hypothyroidism. In this population, 94% did not have indicated FT4 testing or any other follow-up (Figure 3). Further, in those individuals with low TSH—considered abnormal in non-pregnant women but normal for a pregnant patient—inappropriate and/or unnecessary follow-up occurred 50% of the time.

A root cause analysis revealed that the lack of adherence was twofold: 1) TSH and FT4 were bundled in an electronic order set for first time prenatal labs, and 2) TSRIs were not considered. Screening for thyroid dysfunction in pregnancy was indiscriminate and differed by practice because it was order set driven.

CONCLUSION
In the absence of universal screening recommendations, laboratories should outline carefully defined screening parameters to guide clinicians in determining when it is appropriate to screen for thyroid dysfunction in pregnancy. After identifying high-risk patients, screening for thyroid dysfunction in pregnancy should begin with a TSH measurement, followed by assessment of FT4 if TSH is abnormal using TSRIs. If overt thyroid disease is identified, assessment of thyroid antibody status should also be evaluated as this knowledge helps direct care particularly in the postpartum period.

Given the dependence of the developing fetus on maternal thyroid function, particularly early in pregnancy, as well as the severity of outcomes in untreated thyroid disease, appropriate screening should take place as early as possible such that the proper treatment course can be administered. If a patient’s thyroid antibody status is known to be positive, or if a patient has an autoimmune disease, thyroid screening should take place before conception if possible and be monitored appropriately throughout pregnancy.

Methodology is also important. While there are advantages to equilibrium dialysis and LC-MS/MS analysis of thyroid function tests in pregnant women, these methods are generally impractical in high-volume clinical settings. IAs are a practical way to assess thyroid function as results are reported and interpreted in the context of assay-specific and TSRIs that are representative of the local patient population.

In all these areas, patients rely on the unique expertise of clinical laboratorians to guide testing and help ensure patients receive timely and effective treatment.

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