Quality of Care NL

Little Change in Ferritin Testing by Family Physicians in NL

Guideline from Ontario Association of Medical Laboratories

Screening of the general population for iron deficiency is not indicated.

Practice Points

1. Patients with microcytic anemia and at-risk populations with signs and symptoms suggestive of anemia should be considered for ferritin testing.

   These at-risk groups include those with increased requirements for iron (menstruating females, pregnancy, lactation, and growing infants and children), people with increased blood loss, decreased intake, or decreased absorption of iron.

2. In 2015/16 130,000 ferritin tests were undertaken by Family Physicians (FPs) in NL, a rate of 1:4 of the population. At a cost of $10/test this ferritin testing amounted to $1.3 million.

3. Substantial screening for iron deficiency in low-risk groups without anemia (females >50 years, males) was undertaken in Eastern Health (EH).

4. In EH, audit, feedback and academic detailing on ferritin testing was undertaken in 2016/17.

5. Practice Points Vol. 2 contained advice on ferritin testing and was mailed to all FPs in 2017/18.

Methods

1. Data on ferritin testing from 1 Apr 2015 – 30 Mar 2018 was obtained from the NL Centre for Health Information, and analysed by region, and by FP. For EH and Western Health (WH), data for 2017/18 were compared to 2015/16, but for Central Health (CH) baseline was 2016/17.

Results

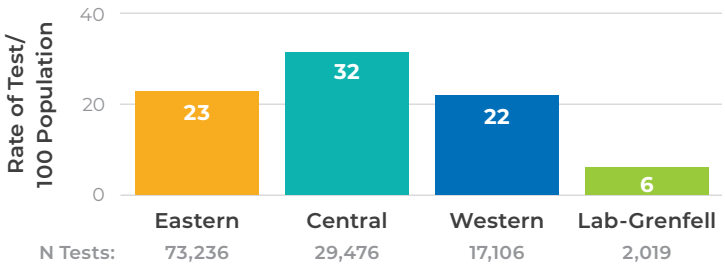

Fig. 1. Rate/100 Population for Ferritin Testing by FPs in the Four Health Regions in 2017/18

- Rate of ferritin testing was highest in CH (1:3 of population) but high also in EH and WH (nearly 1:4 of population).

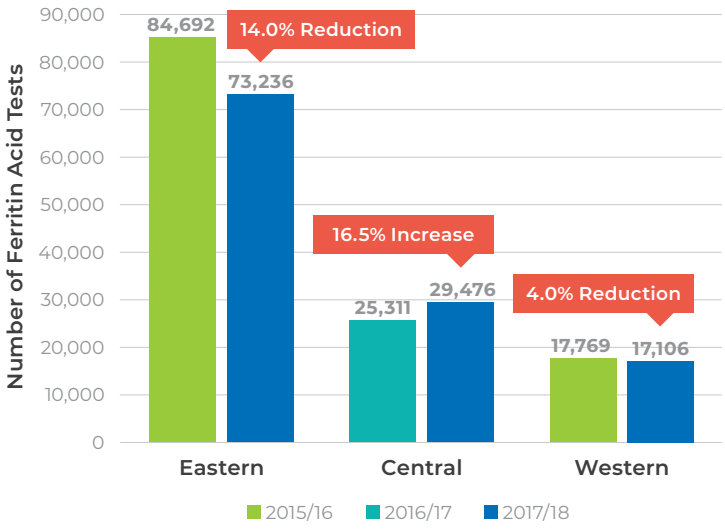

Fig. 2. Change in Ferritin Testing in 2017/18 Compared to Baseline Ordered by FPs Analysed by Health Region

- A reduction of 14.0% was observed in EH and of 4.0% in WH, but an increase of 16.4% occurred in CH.

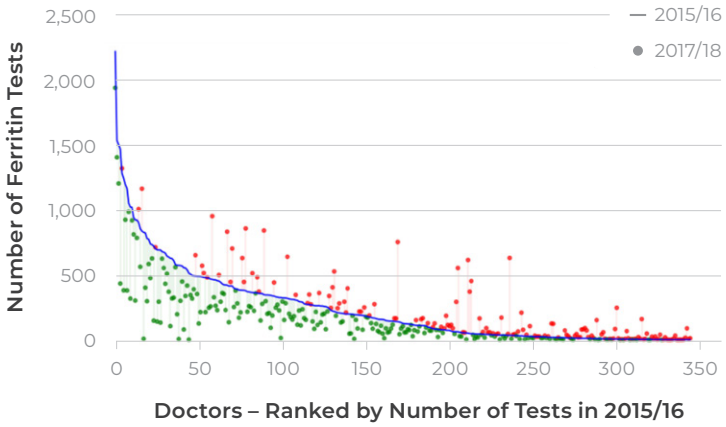

Fig. 3. Change in the Number of Ferritin Tests Ordered by FPs at EH Comparing 2017/18 to 2015/16

Note: On the x-axis doctors are ranked by volume of tests in 2015/16 (solid line) and each individual FP's 2017/18 data is provided as a dot (linked by a vertical line to their 2015/16 volume), with a reduction revealed by the dot below the solid line and an increase by the dot above the line.

- Of 345 FPs in EH, 43% had an increase or no reduction in ferritin testing.
- Six FPs ordered >1,000 tests annually.

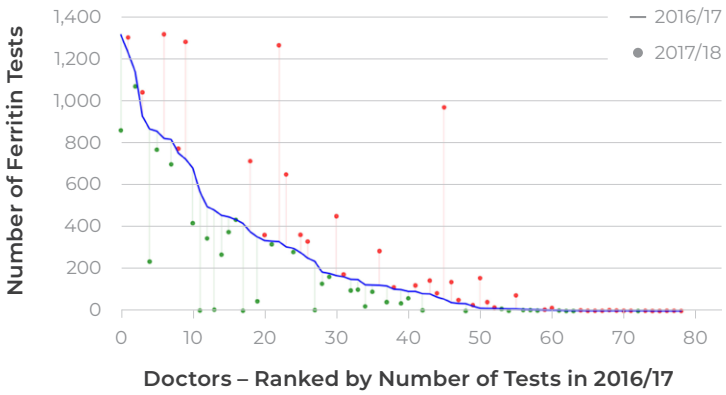

Fig. 4. Change in Number of Ferritin Tests by FPs in CH Comparing 2017/18 to 2016/17

See note of Fig. 3 for interpretation.

- Of 79 FPs in CH, 75% had an increase or no reduction in ferritin testing.
- Seven FPs ordered >1,000 tests annually.

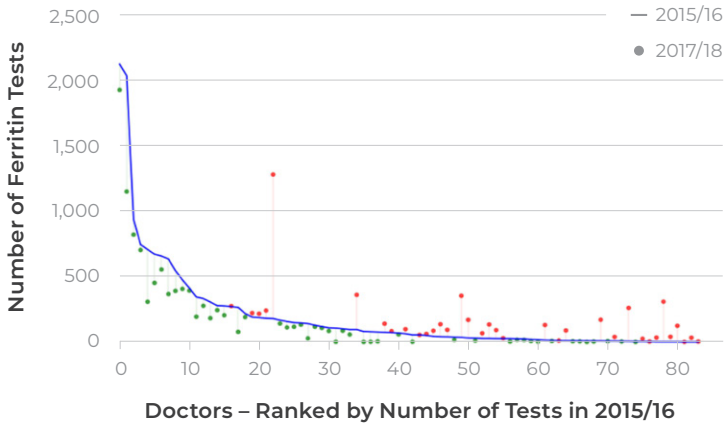

Fig. 5. Change in Number of Ferritin Tests by FPs in WH Comparing 2017/18 to 2015/16

See note of Fig. 3 for interpretation.

- Of 84 FPs in WH, 42% had an increase or no reduction in ferritin testing.
- Three FPs ordered >1,000 ferritin tests annually.

Conclusions

1. Ferritin testing is very high in NL, despite the fact that ferritin screening in groups at low risk for hypoferritinemia is not indicated.
2. A small number of FPs ordered >1,000 ferritin tests annually.
3. A small reduction in ferritin testing was associated with audit, feedback and academic detailing in EH.
4. In patients who have a hemoglobin ordered, reflex testing for ferritin should be undertaken in the laboratory in patients with anemia or microcytosis.
5. Consideration should be given to removing ferritin from the requisition form and ferritin undertaken when ordered in writing.