New Research on Back Pain, Diet and Diabetes, Advanced Care Planning, and Other Issues Frequently Seen in Family Medicine

Marjorie A. Bowman, MD, MPA, Anne Victoria Neale, PhD, MPH, and Dean A. Seebusen, MD, MPH

From the United States and Netherlands, we have 2 articles on back pain, with findings that indicate significant treatment differences between the countries, and a high likelihood of persistence. The Inflammatory Diet is now shown to be related to diabetes. Multiple perspectives on palliative care for the homeless. Could pharmacists assist in preventing suicide? There are changes in the practice of family medicine. Social determinants of health substantially influence health and medical care. Moreover, care for patients from deprived communities is under-reimbursed. Patient pre-existing conditions increased after the Affordable Care Act, suggesting that repealing pre-existing condition protections would likely exacerbate disparities in health and health care. (J Am Board Fam Med 2019;32:759–762.)

Interventions and Long-Term Outcomes of Back Pain in Older Patients

Early imaging of patients with low back pain is discouraged unless certain “red flags” are present; older age is 1 of the recognized red flags. Powell et al1 examined the long-term implications of early imaging in more than 57,000 patients in Medicare Advantage Plans. Patients seeing primary care or chiropractors for the initial visit had less imaging and fewer interventions. Imaging was associated with increased narcotic use and surgical intervention. Some of the findings are troubling in light of the ongoing “opioid epidemic.” Unfortunately, van der Gaag et al2 found that back pain in Dutch adults over age 55 years is quite persistent over the next 5 years. Of note, the imaging rate was substantially higher in the United States than in the Netherlands. The use of physical therapy or chiropractic therapy was higher in the Netherlands. Perhaps, we should also think, “Yoga anyone?” Penrod et al3 found that back pain is one of the most common associations with mentions of yoga in the medical records of a large health system. In addition, over 10 years, the percentage of charts with mention of yoga increased 10-fold.

Improving Clinical Care: Inflammatory Diet and Diabetes, and Alzheimer Disease

Findings from a wonderful family medicine article using the National Health and Nutrition Examination Survey (NHANES) dietary recall data confirms what many have suspected. King et al4 document that diabetes is associated with a diet high in foods associated with postmeal increases in 6 established inflammatory biomarkers (IL-1β, IL-4, 58 IL-6, IL-10, TNF-a, and C-reactive protein). Think sugars, transfat, refined carbohydrates, excess alcohol, and processed meat. For “each 1-point increment in the Dietary Inflammatory Index, the odds of having hemoglobin A1c higher than 9% increased by 43% (95% CI, 1.21 to 1.68).” However, is an elevated hemoglobin A1c always a reliable indicator of glycemic control? It turns out there are several clinical scenarios when this requires more thought. The unusual brief report from St. Louis and Valdini5 provides an opportunity to review these situations.

Although uncertainty continues regarding the usefulness of statins for primary prevention of cardiovascular disease, there is no such uncertainly about statins for secondary prevention. Despite this, statins have historically been underutilized. Use of a large publicly available database, the Medical Expenditure Panel Survey, allowed examination of whether or not statin use for secondary prevention has improved over time.6

Conflict of interest: The authors are editors of the JABFM.

doi: 10.3122/jabfm.2019.06.190322
Addressing suicide and suicidal ideation is a big task and should be a goal for all members of the health care team. In their commentary, Mospan et al\(^7\) explore the role that community pharmacists could potentially play. As pharmacy providers directly interact with a large number of patients every day, and more often than the individual’s primary care clinician, there are multiple ways in which community pharmacists can contribute to suicide screening, education, and prevention. Lam et al\(^8\) provide an update on the status of Alzheimer disease detection and treatment. A combination of brief cognitive tests and blood-based biomarker tests may soon allow primary care providers to identify patients with early-stage Alzheimer disease (AD) efficiently and triage them for further evaluation or treatment.

**Women’s Health**

Witt et al\(^9\) report that embedding a lactation consultant in a family medicine practice can be financially feasible, and much appreciated. One-of-a-kind report: Tolliver’s\(^10\) article on hair care maintenance as a barrier to physical activity in African American women provides interesting information for those unaware of this issue. The extent of this problem may vary with current hairstyle trends. Hair maintenance concerns are likely relevant, to some extent, for women of other ethnicities as well.

**End-of-Life Care and Advance-Care Planning**

Brungardt et al\(^11\) reported on improving Advance-Care Planning (ACP) outcomes by engaging older adults through portal-based tools, including an electronic Medical Durable Power of Attorney form. Brief motivational messages about ACP via a patient portal were initiated, and if not read within 2 weeks, a mailed postcard reminder was sent. Sixty-one percent read the electronic message at 12 months, and 16% engaged in at least 1 ACP action.

Kim et al\(^12\) summarized the content of ACP clinical notes and compared with ACP billing code reimbursement in a tertiary care setting, one of the many places it would seem obvious to initiate these types of interactions. They reported very low use of ACP billing, suggesting that the reimbursement level continues to be insufficient to make ACP financially worthwhile. In 2 related articles, MacKenzie et al\(^13\) and Purkey et al\(^14\) studied the palliative care experience of homeless individuals and the attitudes and knowledge of those in position to care for them (such as health professionals and social workers). While homeless individuals have high mortality rates, they also experience serious illness before death and should have the opportunity to receive palliative care. The homeless individuals had many ideas about end of life care.\(^14\) Yet, multiple thematic gaps and problems, such as the lack of available services and negative attitudes, are identified and reviewed.\(^13\) The associations of advance care planning conversations with various physician and practice characteristics is also explored by Nowels, et al.\(^15\)

**Family Physicians or General Practitioners in Family Medicine Research**

In the United States, there are considerable differences between family physicians and general practitioners. However, the differences are not always appreciated by researchers publishing in the medical literature. Failing to recognize the differences could alter the interpretation of research results. Diep et al\(^16\) report on how family physicians and general practitioners are (or are not) differentiated in the research literature. Of note, \textit{JABFM} encourages submitting authors to separate family physicians and general practitioner groups whenever feasible.

**Changes and Lack of Change in Family Physician Practice—More E-Visits, Less Hospital Care**

Despite training to provide care across the continuum of health delivery settings, Jetty et al\(^17\) report the proportion of family physicians reporting inpatient care decreased by 26% between 2013 and 2017, leaving approximately 1 in 4 of Family physicians (FP)s practicing hospital medicine in 2017. Peabody et al\(^18\) provide the prevalence and factors associated with family physicians providing e-visits. This evidence is from 7580 practicing family physicians who were recertifying with the American Board of Family Medicine. Fewer than 10% reported offering e-visits. Physicians in Health Maintenance Organization and Veterans Administration settings, compared with other sites, were more likely to provide e-visits, which suggests that reimbursement may be a major barrier to expansion of this form of telehealth.
O’Neill et al report on validating the test plan specifications for the American Board of Family Medicine’s Certification Examination to demonstrate the degree to which the examination is representative of family physician practice with regard to frequency of encounter diagnoses and the criticality of the diagnoses. Data from the 2012 National Ambulatory Medical Care Survey were used to assess the frequency of diagnoses encountered by family physicians nationally. The results support the continued use of the current content specifications as being representative of current family medicine practice; however, small adjustments might be warranted to permit better representation of the criticality of the topics.

Social Determinants of Health—Challenges to Best Medical Care and Outcomes
Health disparities between the rich and poor are likely related to severity of illness and resources for care. Electronic health record data from over 78,000 uninsured patients aged 19 to 64 years in 386 Community Health Centers in 19 states contain a high level of pre-existing conditions. Huguet et al compared the prevalence and types of pre-existing conditions before the Affordable Care Act (ACA) in 2012 to 2013 and post-ACA (2014 to 2015) by insurance status and race/ethnicity. This study emphasizes the high prevalence of pre-existing conditions among Community Health Center patients and the large increase in the proportion of patients with at least one pre-existing condition post-ACA. Given how common these conditions are, repealing pre-existing condition protections could be extremely harmful to many patients and would likely exacerbate health care and health disparities.

Hatef et al furthers the evidence indicating social determinants create health differences. By linking Veterans Health Administration medical record data with neighborhood socioeconomic status, a complex picture emerges showing the association between housing factors (such as percentage of houses without plumbing and heating) to an increased likelihood of hospitalization.

Stephenson et al examined the implementation of standard of care depression treatment recommendations by ethnicity and language for patients who screened positive for major depression during a medical visit at an Integrated Federally Qualified Health Center. Spanish-speaking Latinos were less likely to receive or follow through with standard of care recommendations compared with English-speakers regardless of ethnicity. We still need to better understand culturally and linguistically sensitive approaches that improve depression care.

Care for disadvantaged individuals is also poorly reimbursed, which is likely not surprising to family physicians. Using large national datasets, Webb et al report that Accountable Care Organizations serving the most deprived communities (as indicated by the Social Deprivation Index) are less likely to share in savings, receiving 2.3 percentage points lower shared savings than those serving the least deprived communities.

To see this article online, please go to: http://jabfm.org/content/32/6/759.full.

References
1. Powell AC, Rogstad TL, Elliott SW, et al. Health care utilization and pain outcomes following early imaging for low back pain in older adults. J Am Board Fam Med 2019;32:773–780.
2. van der Gaag WH, Enthoven WTM, Luijsterburg PAJ, et al. Natural history of back pain in older adults over 5 years. J Am Board Fam Med 2019;32:781–789.
3. Penrod NM, Lynch S, Thomas S, Seshadi N, Moore JH. Prevalence and characterization of yoga mentions in the electronic health record. J Am Board Fam Med 2019;32:790–800.
4. King DE, Xiang J. The Dietary Inflammatory Index is associated with diabetes severity. J Am Board Fam Med 2019;32:801–806.
5. St. Louis J, Valdini A. Abnormally low hemoglobin A1c as harbinger of hemoglobinopathy. J Am Board Fam Med 2019;32:923–924.
6. Ngo-Metzger Q, Zuvekas S, Shafer P, Tracer H, Borsky A, Bierman AS. Statin use in the US for secondary prevention of cardiovascular disease remains suboptimal. J Am Board Fam Med 2019;32:807–817.
7. Mospan CM, Gillette C, McKee J, Daniel SS. Community pharmacists as partners in reducing suicide risk. J Am Board Fam Med 2019;32:763–767.
8. Lam J, Hlavka J, Mattke S. The potential emergence of disease-modifying treatments for Alzheimer disease: the role of primary care in managing the patient journey. J Am Board Fam Med 2019;32:931–940.
9. Witt AM, Witt R, Lasko L, Flocke S. Translating team-based breastfeeding support into primary care practice. J Am Board Fam Med 2019;32:818–826.
10. Tolliver SO, Hefner JL, Tolliver SD, McDougle L. Primary care provider understanding of hair care
maintenance as a barrier to physical activity in African American women. J Am Board Fam Med 2019;32:944–947.

11. Brungardt A, Daddato AE, Parnes B, Lum HD. Use of an ambulatory patient portal for advance care planning engagement. J Am Board Fam Med 2019;32:925–930.

12. Kim P, Daly JM, Berry-Stoelzle M, Schmidt M, Levy BT. Use of advance care planning billing codes in a tertiary care center setting. J Am Board Fam Med 2019;32:827–834.

13. MacKenzie M, Purkey E. Barriers to End-of-Life Services for Persons Experiencing Homelessness as Perceived by Health and Social Service Providers. J Am Board Fam Med 2019;32:847–857.

14. Purkey E, MacKenzie M. Experiences of palliative health care for homeless and vulnerably housed individuals. J Am Board Fam Med 2019;32:858–867.

15. Nowels D, Nowels MA, Sheffler JL, Kunihiro S, Lum HD. Features of U.S. primary care physicians and their practices associated with advance care planning conversations. J Am Board Fam Med 2019;32:835–846.

16. Diep AM, Thoppe HS, Yang A, Agnani AS, Phillips WR. Accuracy of reporting primary care specialty status in medical research. J Am Board Fam Med 2019;32:941–943.

17. Jetty A, Jabbarpour Y, Petterson S, Eden A, BaZemore A. The declining presence of family physicians in hospital-based care. J Am Board Fam Med 2019;32:771–772.

18. Peabody MR, Dai M, Turner K, Peterson LE, Mainous AG. Prevalence and factors associated with family physicians providing e-visits. J Am Board Fam Med 2019;32:868–875.

19. O’Neill TR, Peabody MR, Stelter KL, Puffer JC, Brady JE. Validating the test plan specifications for the American Board of Family Medicine’s certification examination. J Am Board Fam Med 2019;32:876–882.

20. Huguet N, Angier H, Hoopes MJ, et al. Prevalence of preexisting conditions among community health center patients before and after the Affordable Care Act. J Am Board Fam Med 2019;32:883–889.

21. Hatef E, Kharrazi H, Nelson K, et al. The Association Between Neighborhood Socioeconomic and Housing Characteristics with Hospitalization: Results of a National Study of Veterans. J Am Board Fam Med 2019;32:890–903.

22. Stephenson J, Distelberg B, Morton KR, Ortiz L, Montgomery SB. Different depression treatment recommendations and adherence for Spanish- and English-speaking patients. J Am Board Fam Med 2019;32:904–912.

23. Webb AR, Liaw W, Chung Y, Petterson S, BaZemore A. Accountable care organizations serving deprived communities are less likely to share in savings. J Am Board Fam Med 2019;32:913–922.