

EDITORS' NOTE

In this Issue: Testing Characteristics of Patient-Centered Medical Homes, Patient Self-Care, Predicting Outcomes, and Practical Clinical Information

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Testing Specific Characteristics of Patient-Centered Medical Homes

Use of electronic health records (EHRs) is taking off. They are intuitively appealing, but they are not always better than the paper version. One aspect that electronic records should help with is the availability of test results; another possibility is more appropriate and timely orders with the use of prompting. After implementing an EHR, Metz et al¹ identified improvements in both of these areas for routine prenatal studies in a family medicine residency, and very good rates for both ordering and charting were improved to near perfect.

Pandhi et al² try to tease out whether the accessibility aspect of medical homes increases preventive services beyond what occurs when there is continuity between a physician and an insured patient. The answer is *yes*. Even for the patients with continuity, those who rated accessibility of their continuity of care office as very good or excellent on all 8 evaluative questions received more preventive services.

Getting it all done is not easy. Sloane et al³ present their findings on primary care practices that took on quality in a big way, leading to sustainability of data measurement and changed processes. They provide helpful information about just how hard it can be to make needed quality changes, as well as helpful insights for others trying to leap the quality chasm.

Involving Patients

Two-thirds of patients with high blood pressure tested their pressure at home at least once a month using a free cuff.⁴ This is good news, and these

results could improve appropriate blood pressure control. However, most patients did not report this self-monitoring through the central reporting mechanism, which may not be the most efficient mechanism to get such results. Furthermore, many patients did not tell the doctors their results, even during scheduled office visits. Why did they not tell the doctor? Because the doctor did not ask and/or because they thought the doctor would not care. But doctors do care, and should want to know. So, all doctors need to do is “just ask” about patients’ home blood pressure results!

Self-care is key to the treatment of many common diseases. With data from the American Time Use Survey, Jonas et al⁵ found that disabled patients or those in poor health spend hours each week on self-care. Physicians likely underestimate this and frequently presume that patients will be able to perform the various home health care tasks needed to handle the illness. Consider how much time it takes the average patient with significant diabetes to do foot care, self-test blood sugar, or take insulin. Then, add in time for planning and preparing special foods, which was excluded in the Jonas et al⁵ study. Recognition by health care providers of the time intensity of self-care could go a long way toward helping patients feel understood and potentially prioritize which self-care items to undertake.

Predicting Outcomes

We use population-based modeling to understand risks for individual patients in the office; these help guide our recommended intensity of therapy as well as help patients decide the relative importance of care for the illness in question. The *JABFM* has published several articles about chronic kidney disease in primary care during the last 5 years,^{6–11} to

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which we add one by Cummings et al.¹² This article uses population-based modeling to show that fluctuations in glycosylated hemoglobin levels are less important than known traditional risk factors in the decline in kidney function that frequently occurs in patients with diabetes.

Saver et al¹³ look at the usefulness of predictions based on large databases for individual patients. Family physicians often use population-based data, such as that from the Framingham study, to predict outcomes and decide, for example, who should take cholesterol medications. However, Saver et al¹³ identify that two large prediction models make quite varied predictions, calling into question the ability to use these studies to predict outcomes for changes at an individual patient level, such as whether losing weight will prevent bad outcomes for a given patient with diabetes. This is yet another reminder that we have to consider the overall clinical and psychosocial aspects of each individual in addition to risk factors identified from large cohort studies.

Elevated Liver Function Tests, Fatty Liver, Uric Acid, and Metabolic Syndrome

Metabolic syndrome in elderly men is found when the liver enzyme alanine aminotransferase is abnormal, but it is even more likely when the ultrasound shows fatty liver, despite whether the liver function tests are abnormal.¹⁴ The study was done in Taiwan where routine screening using ultrasounds of the liver are more common because of the high rate of liver cancer. Thus, when an abdominal ultrasound is ordered for another indication and fatty liver is discovered, consider metabolic syndrome.

In another article identifying important relationships with high liver function tests, Mainous et al¹⁵ identified that elevated uric acid is associated with an increased rate of high ferritin, thereby suggesting that one should check for iron overload when there is a high level of uric acid. Ferritin is elevated with a number of conditions: hemochromatosis, iron overload of another etiology, fatty liver, and inflammation of another cause such as cancer and infections or inflammatory autoimmune conditions. Both gout and iron overload also cause joint pain. Uric acid and ferritin were associated with elevated liver function tests, as were metabolic syndrome and diabetes (refer to another article by Mainous et al¹⁶ in a prior issue of *JABFM*). Many

laboratories do not include uric acid determination in the common complete metabolic panel; thus, we do not commonly see uric acid results that were not ordered for a specific reason. However, this study is a good hint to consider iron overload when there is a high uric acid.

Further, these two articles highlight another potential relationship. The same poor diet that is associated with metabolic syndrome is also associated with gout. Thus, it is logical that uric acid elevation also could be associated with metabolic syndrome and fatty liver. We should not only look for iron overload when uric acid is elevated, but should also consider undiagnosed diabetes and/or metabolic syndrome, particularly when alanine aminotransferase is elevated or fatty liver is found on ultrasound.

Practical Information for Common Problems

Bayard et al¹⁷ report on a randomized trial of bupropion for restless leg syndrome. They used a fixed dose of bupropion (150 mg a day) and found greater improvement at 3 weeks but no significant difference at 6 weeks. More research is needed because bupropion is cheaper than several alternatives and usually is well tolerated. We need studies that look at larger and variable dosing of bupropion and direct comparison with other medications used for restless leg syndrome.

An evidence-based review for diagnosis and treatment of constipation provides good information.¹⁸ Simultaneously, however, it seems that much is not yet recognized or maybe not just studied. Following all the typical “tricks of the trade” does not necessarily lead to success. One of the author (MAB) believes a common cause of constipation among American adults (not just children) is voluntary stool withholding and/or avoidance of public toilets for stooling, ie, not going when urge is felt, which leads to harder stools. However, this “cause” does not seem to have been a common hypothesis considered in studies of constipation, as is noted in this large literature review.

In another interesting study, Lear et al¹⁹ report the rate of *Staphylococcus aureus* nasal colonization (23%, none methicillin resistant) and actual skin infections (5%) was lower than expected in football players in northeastern Ohio.

More

Other articles provide an update on Cannabis for medical treatment²⁰; views of the Pisacano scholars on doctoring²¹; simvastatin associated with meralgia paresthetica²² (something of which MAB would not have thought); and urine clarity as a not-good sign for the presence or absence of a urinary tract infection.²³

Next issue: Our Sixth Practice-based Research Theme Issue

Since 2006, the *JABFM* has published an annual theme issue highlighting practice-based research and the significant research from practice-based research networks. However, such reports are not confined to the annual theme issue and can be found in other issues throughout the year as well. This year we had a tremendous response to our call for papers, and we are looking forward to an exciting September/October 2011 issue that showcases the breadth of research in the primary care setting and reports about the nature of practice-based research networks.

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