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**Clinical Practice Guideline    Iron Deficiency Anemia in Pregnancy,  
Intrapartum and Postpartum**  
**Department                                      Transfusion Safety/ Blood Matters**

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**Target Audience**

This clinical practice guideline is applicable to all medical and nursing staff and performed by:

Registered Nurse  
Registered Midwife  
Medical Officer  
Student Nurse/ Midwife under supervision

**Purpose**

To provide a guideline for staff in the assessment and treatment of Iron deficiency anaemia throughout the Antenatal and Postnatal stages of pregnancy.  
To provide optimal, safe patient care during pregnancy.

**Guideline**

Iron deficiency anaemia is the most common cause of anaemia in pregnancy worldwide. Many women, particular those who are multiparous, commence pregnancy with reduced iron stores.  
Iron requirements are 3 times higher in pregnancy, because of this the early recognition and treatment of iron deficiency anaemia is beneficial to both mother and baby.

Normal Haemoglobin (Hb) range in pregnancy is 110 -150gm/L

**Iron Deficiency Anemia assessment and optimisation varies during each trimester of pregnancy. The Australian Red Cross Blood service has developed guidelines to assist clinicians in the decision making process.**

- [\*\*First trimester – Please see attachment one\*\*](#)
- [\*\*Second trimester – Please see attachment two\*\*](#)
- [\*\*Third trimester – Please see attachment three\*\*](#)

Risk factors for anaemia

- Vegetarian Diet
- Previous episode of anaemia.
- Multiple Pregnancies.
- Inter- pregnancy interval < 1 year.
- Teenage pregnancy.
- Recent history of bleeding.
- Inflammatory bowel disease- decreased absorption.
- Multiparous women.
- Aboriginal and Torres Strait Islander Women.

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First created: 19/09/2017	Page 1 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020

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**Key Aligned Documents**

- [Peninsula Health Policy – Alerts and Allergy and Adverse Drug Reaction](#)
- [Peninsula Health Policy – Hand Hygiene & Aseptic Technique.](#)
- [Peninsula Health Policy – Consent to medical Treatment.](#)
- [Peninsula Health Policy – Patient Identification & Procedure Matching.](#)
- [Peninsula Health Policy – Medication management.](#)
- [Peninsula Health Policy-Iron Polymaltose](#)
- [Peninsula Health Policy – Transfusion Practice.](#)

**Evaluation**

Effectiveness of this guideline will be monitored and evaluated through, the regular revision and review of relevant documentation. Investigation into and education surround feedback received through the VHIMS/Riskman reports.

**References**

- 1) Australian Red Cross Blood Service – Transfusion Resource Center accessed from <http://resources.transfusion.com.au/cdm/singleitem/collection/p16691coll1/id/864/rec/1> on the 26/04/17
- 2) Women and Newborn Health Service- King Edward Memorial Hospital [http://www.kemh.health.wa.gov.au/development/manuals/O&G\\_guidelines/sectionb/1/b1.1.1\\_2.pdf](http://www.kemh.health.wa.gov.au/development/manuals/O&G_guidelines/sectionb/1/b1.1.1_2.pdf)
- 3) Patient Blood Management Guidelines:Module5: Obstetrics and Maternity. *National Blood Authority, Australian Government National health and medical research council, 2015*

**Keywords**

**Hb-** Haemoglobin.

**Anaemia-** defined by the World Health Organization as Hb < 110 g/L in pregnancy and < 100 g/L postpartum.

**Severe Anaemia -** in Pregnancy – Hb below 70 gm/L

**ARCBS** – Australian Red Cross Blood Service.

**FBC-** Full blood count.

**MCV-** Mean Corpuscular volume/ Mean cell volume – measure of the average volume of a red blood cell.

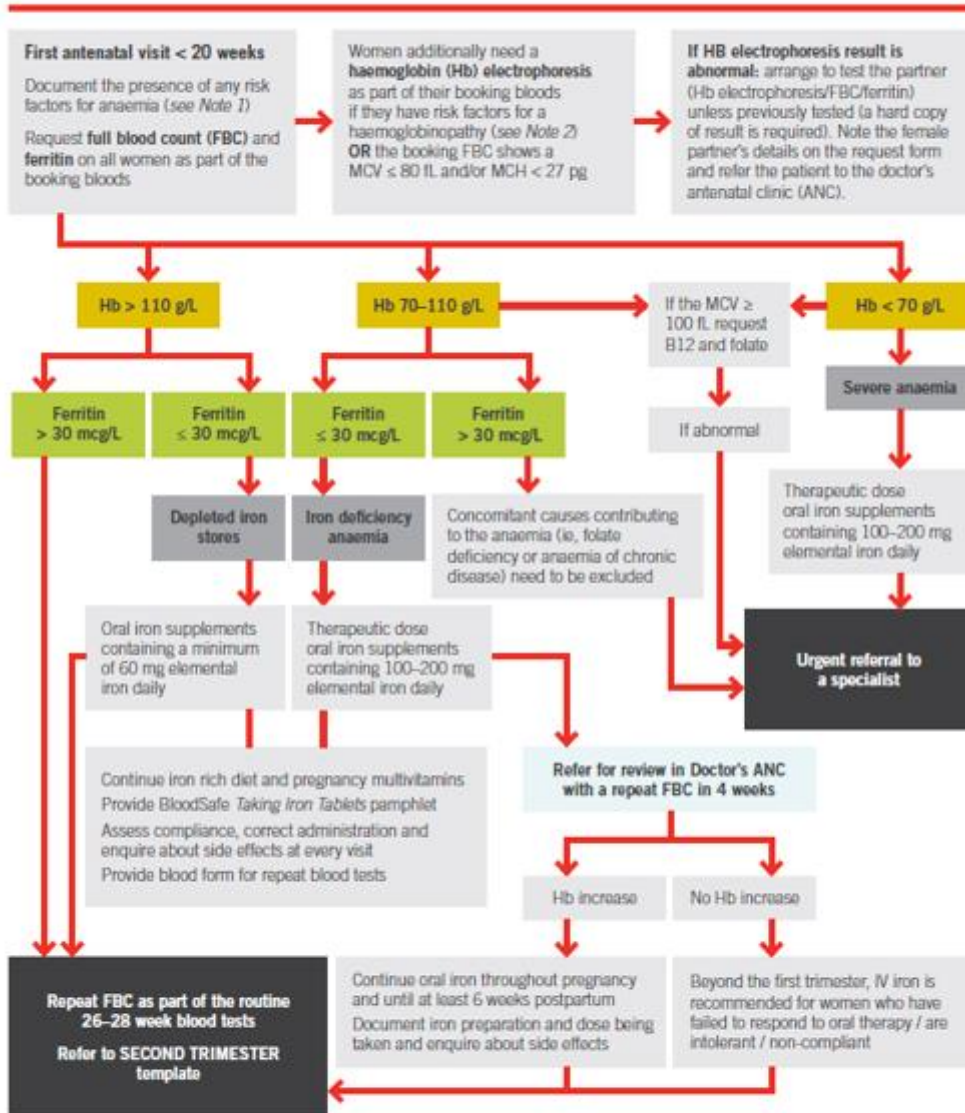
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Document Owner:	Transfusion Safety Committee Meeting
Document Author	Transfusion Clinical Nurse Consultant
Approved by:	Transfusion Safety Committee Meeting, Drugs and Therapeutics
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PROMPT doc no: 40184144    Version: 2.0		
First created: 19/09/2017	Page 2 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020

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Attachment one

**ANTENATAL HAEMOGLOBIN ASSESSMENT AND OPTIMISATION FIRST TRIMESTER**



**Note 1** - Risk factors for anaemia: previous anaemia, inter-pregnancy interval < 1 year, multiple pregnancy, parity ≥ 3, vegetarians, teenage pregnancies, recent history of bleeding, Aboriginal and Torres Strait Islander women.  
**Note 2** - Risk factors for haemoglobinopathies: Women with a family history of anaemia, thalassaemia or other abnormal haemoglobin variant; and any woman from a high risk ethnic background who has not previously been tested.

April 2016. These algorithms were compiled by Dr F. Sethia, Dr B. Stagniers and Dr P. Orpin from the Carberra Hospital in collaboration with the Australian Red Cross Blood Service. The information contained in this algorithm is for general guidance only. The disclaimer found at transfusion.com.au applies to this algorithm. Australian governments fund the Blood Service to provide blood, blood products and services to the Australian community.  
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PROMPT doc no: 40184144	Version: 2.0	
First created: 19/09/2017	Page 3 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020

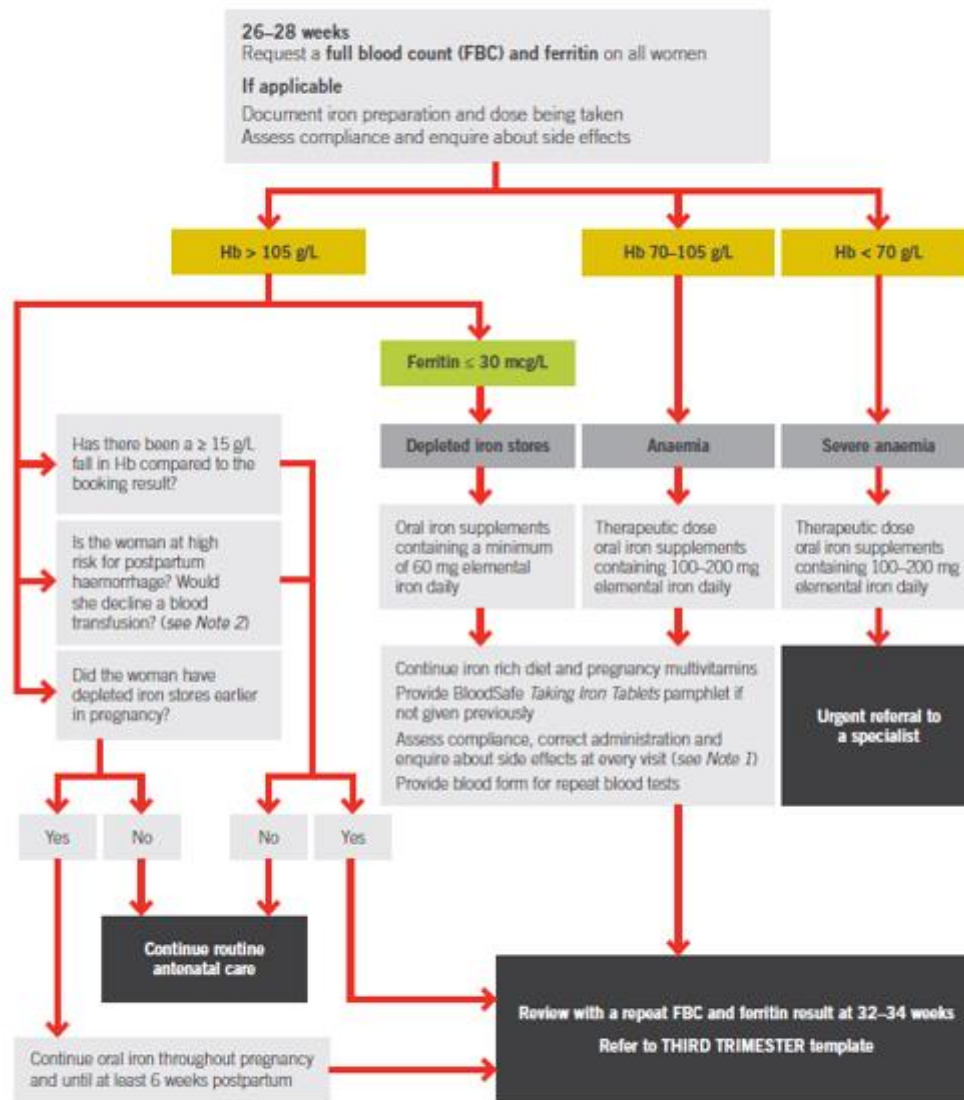


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## Department Transfusion Safety/ Blood Matters

Attachment [twg](#)

### ANTENATAL HAEMOGLOBIN ASSESSMENT AND OPTIMISATION SECOND TRIMESTER



**Note 1** - If nausea and epigastric discomfort are experienced, try preparations with lower iron content. Slow release enteric coated forms should be avoided.

**Note 2** - Non-anaemic women where estimation and optimisation of iron stores is necessary as significant blood loss may occur at delivery: Jehovah's witnesses, recent history of bleeding, previous postpartum haemorrhage, placenta previa/accreta.

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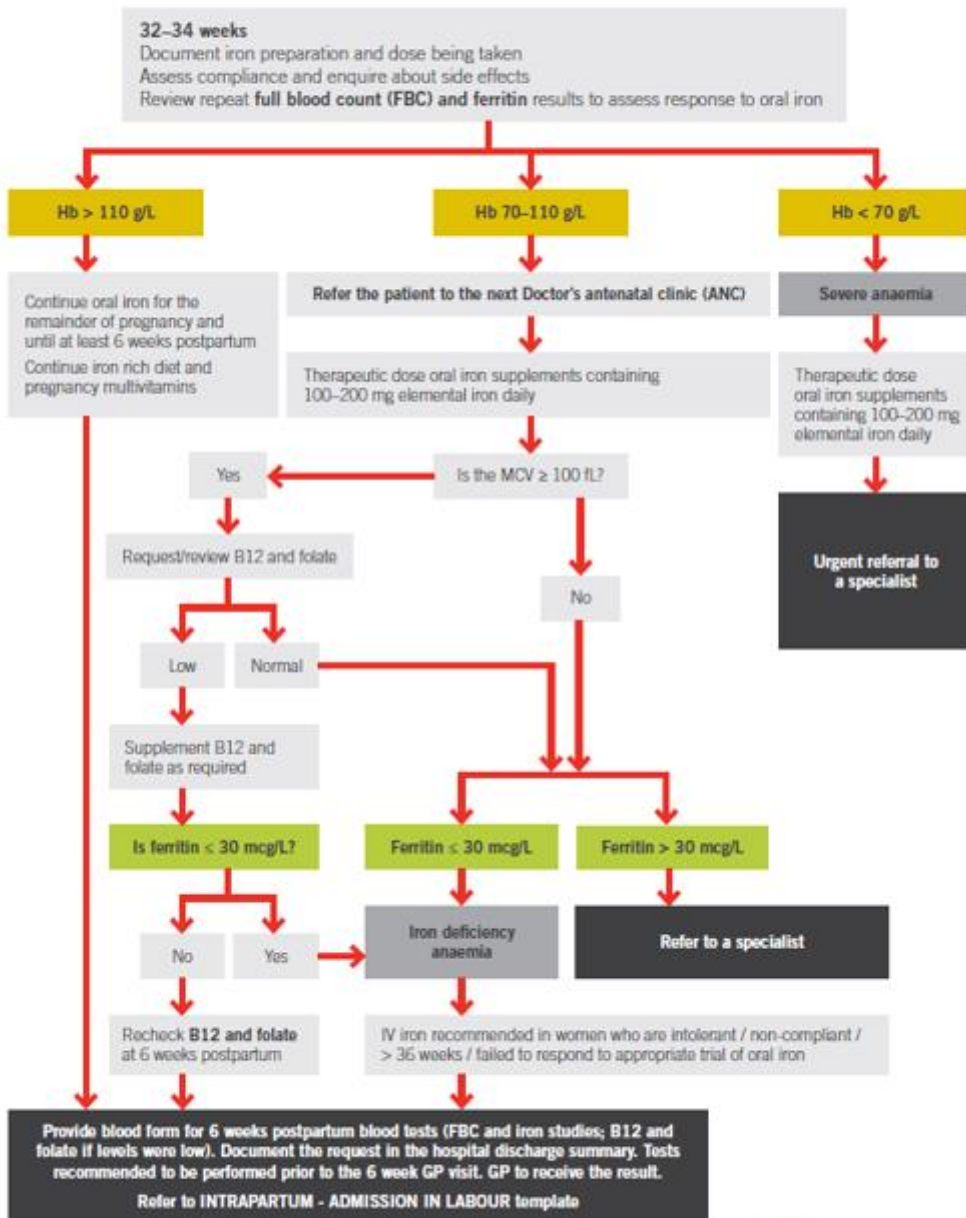
PROMPT doc no: 40184144	Version: 2.0	
First created: 19/09/2017	Page 4 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020



Clinical Practice Guideline Iron Deficiency Anemia in Pregnancy, Intrapartum and Postpartum  
Department Transfusion Safety/ Blood Matters

Attachment three

**ANTENATAL HAEMOGLOBIN ASSESSMENT AND OPTIMISATION  
THIRD TRIMESTER**



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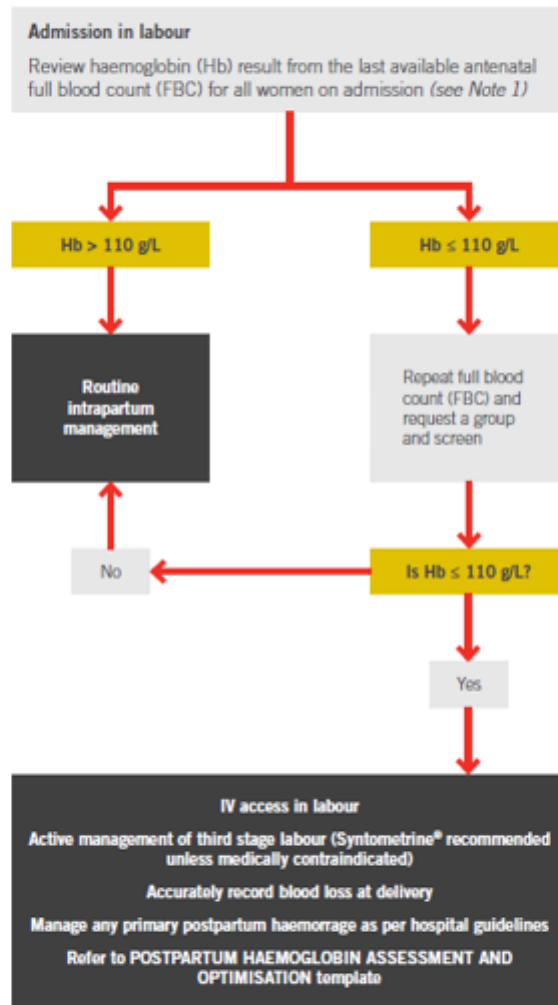
PROMPT doc no: 40184144	Version: 2.0	
First created: 19/09/2017	Page 5 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020



Clinical Practice Guideline Iron Deficiency Anemia in Pregnancy, Intrapartum and Postpartum Transfusion Safety/ Blood Matters  
Department

Attachment four

ADMISSION IN LABOUR  
INTRAPARTUM



Note 1- Women anaemic at the time of delivery may require additional precautions at the time of delivery

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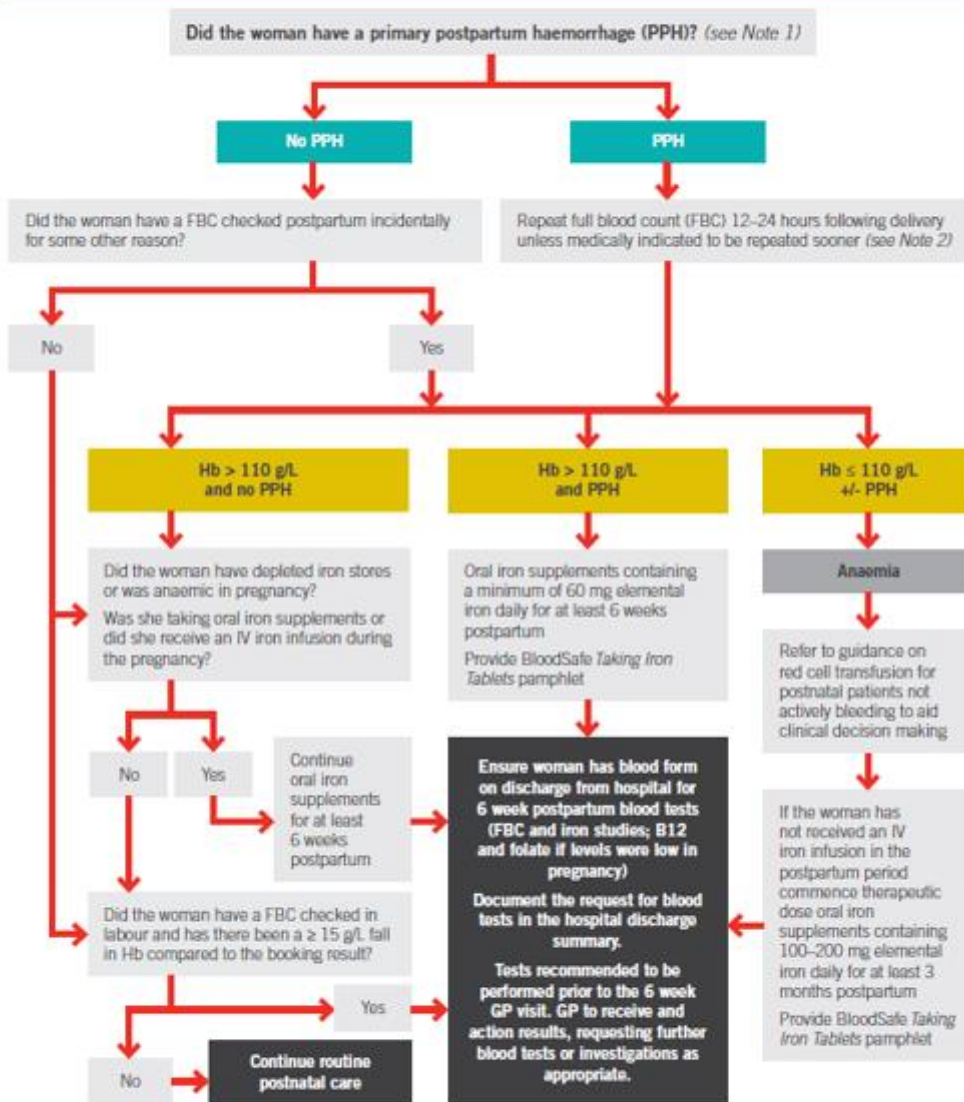


PROMPT doc no: 40184144 Version: 2.0		
First created: 19/09/2017	Page 6 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020

**Clinical Practice Guideline Iron Deficiency Anemia in Pregnancy, Intrapartum and Postpartum**  
**Department Transfusion Safety/ Blood Matters**

Attachment five

**POSTPARTUM HAEMOGLOBIN ASSESSMENT AND OPTIMISATION**



**Note 1** - Primary postpartum haemorrhage (PPH) is defined as excessive bleeding in the first 24 hours post-birth, and is traditionally defined as blood loss of  $\geq 500$  mL after vaginal birth or  $\geq 1000$  mL blood loss after caesarean section.

**Note 2** - There is no role for checking a ferritin level or iron studies in the immediate postpartum period as the results are not interpretable.

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PROMPT doc no: 40184144	Version: 2.0	
First created: 19/09/2017	Page 7 of 9	Last reviewed:
Version changed: 24/10/2018	UNCONTROLLED WHEN DOWNLOADED	Next review: 19/09/2020

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Department                            Intrapartum and Postpartum  
    Transfusion Safety/ Blood Matters**

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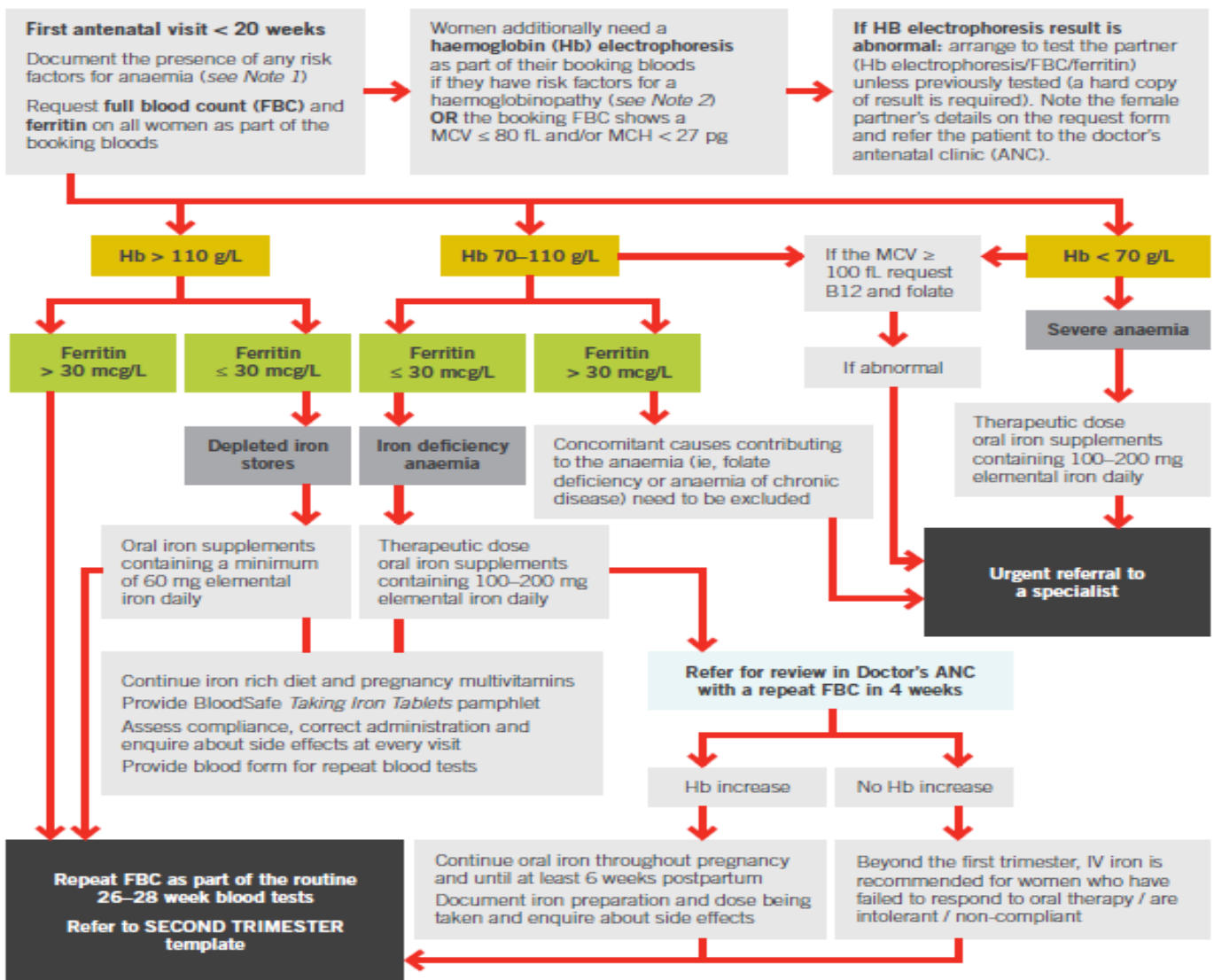
PROMPT doc no: <b>40184144</b> Version: <b>2.0</b>		
First created: <b>19/09/2017</b>	Page 8 of 9	Last reviewed:
Version changed: <b>24/10/2018</b>	UNCONTROLLED WHEN DOWNLOADED	Next review: <b>19/09/2020</b>





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Department Transfusion Safety/ Blood Matters

ANTENATAL HAEMOGLOBIN ASSESSMENT AND OPTIMISATION FIRST TRIMESTER



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