**Haematology audit template**

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| **Date of completion**  | (To be inserted when completed) |
| **Name of lead author/participants** | (To be inserted) |
| **Specialty** | Haematology |
| **Title** | **An audit of compliance with the British Society for Haematology guideline on the management of iron deficiency in pregnancy** |
| **Background** | The British Society for Haematology (BSH) has published guidance on the management of iron deficiency in pregnancy. This audit will review compliance with some of the main recommendations made. |
| **Aim & objectives** | To review whether: 1. iron deficiency in pregnancy is being identified and managed promptly
2. women with anaemia postnatally are being correctly managed.
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| **Standards & criteria** | 100%, or if not achieved there is documentation in the case notes that explains the variance (standards 1, 2, 5–7 and 9 relate to subgroups of patients only).1. All women identified as being anaemic should commence treatment with oral iron within 2 weeks or there should be an explanation as to why not.
2. Non-anaemic women at increased risk of iron depletion should be offered iron empirically or should have their serum ferritin checked, with iron offered if the ferritin is <30 µg/L.
3. Women receiving oral iron supplementation should be given a ferrous salt (40–80 mg elemental iron every morning or alternate mornings).
4. Women should be counselled as to how to take oral iron supplements correctly (i.e. on an empty stomach, with water or a source of vitamin C, at least 1 hour before eating, drinking or taking other medications including multivitamins or antacids).
5. Women with established anaemia should undergo repeat testing after 2–3 weeks of treatment.
6. Women with a poor response to oral iron should be assessed for compliance and concomitant causes of anaemia, such as folate deficiency and malabsorption.
7. Women with confirmed iron deficiency and not responding to, or intolerant of, oral iron, and those with an Hb of <100 g/L after 34 weeks’ gestation should be offered intravenous iron.
8. After delivery, women with blood loss >500 mL, uncorrected anaemia detected antenatally or symptoms suggestive of anaemia should have their Hb checked within 48 hours of delivery.
9. Postpartum women with Hb <100 g/L should be offered iron (oral elemental iron 40–80 mg daily if haemodynamically stable and asymptomatic or mildly symptomatic; intravenous iron if previous poor response/intolerance to oral iron, or if the severity of symptoms requires prompt management).
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| **Method** | **Sample selection*** **Criteria 1–7** all antenatal patients who have either been treated with an iron preparation, deemed at high risk of iron depletion, had a ferritin level <30 µg/L or had an Hb level <110 g/L before 12 weeks’ gestation or <105 g/L after 12 weeks’ gestation; 50 consecutive patients in the preceding 1 month.
* **Criteria 8 and 9** all postnatal women with blood loss >500 mL, uncorrected anaemia detected antenatally, symptoms suggestive of anaemia or Hb <100 g/L; 50 consecutive patients in the preceding 1 month.

**Data to be collected on proforma (see below).** |
| **Results** | (To be completed by the author)The results of this audit show the following compliance with the standards:

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| **Investigation** | **% compliance** |
| All women identified as being anaemic commenced treatment within 2 weeks, or an explanation as to why not was available |  |
| Non-anaemic women at increased risk of iron depletion were offered iron empirically or had their serum ferritin checked, with iron offered if the ferritin was <30 µg/L |  |
| Women receiving oral iron supplementation were given a ferrous salt (40–80 mg elemental iron every morning or alternate mornings) |  |
| Women were counselled as to how to take oral iron supplements correctly (i.e. on an empty stomach, with water or a source of vitamin C, at least 1 hour before eating, drinking or taking other medications including multivitamins or antacids) |  |
| Women with established anaemia underwent repeat testing after 2–3 weeks of treatment |  |
| Women with a poor response to oral iron were assessed for compliance and concomitant causes, such as folate deficiency and malabsorption |  |
| Women with confirmed iron deficiency and not responding to, or intolerant of, oral iron, and those with an Hb of <100 g/L after 34 weeks’ gestation were offered intravenous iron |  |
| After delivery, women with blood loss >500 mL, uncorrected anaemia detected antenatally or symptoms suggestive of anaemia had their Hb checked within 48 hours of delivery |  |
| Postpartum women with Hb <100 g/L were offered iron (oral elemental iron 40–80 mg if haemodynamically stable and asymptomatic or mildly symptomatic; intravenous iron if previous poor response/intolerance to oral iron, or if the severity of symptoms required prompt management) |  |

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| **Conclusion** | (To be completed by the author) |
| **Recommenda-tions for improvement** | Present the result with recommendations, actions, and responsibilities for action and a timescale for implementation. Assign a person(s) responsible to do the work within a time frame.**Some suggestions:*** highlight areas of practice that are different
* present findings.
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| **Action plan**  | (To be completed by the author – see attached action plan proforma) |
| **Re-audit date** | (To be completed by the author) |
| **Reference** | Pavord S, Daru J, Prasannan N, Stanworth S, Robinson S, Girling J. UK guidelines on the management of iron deficiency in pregnancy. Br J Haematol 2020;188:819–830.[onlinelibrary.wiley.com/doi/10.1111/bjh.16221](https://onlinelibrary.wiley.com/doi/10.1111/bjh.16221) |

**Data collection proforma for women with iron deficiency during or after pregnancy**

**Audit reviewing practice**

Patient name:

Hospital number:

Date of birth:

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|  | **1****Yes**  | **2****No** | **3** If shaded box not ticked, was there documentation to explain the variance?**Yes/No** plus free-text comment | **4** Compliant with guideline if shaded box ticked or an appropriate explanation from column 3. **Yes/No**(Record if standard not applicable) |
| **For antenatal women**  |
| **1**  Women identified as being anaemic, commenced treatment within 2 weeks or an adequate explanation as to why not is available |  |  |  |  |
| **2**  Non-anaemic women identified as being at increased risk of iron depletion, was offered iron empirically or had serum ferritin checked and iron offered if the ferritin was <30 µg/L |  |  |  |  |
| **3**  Women receiving oral iron supplementation, was given a ferrous salt at a dose of 40–80 mg elemental iron every morning or alternate mornings |  |  |  |  |
| **4**Women receiving oral iron supplementation, there is evidence they were counselled in how to take it correctly (i.e. on an empty stomach, with water or a source of vitamin C, at least 1 hour before eating, drinking or taking other medications including multivitamins or antacids), such as documentation in the notes or record that an appropriate information leaflet was given |  |  |  |  |
| **5**Women with established anaemia, underwent repeat testing after 2–3 weeks of treatment to assess compliance, correct administration and response to treatment |  |  |  |  |
| **6**Women with a poor response to oral iron, was assessed for compliance and concomitant causes of anaemia, such as folate deficiency and malabsorption |  |  |  |  |
| **7**Women with confirmed iron deficiency and not responding to, or intolerant of, oral iron, or with an Hb of <100 g/L after 34 weeks’ gestation, was considered for intravenous iron |  |  |  |  |
| **For postnatal women** |
| **8** Women with blood loss >500 mL, uncorrected anaemia that was detected antenatally or symptoms suggestive of anaemia, had their Hb checked within 48 hours of delivery |  |  |  |  |
| **9** Women with Hb <100 g/L, were offered iron (oral elemental iron 40–80 mg for those who were haemodynamically stable and asymptomatic or mildly symptomatic; intravenous iron in those with previous poor response/intolerance to oral iron, or in whom the severity of symptoms required prompt management) |  |  |  |  |

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| **Audit action plan**An audit of compliance with the British Society for Haematology guideline on the management of iron deficiency in pregnancy |
| **Audit recommendation** | **Objective** | **Action** | **Time scale** | **Barriers and constraints** | **Outcome** | **Monitoring** |
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