

# Real-Life Observational Studies Provide Actionable Data for Family Medicine

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**This issue includes several excellent observational studies prompted by physicians' clinical questions. Many people use lots of menthol cough drops—does the menthol overall lengthen the cough duration? When should we intensify treatment of older individuals with diabetes? Do occipital nerve blocks work for acute migraine headaches? Did you know that the plantar fascia can rupture? What happens to those patients with chest pain but low pretest probability for serious cardiac disease who are admitted to the hospital? Acupuncture can work well—for the patients—but how can we incorporate it into the usual pace of the family medicine office? Is it a win-lose situation when medical assistant roles are expanded? How many practice sites do physicians have and does that make a difference in the number or type of health personnel shortage areas? What would you guess on the presence of humor in the medical office—more or less than half of the visits; introduced by doctors or patients; primary care or specialty doctors? (J Am Board Fam Med 2018;31:171–173.)**

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## Clinical Observations

Does the menthol in cough drops contribute to prolonging the duration of the cough? Have you ever walked in the room and smelled what seems like the ever-present odor of menthol? One physician pondered this question and a research network followed up with an observational study.<sup>1</sup> If it were not for the well-done statistics, it might be easy to ignore the intriguing conclusions.

McCreedy et al<sup>2</sup> looked at diabetes treatment in a vignette-based study, considering factors associated with decisions to change medicines in older patients with diabetes and various comorbidities. More than half of the clinicians made recommendations consistent with guidelines for many of the patients presented, either for no change or increased medication. However, many recommended intensification of treatment for an 80-year-old woman with multiple concurrent diseases and an  $HbA_{1c}$  of 7.5%, despite recommendations not to do so, with internal medicine clinicians and nurse practitioners more likely than family physicians to intensify treatment. Another site<sup>3</sup> follows a large number of

individuals attending diabetes group visits and were unable to detect positive disease-related outcomes.

Mothers come to well-child visits. Mothers may not be getting care. Srinivasan et al<sup>4</sup> recognized this and implemented screening of mothers during well-child visits for risks through the IMPLICIT Network of practices. This was not simple. The screening did not cover all maternal needs, instead emphasizing those areas most important to the health of the child and to interconception issues, such as birth control use. Thankfully, despite the difficulties, many interventions were undertaken. This may be simpler in a family medicine office, where the mother has a significant likelihood of also being a patient of the practice.

Given the mixed results of prior research concerning greater occipital nerves blocks for acute migraine headaches, Allen et al<sup>5</sup> decided to review 5 years of data from the Mayo Clinic, Arizona, reporting outcomes for several hundred patients. Four of 5 patients returned for a follow-up visit, more than half of those reported a good response, and an additional quarter reported a moderate response. Repeated injections were associated with more improvement, but the authors were unable to distinguish the outcome by type of volume of medication used. Thus, learning this relatively simple

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technique is likely to help a substantial portion of patients with acute migraine pain, but not everyone. A recently published meta-analysis came to the same conclusion, based on 6 trials they found in the literature.<sup>6</sup>

The clinical case from Servey et al<sup>7</sup> highlights that plantar fascia rupture can occur even without obvious risk factors such as prior plantar fasciitis or steroid injections. Ultrasound assisted in the diagnosis.

What happens after the patient with a low pretest probability for coronary artery disease is admitted? In this observational study, more than half received a coronary angiogram or computerized tomography, yet none were positive for obstructive coronary artery disease.<sup>8</sup> Given the concern for potentially serious risks from unnecessary testing, the authors are pursuing additional study to provide more data to determine the best choices for patients.

Our ethics feature article<sup>9</sup> concerns treatment availability. The convenience sample was residency directors, and the example clinical entity was hepatitis C. At least some state Medicaid programs only provide treatment to the most advanced hepatitis C cases and excluded patients with recent substance abuse, thereby creating the potential for further transmission and new cases. The cost of the treatment is likely the primary reason for the restrictions. You may compare your own sense of moral distress to this situation with the thoughts of the respondents.

### **Improving Practice**

Ferrante et al<sup>10</sup> note that medical assistant roles move from relatively passive to more active in Patient-Centered Medical Homes. There are multiple barriers to this shift, and multiple personal responses to the new roles by both clinicians and medical assistants. Some medical assistants appreciate their new roles, whereas others may not appreciate the changes or are not sufficiently skilled to undertake the new tasks. The task shifting may help the clinicians feel better, but not always the medical assistants. Further, are the shifts more about documentation or true “health care”? The authors review the implications of their findings, with suggestions about how to better implement Patient-Centered Medical Homes based on their findings.

Acupuncture may be clinically effective, yet many trained clinicians do not end up providing acupuncture in practice. Perhaps it is not easily incorporated in the flow of family medicine, given the longer-than-average visit length, and the common need for 2 to 3 visits per week. And, oh, please be quiet during treatment. There are barriers for the patients as well. Ledford et al<sup>11</sup> used interviews to determine how 1 office was successful where others have failed.

Venner et al<sup>12</sup> report survey results of primary care providers’ opinions and practices concerning alcohol and opioid use screening. The authors make an argument that the current focus of these efforts may not be directed at the population in whom the greatest difference can be made.

Radcliff et al<sup>13</sup> demonstrate a new methodology for studying the impact of natural disasters, and subsequent recovery, within primary care. They apply the method to Veterans Administration health clinics during and after a recent hurricane landfall. With natural disasters seemingly on the rise, this methodology is indeed timely.

Recovery from disasters is probably easier when physicians have more than 1 office location, that is, 1 may be damaged and another may not. Xierali et al<sup>14</sup> provide new information on physician availability by looking at the number of individual physician practice sites. It is admittedly a research-intensive article, using newly available data unique to Georgia. The average physician practices at more than 1 location, which could be a hospital and an office. However, many physicians practice in more than 2 locations, with many of the additional areas outside of the densely populated urban areas. Perhaps this means there is more physician availability in designated shortage areas than previously understood.

### **Humorous**

And humorously, we will end with an article that humors our hearts.<sup>15</sup> Joking aside, humor is common in office visits and introduced by patients and doctors of all types. In our offices, we feel that it makes the visit more pleasurable and sometimes more effective in leading to outcomes.

*To see this article online, please go to: <http://jabfm.org/content/31/2/171.full>.*

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