

Medicine Optimisation Summary:

Changes to BNF iron supplement dose recommendation (December 2023)

Summary:

The BNF has changed its dosing advice for iron supplements, reducing the recommended dose from 2 to 3 times daily to 1 a day, or every other day. The reasons for this are:

- Studies show administration of 200mg oral ferrous sulfate on alternative days result in almost twice the amount of iron absorption as that from taking 100mg on consecutive days.
- This means fewer pills, and perhaps less gastrointestinal side effects.

Please follow these recommendations.

Indications and dose (From BNF)

Ferrous sulfate

Iron-deficiency anaemia [treatment and prophylaxis]

By mouth using tablets

Adult
200 mg once daily, reduced if not tolerated to 200 mg once daily on alternate days.

By mouth using modified-release tablets.

Adult
325 mg once daily, reduced if not tolerated to 325 mg once daily on alternate days.

By mouth using oral drops

Adult
2-4 mL once daily, reduced if not tolerated to 2-4 mL once daily on alternate days.

Ferrous fumarate

Iron-deficiency anaemia [treatment and prophylaxis]

By mouth using tablets

Adult
Initially 210 mg once daily, reduced if not tolerated to 210 mg once daily on alternate days, alternatively initially 322 mg once daily, reduced if not tolerated to 322 mg once daily on alternate days.

By mouth using capsules.

Adult
305 mg once daily, reduced if not tolerated to 305 mg once daily on alternate days.

By mouth using oral solution

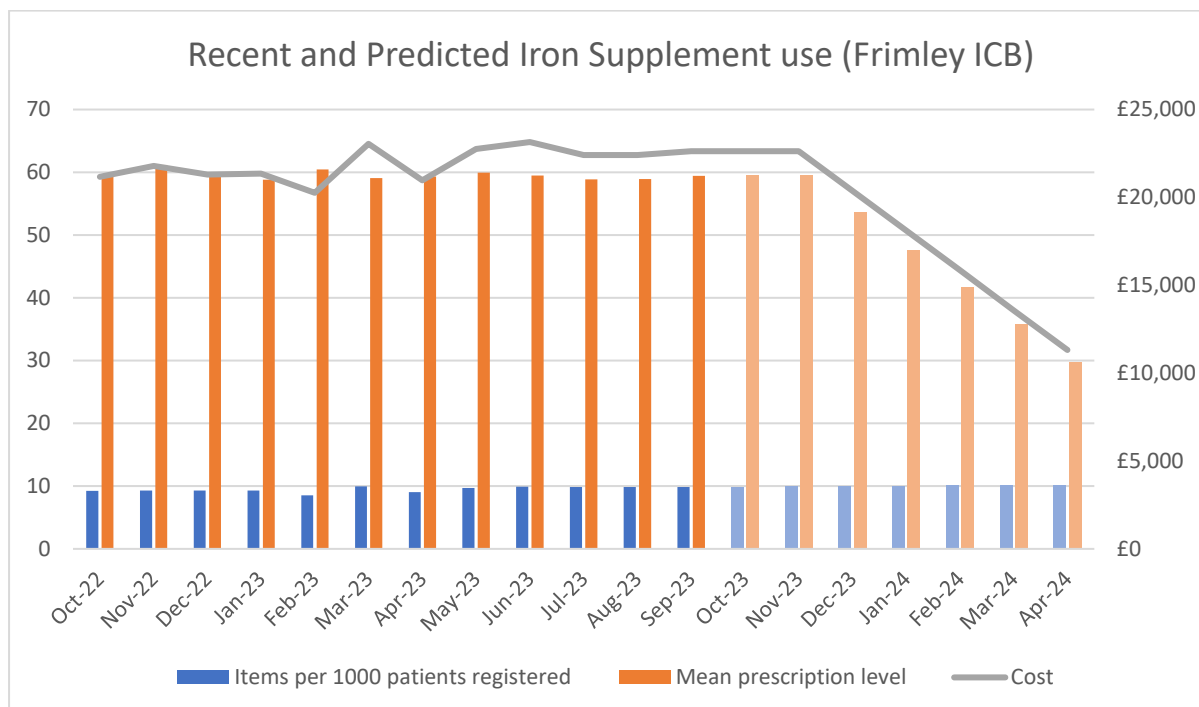
Adult
6-11 mL once daily, reduced if not tolerated to 6-11 mL once daily on alternate days.

Link to [BNF - Ferrous sulfate](#)

Link to [BNF - Ferrous fumarate](#)

Aims and Targets

The chart below summarises the primary care prescriptions of ferrous sulfate and ferrous fumarate from October 2022 to September 2023 in Frimley ICB (data Epact2). The chart then models future prescription levels based on a gradual uptake of the new guidance.



- The **orange columns** show the average number of iron supplement tablets prescribed in each prescription, across Frimley. This is currently stable at an average of around 60 tablets, and we aim to decrease this to an average about 28 by April 2024, as the new guidelines are adhered to.
- The **grey line** shows the total monthly cost of these prescriptions across Frimley and the aim is that the monthly costs will reduce from about £20,000 to about £10,000. The predicted savings for this financial year are £34,000 and for next financial year £130,000.
- The **blue columns** show the average amount of iron supplement prescriptions across Frimley. This shows a slow increase, in line with population growth, and we expect this to continue.

It should be noted that this data is from primary care only, and further reductions and savings will be made in secondary care.

Further resources:

- [BNF guidance - Ferrous fumarate](#)
- [BNF guidance - Ferrous sulfate](#)
- [Presentation slides - Oral Iron Supplementation by Maneet Ahuja](#) (Clinical Pharmacist, Frimley Health NHS Foundation Trust) (7 slide deck)
- [Iron Optimisation in Primary Care \(March 2023\)](#) Interview with Surrey Heartlands GP about his experience of reducing dose of iron supplements (video - 22 mins)

NHS Frimley Medicines Optimisation Team: December 2023