This information was up to date at the time of release to the Heads of Midwifery.
The editorial board does not accept liability for any errors or omissions following its subsequent publication.
Updating arrangements for the formulary should be decided upon and implemented at a local level.

Ferrous Sulfate

Legal status (GSL, P or POM on exemption list, or PGD)	▪ P - midwife may supply
Patient group	Pregnant and postpartum women.
Clinical indication	Antenatal: moderate iron deficiency anaemia. See local guideline for treatment threshold. Postnatal: treatment of iron deficiency anaemia which was determined by serum haemoglobin (Hb) results on postnatal day 2. See local guideline for treatment threshold.
Pharmacology (Onset and duration of action where appropriate)	Ferrous sulfate is a soluble salt of iron which is an essential component of the body. Iron is required for the production of haemoglobin. It is used in the treatment and prophylaxis of anaemia in accordance with local guidelines. It is mainly absorbed in the small intestine, but can be absorbed along the entire length of the alimentary canal. It is more readily absorbed as the ferrous state. Haemoglobin should increase by 1-2g/litre per day or 20g/litre over 3-4 weeks.
Pharmaceutical form, strength, route of administration	Dried ferrous sulfate tablets 200mg (65mg iron). For oral administration.
Dose, frequency and maximum number of doses or period of time for administration or supply	One tablet two to three times daily in accordance with local guidelines. Antenatal: 1 original pack of tablets initially, then for duration of pregnancy if iron deficiency anaemia confirmed. Postnatal: While an inpatient or outpatient until discharged from midwifery care or 3 months after haemoglobin has normalised, whichever is sooner. Maximum duration 6 months.
Contra-indications/exclusion criteria	▪ known hypersensitivity to any component of the medicine ▪ haemochromatosis, haemosiderosis, haemolytic anaemia, paroxysmal nocturnal haemoglobinuria ▪ frequent blood transfusion, concomitant parenteral iron ▪ active peptic ulcer, regional enteritis and ulcerative colitis ▪ anaemias other than those due to iron deficiency

Ferrous Sulfate	
Cautions and action that will be taken if a caution applies	▪ before starting treatment, exclude any other cause of anaemia ▪ reduced absorption in women who have had a gastrectomy ▪ known or suspected gastro-intestinal strictures or diverticulae ▪ inflammatory bowel disease, history of peptic ulcer ▪ rare hereditary problems of galactose intolerance or fructose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption or sucrase-isomaltase insufficiency ▪ check for and document any allergies ▪ check and document past medical and drug history and current medication to ascertain potential for overdose ▪ if a caution applies consult with a doctor ▪ document consultation in maternity record
Medicine interactions and action that will be taken if a patient is taking a medicine that may interact	▪ antacids, calcium and zinc preparations and cholestyramine can reduce absorption of iron. Iron reduces absorption of ciprofloxacin and other quinolones, tetracycline, levothyroxine, mycophenolate, penicillamine and zinc preparations. The antihypertensive effect of methyldopa may be reduced ▪ black stools and constipation are common, diarrhoea can occur occasionally ▪ absorption reduced by certain foods - see information to be given to patients ▪ if there is a clinically significant drug interaction, consult with a doctor before administration or supply ▪ document consultation in maternity record ▪ refer to current BNF for latest information on interactions
Potential adverse reactions and side effects including actions to be taken if adverse drug reaction is suspected	▪ *nausea and epigastric pain are dose related. Black stools and constipation are common, diarrhoea can occur occasionally* ▪ *on labour* *Nil* ▪ *on the neonate* *Nil* ▪ *on breast feeding* *Nil* ▪ *If a serious adverse reaction is suspected please report to the MHRA Yellow Card Scheme. http://yellowcard.mhra.gov.uk/.*

Ferrous Sulfate	
Overdose	▪ ingestion of 20 mg/kg elemental iron is potentially toxic and 200-250 mg/kg is potentially fatal ▪ all potential overdoses require urgent action with gastric lavage and desferrioxide/desferrioxamine treatment ▪ symptoms of abdominal pain, vomiting and diarrhoea occur within 60 minutes of ingestion - cardiovascular collapse and coma may follow ▪ vomit and stools may be coloured grey or black ▪ patient may recover or further deteriorate with pulmonary oedema, convulsions, anuria, hyperthermia, severe shock, metabolic acidosis, coagulation abnormalities, hypoglycaemia or hyperglycaemia. ▪ immediate assessment/treatment is essential - refer to medical staff ▪ manage in accordance with established treatment guidelines or see BNF overdose section ▪ for further advice contact National Poisons Centre 0344 892 0111
Action if patient declines	▪ refer to authorised prescriber or doctor ▪ document in maternity record
Additional advice and information	▪ advise women to avoid the following for one to two hours before and after taking this medicine: tea, coffee, milk, eggs and whole grains, as they reduce the absorption of iron ▪ medicine which interacts with iron should not be taken within one to two hours of iron ▪ Women taking levothyroxine should separate levothyroxine and iron doses by 4 hours ▪ iron is better absorbed on an empty stomach and should be taken one to two hours before meals, but if gastro-intestinal side effects are intolerable, advise women to take just after food ▪ give women dietary advice to optimise their iron intake ▪ encourage women to drink plenty of fluids and increase the fibre in their diet to prevent the development of constipation ▪ recommend taking with a glass of orange juice to increase absorption ▪ advise to contact midwife/GP if condition worsens or symptoms persist
Patient monitoring arrangements during and after treatment and follow-up required	Monitor both antenatal and post natal women in accordance with local guidelines.
Particular storage requirements	-

References

1. Summary of Product Characteristics http://www.medicines.org.uk Accord text revision 12.11.2019. Accessed 16.12.2019

2. http://www.bnf.org