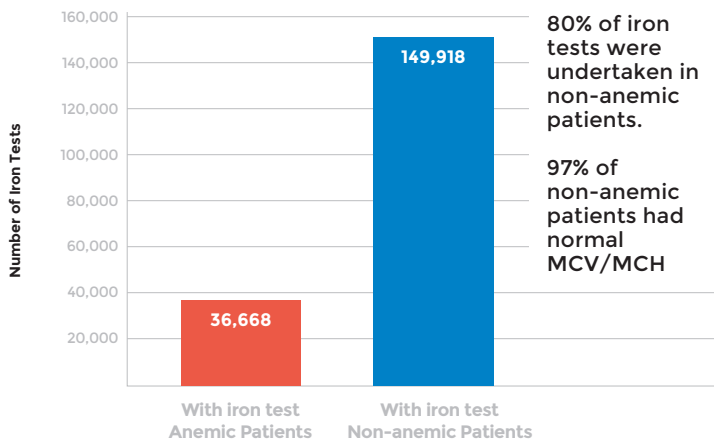


Iron Testing

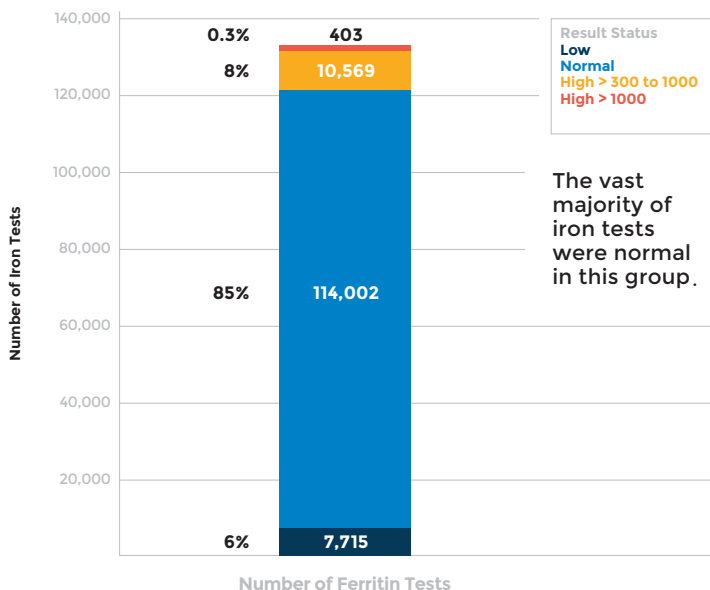
Practice Points

1. Iron sufficiency is usually measured with serum ferritin rather than iron saturation.
2. Asymptomatic non-anemic patients should not be tested for ferritin, and testing should be individualized in symptomatic non-anemic patients, as it is uncertain whether treatment of hypoferritinemia with oral iron will lead to clinical benefits.
3. Patients with anemia and low MCV should be tested for ferritin, because: (a) Older adults with iron deficiency anemia should be investigated for gastro-intestinal cancer. (b) Women of reproductive age require iron if iron deficient.

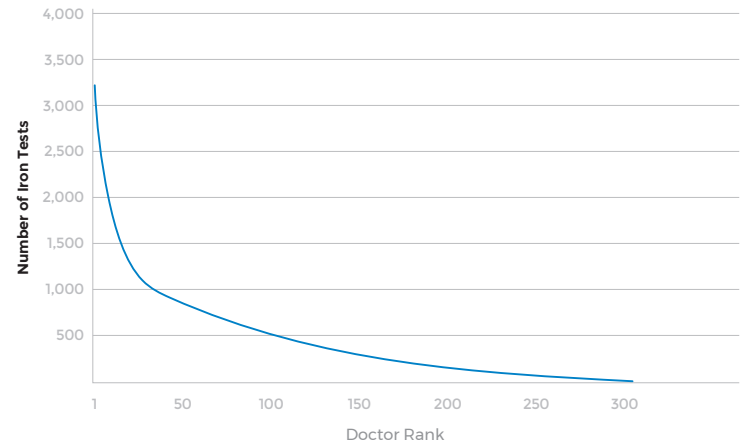
Number of iron tests ordered by family doctors, by anemia (2014-16)



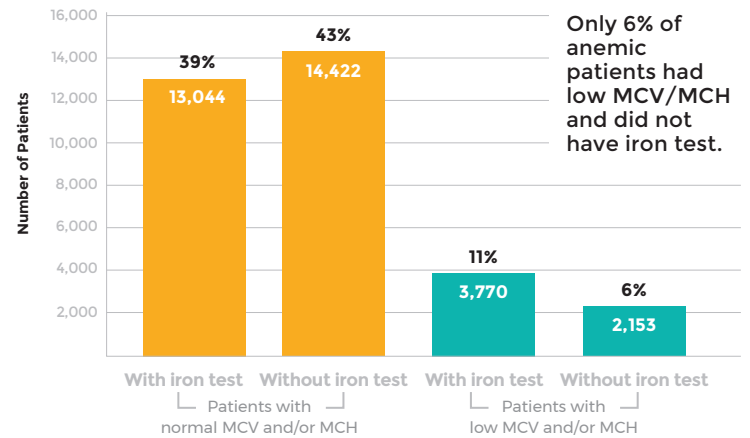
The number of ferritin tests done in people with normal HGB, MCV, and MCH (2014-16)



Iron tests ordered by family doctors in non-anemic patients with normal MCV or MCH, ranked by test ordering volume:



Iron testing in anemic patients by MCV/MCH level



The analysis reveals both potential over- and under-use of iron testing.

OVER testing in those without anemia is substantial, low yield and costly. A ferritin test costs \$10.

Although small in number:

- UNDER testing adults over the age of 60 with likely iron deficiency anemia risks not diagnosing bowel cancer.
- UNDER testing women aged less than 40 with likely iron deficiency anemia may be associated with a missed opportunity to treat symptoms and to prevent problems in pregnancy.