ABSTRACT: Objectives: Reducing maternal anaemia at term. Is there a window of opportunity for earlier identification and treatment? All pregnant women have haemoglobin checked at booking and 28 weeks. Nevertheless, a significant number are anaemic at delivery. Identifying anaemia is essential to allow timely investigation and correction to prevent associated morbidity. Maternal morbidities include: susceptibility to infection, ↓ tolerance of postpartum haemorrhage (PPH), ↑ risk of PPH and preterm delivery. Perinatal morbidities include: low birth weight and anaemia in the first 3 months of life. Design: Retrospective case note review. Method: Blood results for consultant-led deliveries ≥37 wks at Victoria Hospital, Kirkcaldy, 01/04-17/30/04/18 were reviewed and the following data collected: Haemoglobin at booking, 28 weeks, admission (for delivery) and discharge. If anaemia was identified, notes were reviewed. Results: 138 cases reviewed. 10.9% (n=15) were anaemic at term. Of these, 33% (n=5) delivered by elective caesarean section (eCS); 60% (n=3) of whom were anaemic at 28 weeks. 2 women required peri-partum blood transfusion - 1 of whom was identified at 28 weeks. Conclusions: Of the 1 in 10 women anaemic at term, 33% were planned eCS. Opportunities to manage anaemia were missed. Our results support further haemoglobin check at 34/35 weeks; initially targeting women undergoing eCS. Supporting implementation of enhanced recovery, prevention of avoidable blood transfusion and reduction in surgical site infections. If this can be implemented successfully with clearly identified benefits – including costs, the increased testing can be rolled out more widely.

OBJECTIVES
Within our unit we identified a worrying trend of women presenting anaemic at time of delivery. Anaemia affects 38% of the antenatal population, the majority due to iron deficiency.1 Identifying anaemia is essential to allow investigation of cause and timely correction, preventing associated maternal and perinatal morbidity. Maternal morbidity includes: susceptibility to infection, ↓ tolerance of PPH, ↑ risk of PPH and of preterm delivery. Perinatal morbidity includes: low birth weight and anaemia in the first 3 months of life. Current UK guidelines advise HB check at booking and 28 weeks in women identified for “low risk” care.2 3 Current British Society for Haematology Guidelines advise an HB < 110 g/L in 1st trimester and < 105 g/L in 3rd trimester as diagnostic of anaemia in pregnancy.3 We aimed to identify through case note review:

- Were antenatal opportunities being missed to correct anaemia prior to delivery?
- Do women who are anaemic at term have low HB at 28 weeks and is a further HB check at 34/35 weeks justified?

DESIGN
Retrospective case note review of women delivering ≥ 37 weeks in the consultant-led unit performed.

METHODS
Blood results for consultant-led deliveries ≥ 37 weeks at Victoria Hospital, Kirkcaldy, 01/04-17/30/04/18 reviewed. HB • booking • 28 wks • admission at time of delivery • discharge. If anaemia identified (HB <110 g/L at booking and/or <105 g/L beyond 28 wks) clinical information in laboratory blood results were reviewed to check:

1. Oral therapy started ?
2. Appropriate follow up (?↑ HB) ?
3. Ferritin checked if not responding to oral therapy ?
4. Intravenous iron if confirmed iron deficiency?

It was also noted if blood transfusion occurred and when. Basic demographic data also collected: age, BMI, parity, gestation at delivery and mode of delivery. Results were analysed using Microsoft Excel.

RESULTS
Results for 138 cases reviewed.

- average age at delivery - 29.1 years (n=137)
- average BMI - 28.7 (n=112)
- average gestation at delivery - 39 completed wks (n=137)
- average parity - 1 (n=135)
- 59.4% (n=82) had spontaneous vaginal delivery
- 7.3% (n=10) had instrumental delivery
- 33.3% (n=46) delivered by caesarean section

Figure 1 summarises AN management of women anaemic at delivery. 10.9% (n=15) were anaemic at delivery; average HB 99 g/L (n=15). Of those anaemic at delivery, 33% (n=5) planned for eCS. 2 women required blood transfusion; 1 transfused during eCS and 1 transfused post nataly. A further 1 woman anaemic at delivery had anaemia identified between 28 weeks and admission for delivery.

Of 5 women delivered by eCS who were anaemic at time of delivery, 2 had a HB<105 g/L at 28 weeks.

REFERENCES