

Decrease in Ferritin Testing in Patients with Normal Hemoglobin Level

Guideline

1. Ontario Association of Medical Laboratories guidelines states that screening of the general population for iron deficiency is not indicated.

Objective

To determine whether ferritin testing in patients with normal hemoglobin was undertaken predominantly in younger women with increased requirements for iron.

Practice Points

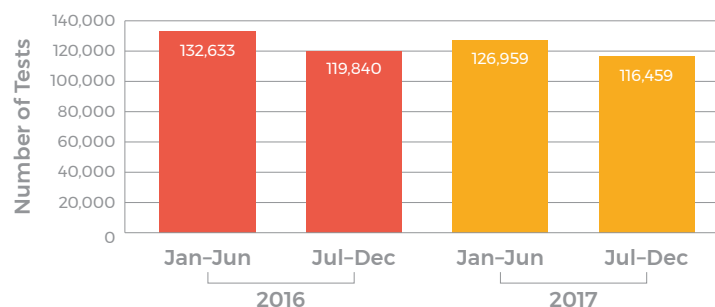
1. At-risk populations with clinical signs and symptoms and patients with microcytic anemia should be considered for testing. These include those with increased requirements (menstruating females, pregnancy, lactation, and growing infants and children), people with increased blood loss, decreased intake, or decreased absorption.
2. Serum iron, iron binding capacity, and percent saturation testing for iron deficiency is not encouraged because serum ferritin is preferable.

Method

1. Hemoglobin, iron saturation, and ferritin tests undertaken at Eastern Health by General Practitioners (GPs) in 2016 and 2017 were studied over four six-month periods. Academic detailing was undertaken with GPs in Eastern Health on ferritin testing in the first six months of 2017.

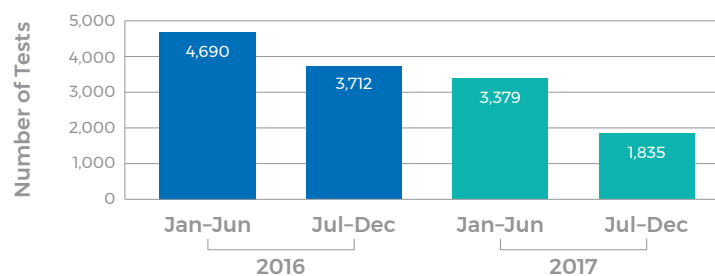
Results

Number of Hemoglobin Tests by Six Month Period in 2016 and 2017



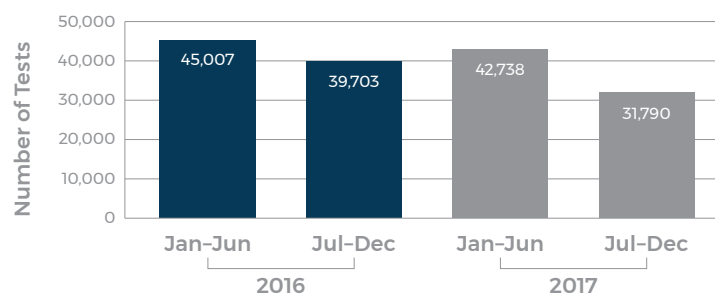
There was 4% drop in hemoglobin testing from 2016 to 2017

Number of Iron Saturation Tests by Six Month Period in 2016 and 2017



There was a 51% drop in iron saturation testing comparing Jul-Dec 2016 to Jul-Dec 2017

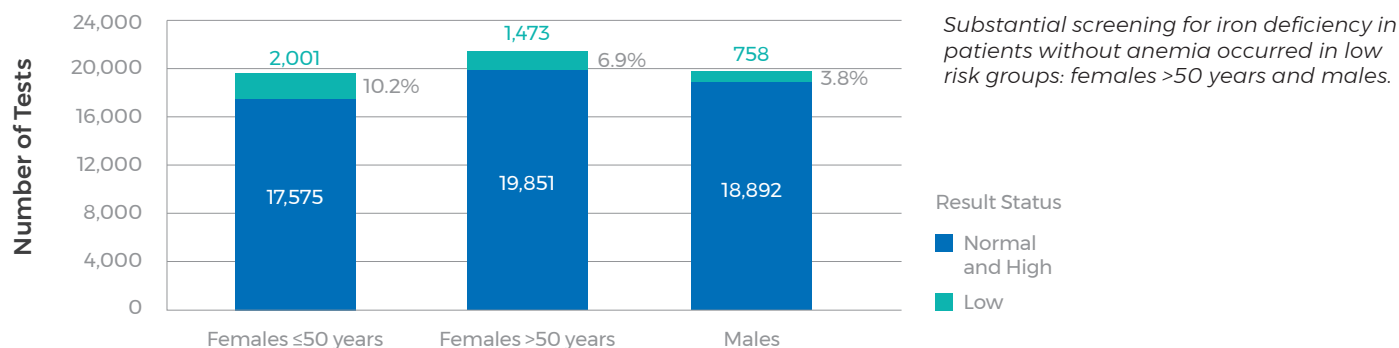
Number of Ferritin Tests by Six Month Period in 2016 and 2017



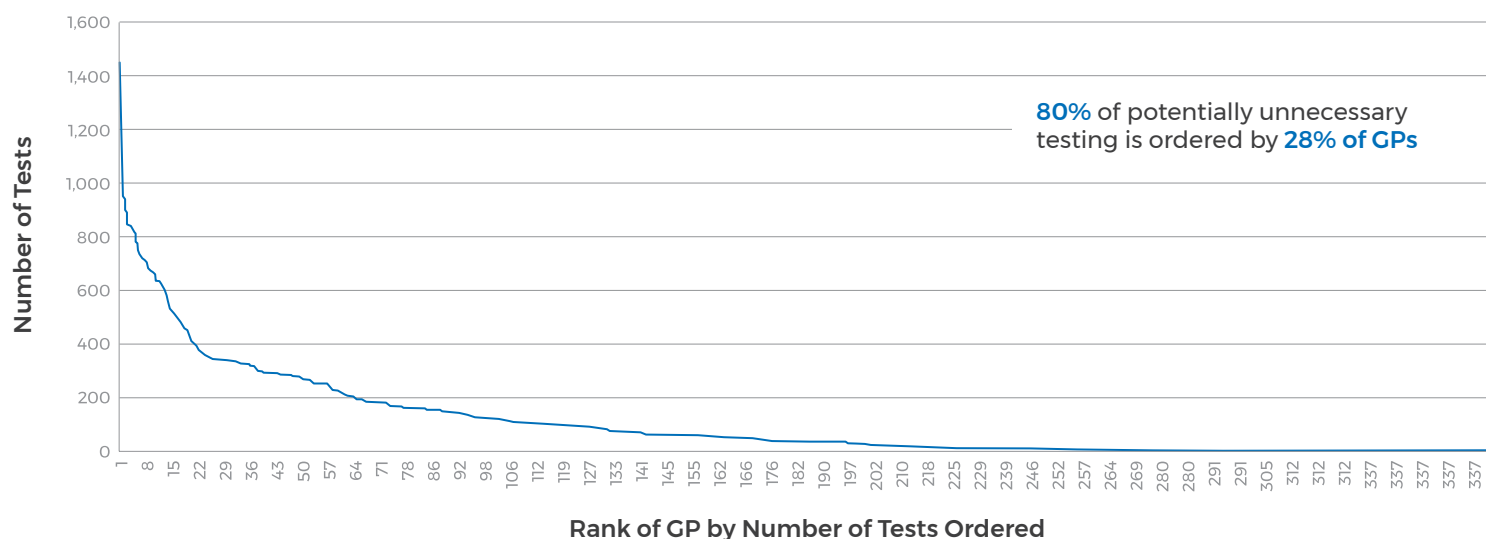
In Jul-Dec 2017, compared to Jul-Dec 2016, there was a 20% reduction in ferritin testing

Decrease in Ferritin Testing in Patients with Normal Hemoglobin Level

Number of Ferritin Tests Ordered by GPs by Sex and Age in 2017 Who Had Normal Hemoglobin, MCV, and MCH



Ferritin Testing in Male Patients and Females >50 Years With Normal Hemoglobin, MCV, and MCH by GP



Conclusion

1. Iron deficiency screening using ferritin testing in non-anemic patients in the general population is being undertaken by some GPs and is not indicated unless the patient is in an at-risk group.