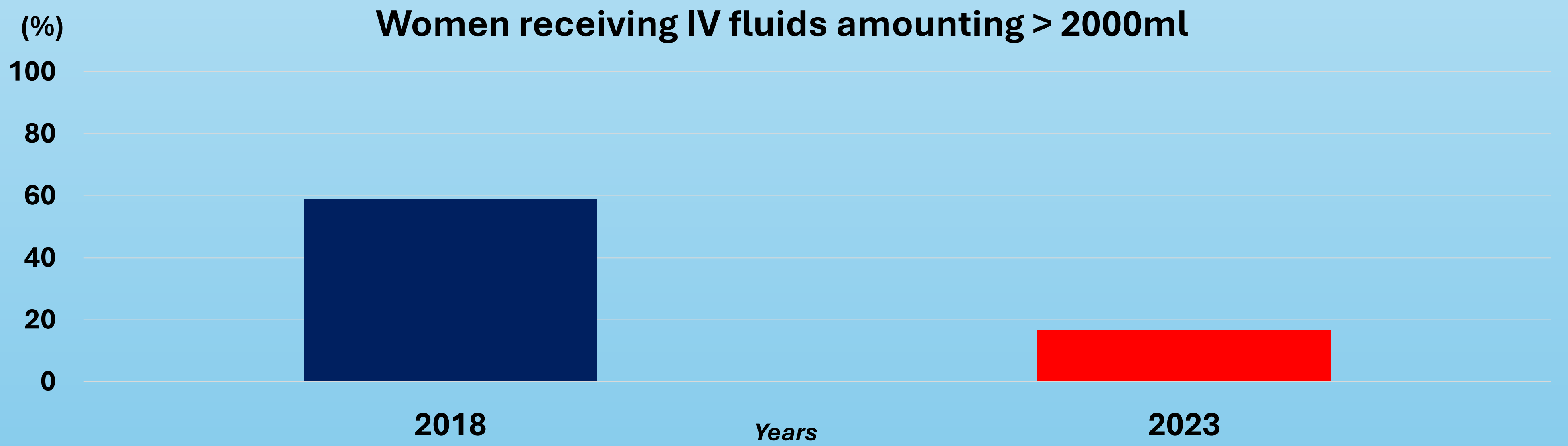
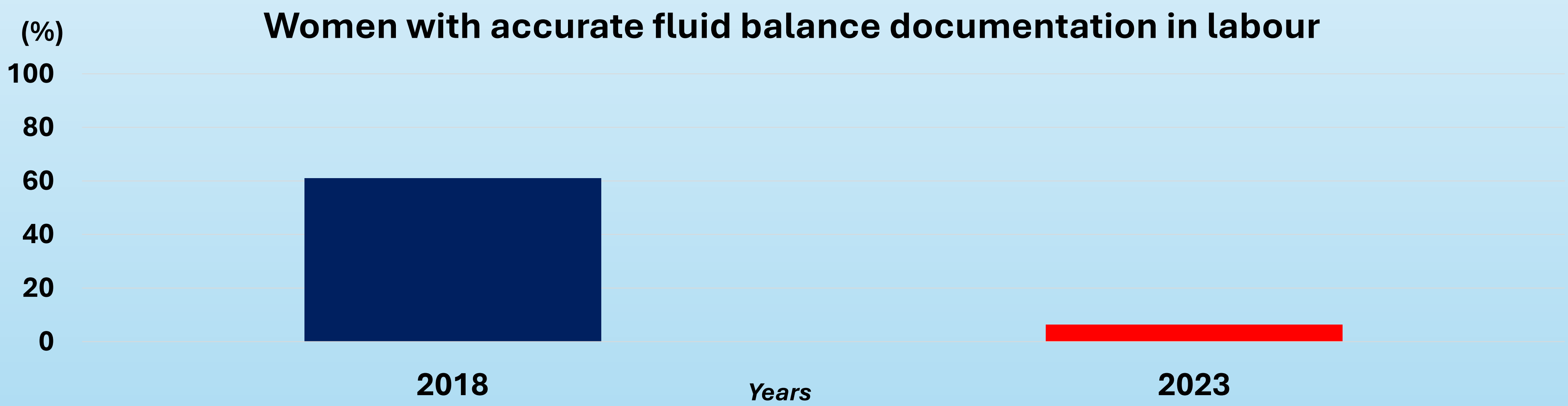
Audit standards :

1. 100% of women on fluid balance monitoring from the start of labour
2. 100% of women tested for serum Na⁺ after 4 hours of antenatal oxytocin infusion or when they are in +1.5L fluid balance.
3. Women are not routinely given IV fluids with epidurals



Results

Fifty-three women in labour were audited, of which 31 patients had epidurals.



References

1. Guidelines and Audit Implementation Network. Guideline for the Prevention, Diagnosis and Management of Hyponatraemia in Labour and the Immediate Postpartum Period. 2017. <https://www.rqia.org.uk/RQIA/files/df/dfd57ddd-ceb3-4c0d-9719-8e33e179d0ff.pdf>
2. Intrapartum Care. NICE Guidelines [NG235]. Published: 29 September 2023 <https://www.nice.org.uk/guidance/ng235/chapter/Recommendations>

Discussion

- Fluid balance documentation is poorly done in labour. Increase in the number of fluid balance charts started but only 6.3% had fluids accurately recorded in those charts. Accuracy was cross-checked against fluids prescribed in drug charts.
- Likely due to transition from paper to electronic documentation from 2018 to 2023. Lack of staff training in new method of recording data.
- 1-week MDT training for midwives held for further education.
- Marked reduction in women routinely receiving IV fluids *in labour* and *with epidurals*.
- Labels have been placed on oxytocin pumps to highlight the time serum Na⁺ needs to be checked.
- Cost analysis of VBG vs U&E undertaken (£2.42 vs £2.53)
- VBG now superseded serum U&E in checking Na⁺ levels post-oxytocin administration.

Key Takeaway Messages:

- Excess fluid intake increases risk of hyponatraemia
- IV fluids **not routinely** needed with low dose epidurals²
 - IV fluids are rarely needed in labouring women
 - VBG is cheaper and quicker at testing serum Na⁺