

An Investigation of the Appropriate use of Postpartum Full Blood Count Testing

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Objective

Effective management of maternal postnatal anaemia is required to prevent adverse outcomes however, the need for taking a full blood count (FBC) for investigation of post-partum anaemia needs to be weighed up against the need for intervention and the cost of the test. The aim of this study was to evaluate if postnatal FBC taking was in line with the regional guidelines (to take an FBC if blood loss exceeds 500ml), to evaluate if there was a more appropriate threshold at which FBC could be taken as well as calculating cost savings of changing the intervention threshold.

Design

A retrospective audit was undertaken to evaluate if FBC taking was in line with the local ‘Anaemia in pregnancy’ guideline. What, if any, treatment was required according to blood loss was used to evaluate the blood loss threshold for investigation.

Method

150 women were identified who delivered over a 2-month period. Information was collected for mode of delivery, blood loss, haemoglobin pre- and post-delivery and treatment of anaemia. Data was collected from the iSOFT electronic patient records and collated on an EXCEL spreadsheet and analysed.

Results

150 women were identified (50 SVD, 50 instrumental, 50 caesarean delivery). Mean blood loss 586 ml (Range 150 – 3080 ml). Blood loss <500ml: 38% of women had a FBC, 89% required no treatment, 11% iron, no transfusions. Blood loss 500-749 ml: 100% had an FBC, 69% required no treatment, 28% iron, 2% transfusion. Blood loss 750ml-999ml: 93% had FBC, 49% required no treatment, 28% iron, 13% transfusion. Blood loss >1000ml: 100% had FBC, 35% no treatment, 41% iron, 24 % transfusion (Figures 1 &2).

Figure 1. Percentage of FBC done according to blood loss

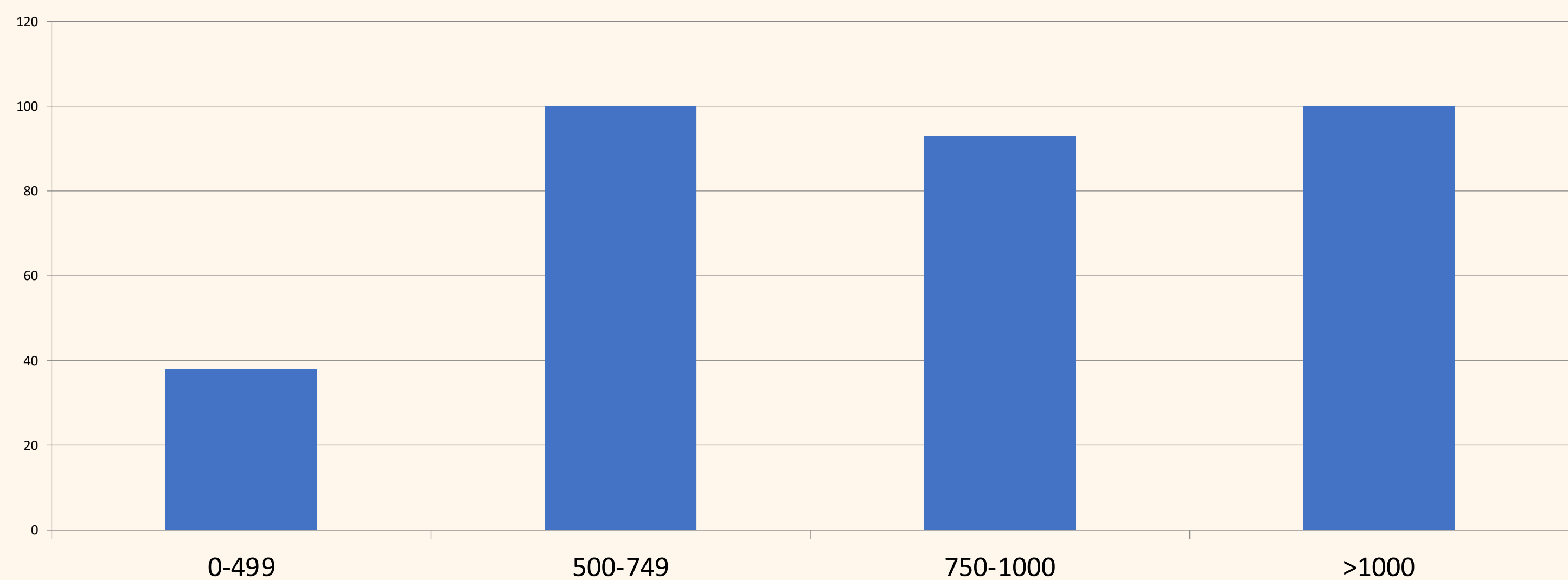
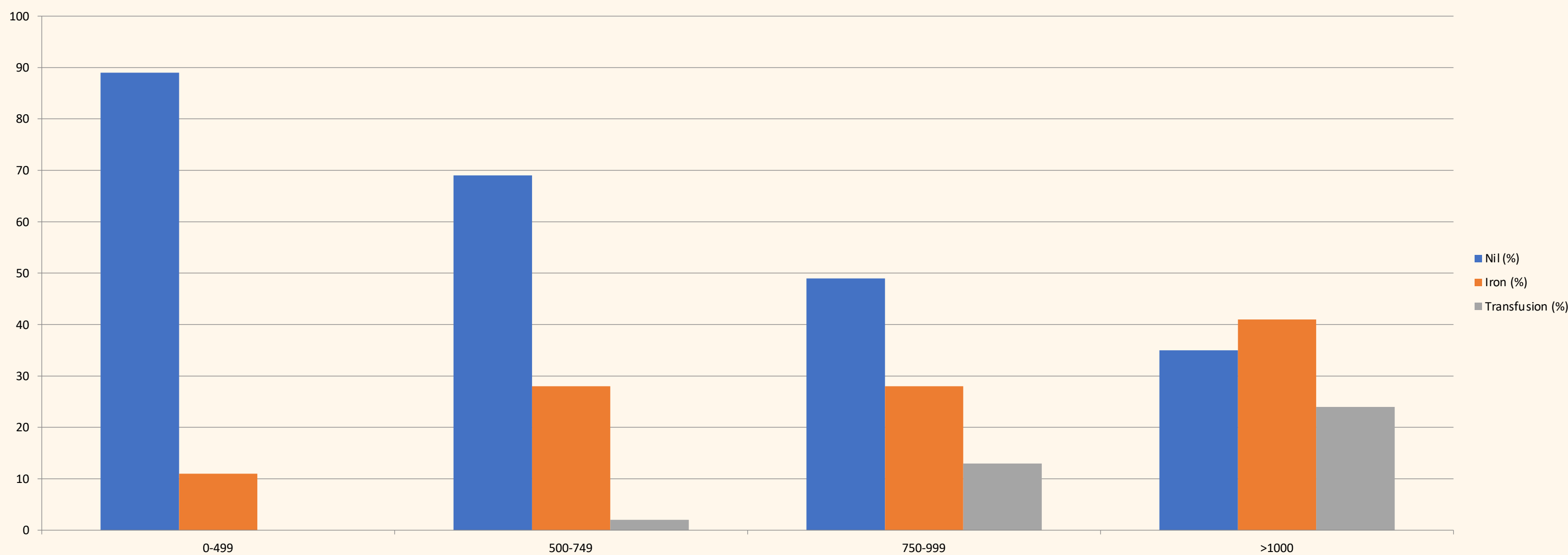
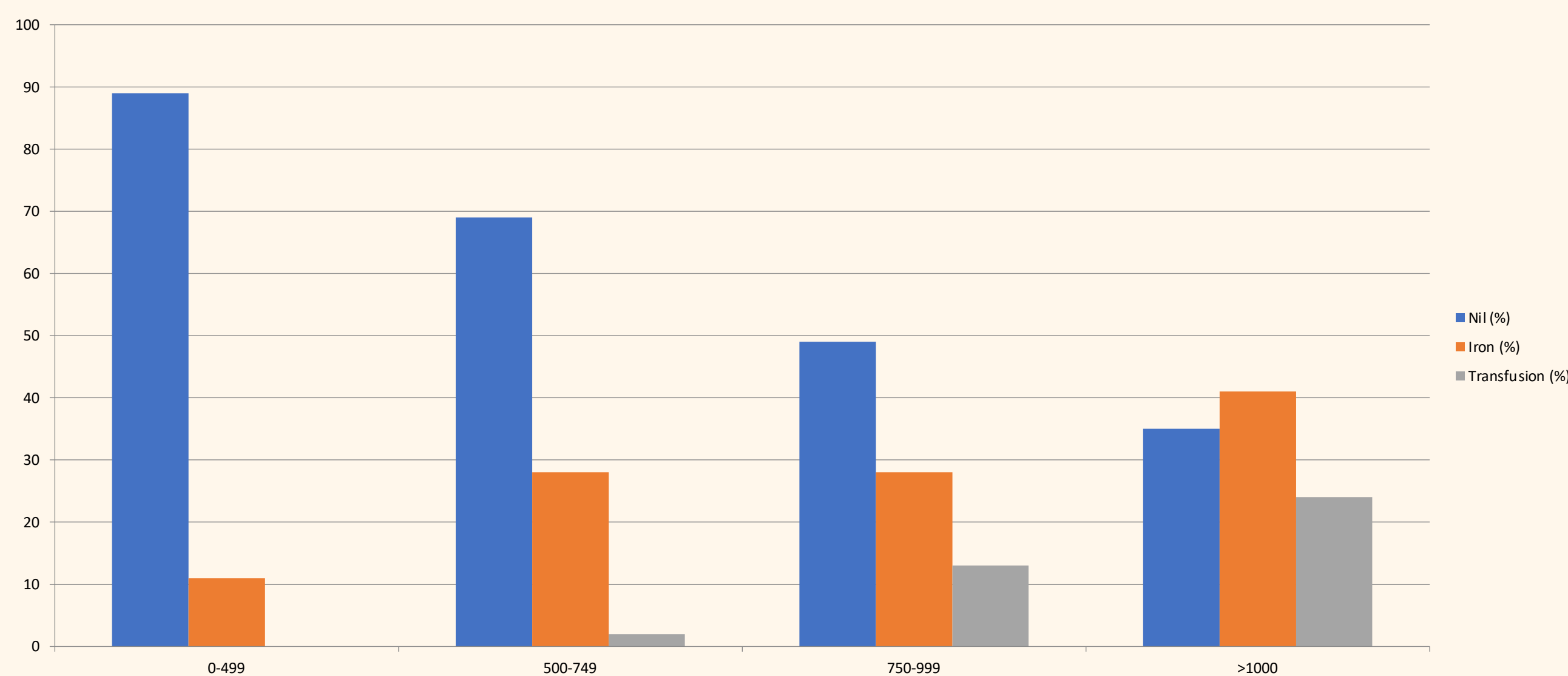


Figure 2. Treatment given per blood loss



If the threshold for FBC was increased to a blood loss of 750ml (unless pre-existing anaemia or symptomatic) 79% would not need a FBC. Of the 21% who did, 69% would not require any treatment (figure 3). This would give a significant cost saving to the trust per year (£8663.61) as well as staff time and would reduce the need for intervention for patients.

Figure 3. Treatment required per blood loss



Conclusion

The investigation and treatment of postnatal anaemia needs to be managed appropriately. Here we have shown that FBC taking was in line with regional guidance. The threshold for investigation could be increased to 750ml blood loss without risk to patients and there would be significant saving in both cost and staff time as well as patient benefits in doing this.

References

RCOG Green top guideline 47: Bloods transfusion in Obstetrics.
<https://www.rcog.org.uk/media/sdqcorsf/gtg-47.pdf>