The High Value Care
One Minute Guide to:

Folate Testing in Anemia

Q: Should you test folate levels in your hospitalized patients?

The Bottom Line: Do NOT routinely test folate levels in your hospitalized patients.

Context: Folate deficiency is a well-described cause of macrocytic anemia. The American diet has been fortified with folic acid from a variety of food sources since 1998. This has led to near-elimination of folate deficiency (less than 1 in 1000 prevalence in a large North American cohort\(^1\)).

The Data: Two large, hospital-based retrospective cohort analyses found 2093\(^2\) and 2563\(^3\) inpatient RBC and serum folate levels assessed in a 1 year period, respectively. Only 2 and 4 individuals, respectively, were found to have deficient levels on testing, and one of the low levels in the second study was actually felt to be spurious. The charges incurred with of folate testing in these studies ranged between $32,000 - $316,000, with a cost per deficient result ranging from $8,000 to $158,000.

Conclusion: Folate deficiency is vanishingly rare in North American patients and only seen in specific contexts such as severe alcohol use disorder, malabsorption, and severe malnutrition. If you have a high-suspicion that a patient has folate deficiency, then empirically treat them or encourage them to eat. Remember to rule out a B12 deficiency.