coping strategies (including substance use), lack of autonomy, poor relationships with colleagues, lack of time for self-care activities, complicated patients, and career choice regret. Other contributing factors include increased documentation and administrative tasks, growing patient loads and work hours, increased computerization, and loss of workplace autonomy; in short, the "mounting pressures of clinical care" that are "approaching the limits of personal accommodation."[1] Additionally, medical culture tends to stigmatize error, emotional vulnerability, mental illness, and help-seeking. Key barriers to seeking help are lack of time, concern about credentialing or licensing implications, and perceived lack of confidentiality or access.[2]

Efforts to improve physician wellness have focused on promoting mindfulness and self-awareness, supporting resiliency, providing peer support and sense of community, and improving access to and de-stigmatizing utilization of behavioral health services. The role of duty-hour limitations, pass/fail grading systems in medical school, schedule changes, and engaging physicians in quality improvement initiatives have also been explored. Recognizing that the physician work environment contributes to burnout, Bodenheimer, et al, as well as others, propose health systems measure physician and staff satisfaction to achieve the Quadruple Aim: enhancing patient experience, improving population health, reducing cost, and improving the work life of clinicians and staff.[4] More research is needed to determine the long-term effectiveness of interventions to improve physician wellness.

How can medical organizations, including those in family medicine, work to improve physician wellness? Alarmed by recent resident deaths by suicide, the Accreditation Council for General Medical Education (ACGME) held a Symposium on Physician Well-Being in November 2015, which included an AFMRD representative. The goals of the symposium were to understand the problem, begin a national dialog, and collaborate across organizations to create positive, transformational change in resident well-being and training environments.[1] The ACGME's Clinical Learning Environment Review (CLER) program is creating a new focus area to address physician well-being and a follow-up ACGME symposium is planned for November 2016.

Other organizations are also focusing on the issue. The American Academy of Family Physicians (AAFP) and the Family Medicine for America's Health initiative have committed to addressing physician wellness to maintain a healthy workforce to improve the health of the nation. The Society of Teachers of Family Medicine (STFM)'s inaugural twitter #STFMChat in February 2016 discussed physician wellness. In July 2016, AAFP leadership attended a summit of stakeholders convened by the National Academy of Medicine. This summit involved the American Medical Association, the American Association of Medical Colleges, the ACGME, and the Center for Medicare Services, among others. The AFMRD has established a physician well-being task force and plans special programming for the March 2017 Program Directors Workshop.

Although there may not yet be consensus on how to improve physician well-being, many national organizations, including those in family medicine, are now urgently seeking gains. Improvement is imperative for the health of our profession, our specialty, and our nation.

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NAPCRG ANNUAL MEETING DISTINGUISHED PAPERS

NAPCRG's Annual Meeting is a forum for primary care researchers from across the globe to gather and present their research, collaborate for new research, and foster growth for up-and-coming researchers. The 2016 Annual Meeting was held in Colorado Springs, Colorado, November 12-16, 2016.

Three papers were selected and given the special designation of "distinguished paper" for excellence in research based on the following factors: overall excellence, quality of research methods, quality of the writing, relevance to primary care clinical research, and overall impact of the research on primary care and/or clinical practice.

Below are brief summaries of this year's distinguished papers; complete abstracts are available on the NAPCRG website.

The Correlation Between Family Physicians' Work and Reportable Current Procedural Terminology Codes: A Residency Research Network of Texas Study

Richard A. Young, MD; Sandra K. Burge, PhD; Kaparaboyna Ashok Kumar, MD, FRCS, FAAFP

The US Center for Medicare and Medicaid Services (CMS) states that codes submitted by physicians for payment must be medically necessary, which is guided by the American Medical Association's Current Procedural Terminology (CPT) coding system and CMS guidelines. The objective of this study was to characterize the issues addressed and treatments offered by family physicians and to count the number of visits in which the family physicians addressed issues that are reportable by available CPT codes. The study results indicated that family physicians performed cognitive work in a majority of their patient encounters that was not reportable under the CPT system. This was most often explained by numerous issues addressed by the physician.

"Pretty Radical From What I've Known": The Dissonance and Distance Underlying Patients' Cognitive Engagement With Educational Health Information

Gayle Halas; Beverley Temple

Patient education often aims to activate behaviors for health management. Assumptions of a fundamental desire for information and learning as prerequisite for self-management are countered by the fact that some patients refuse or selectively attend to health information. The complex and emotional context surrounding illness and disease may reduce the patient's openness or willingness to engage with information. Perception of non-compliant, resistant, and even difficult patients is a common occurrence with little understanding of the underlying factors. The objective of this study was to explore the cognitive and emotional factors underlying the patient's readiness to learn or cognitively engage with information regarding diabetes management. Throughout the study 3 main themes emerged: underlying incongruence in knowledge, thoughts, and beliefs; relational talking; and negotiating control. Themes converged on the essence of 'distance' between the patient's lifeworld and the disease and its management. When considered in relation to cognitive dissonance and psychological distance theories psychological adjustment and relational challenges were revealed. Adjustment involved reconciling difference and dissonance at various points during diabetes management. It also threatened adjustment and in some cases generated defensive reactions. Differentiating the message according to concrete and abstract information may be more conducive to a staged learning process and offer a more tangible understanding of 'finding common ground' within patient-centered communication. In conclusion, adjustment and relational challenges have a bearing on the early stages of the learning process. These factors underlying readiness to learn have been reported by patients with diabetes and require further consideration for tailoring communication and education that supports person-centered care and self-management.

Predicting Adverse Outcome From LRTI: The 3C Cohort S of Lower Respiratory Tract Infection in Primary Care

Michael Moore, FRCGP; Beth Stuart; Sue Smith; Kyle Knox; Ann Van den Bruel, MD, PhD; Matthew J. Thompson, MD, MPH, DPhil; Mark Lown; Paul S. Little, MD, MBBS, MCRP, MRCP; David Mant

Lower respiratory tract infection (LRTI) is one of the most common acute infections presenting in primary care. Antibiotics are frequently prescribed and 1 of the drivers of continued prescribing is concern over adverse outcome and hospital admission. The goal of this study was to assess predictors of worse outcome in LRTI presenting in routine primary care. Preliminary analysis suggests there are 10 variables that predict hospitalization or death with a RR of 1.5 or higher: age 60+, comorbidity, shortness of breath, chest pain, crackles, higher severity score, high pulse, high temperature, low oxygen saturation and low blood pressure. These 10 items can be combined into a total score which ranges from 0 (none of these) to 10 (all of these). The AUC of this score is 0.73 (Bootstrapped 95% CI, 0.70-0.76). The concluded clinical implications were that hospitalization and death is uncommon following LRTI presentation in primary care. The prediction model shares many features of that predicting pneumonic infiltrates.

Jill Haught, NAPCRG