Editorial

Advanced Practice Clinicians and Physicians in Primary Care: Still More Questions than Answers

he role of nurse practitioners (NPs) and physician assistants (PAs) in delivering high-quality, costeffective primary care remains an important question for clinicians, practice leaders, and policymakers. Mafi and colleagues used data from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey to seek insight into this issue, focusing on care of patients with 3 conditions commonly managed in primary care (upper respiratory infections [URIs], back pain, and headache) (1). They explore these rich sources of data to evaluate whether there are detectable differences between primary care physicians and advanced practice clinicians (APCs) in how often they use low-value tests (such as standard radiography or advanced imaging) and treatments (such as antibiotics for URIs), as well as how often they refer patients to specialists. The authors conclude that their analysis demonstrates that APCs and physicians "provided equal amounts of guideline-discordant lowvalue care "

This finding is particularly interesting because previous research suggests that APCs are more likely than primary care physicians to order tests or request specialty referrals when confronted with similar clinical problems (2, 3). Indeed, given the substantially greater cost, training, and clinical experience required of physicians before they enter primary care practice, it would be surprising if this investment were not associated with better care relative to APCs in some clinical circumstances. Among physicians, many studies have documented the role of greater clinical experience in improved outcomes for invasive procedures and, more recently, for inpatient management of medical conditions (4). The recent report by the National Academies of Sciences, Engineering, and Medicine on errors in diagnosis also emphasizes both training and clinical experience as important factors in making the correct diagnosis and selecting the right tests (5). Accordingly, it may not be surprising that primary care physicians who work alongside APCs often perceive that physicians can provide a "higher quality of examination and consultation" (6).

Of course, it is plausible that any greater clinical expertise conferred by the physician's additional training and clinical experience is not relevant to efficient and appropriate care of these common health concerns. However, it also may be the case that the numerous other sources of variation in use of low-value services are sufficient to render underlying differences due to training and experience undetectable in these data. Poorly rationalized deviations from evidence-based practice have been demonstrated for decades, with various practice-setting factors shown to contribute to this problem (7). Not least among these are pro-

ductivity incentives and financial performance concerns, which are associated with physicians' use of services in medical groups. It is intriguing to note that Mafi and colleagues find that in hospital-owned "general medical clinics," physicians prescribed antibiotics and made specialty referrals significantly less often during primary care visits than did APCs. Of course, the relatively smaller number of APC visits observed in physician-led office practices may have made it more challenging to detect differences in this setting.

It would be interesting to know how physician and APC incentives and productivity expectations varied across these settings. Presently, less is known about the diversity and influence of incentive plans for APCs than for physicians; for example, the recent National Sample Survey of Nurse Practitioners did not explore this issue. Of course, in this observational study, neither physicians nor APCs were randomly assigned to comparable clinical environments and incentive plans. Similarly, patients were not randomly assigned to APCs or physicians in these settings. Thus, the patients presenting to physicians with these health concerns may have had different needs or expectations for care not detectable through the available risk adjustment factors.

Nonetheless, as Mafi and coworkers note, various studies have shown that APCs may provide comparable or even superior care, especially under circumstances in which the additional clinical acumen gained by more training and experience may not be required. Perhaps URIs, headache, and low back pain are additional examples of the more extensive training of primary care physicians not contributing to higher-value care. If this finding is confirmed, what are the implications for broader primary care training and practice? Among the core features of primary care is the long-recognized but little-studied subject of comprehensiveness (that is, the extent to which the clinician, as part of the primary care team, recognizes and meets each patient's physical and mental health care needs) (8). Understood as being synonymous with the general practitioner role when definitions of primary care were first developed in the United States, comprehensiveness of clinical practice is still associated with more efficient care, at least among family physicians, in recent studies (9). If the more limited breadth and depth of training required of APCs is sufficient to efficiently manage some common conditions, how does this translate into care for the much broader range of conditions and concerns commonly seen in primary care? A better understanding of these issues may guide more informed ascertainment of the competencies required for skillful primary care in different settings and patient populations.

Of course, there also is considerable interest in developing primary care teams, recognizing that some re-

sponsibilities of modern primary care practice do not require the medical knowledge and clinical skills of a physician (8). How best to combine the skills of APCs and physicians to achieve efficient, comprehensive primary care remains another unanswered question. Among the challenges in implementing team-based approaches to new patient concerns is how to retain interpersonal continuity, also shown to be important to effective primary care (10). The APCs on the primary care practice team might be very efficient in facilitating the quick assessment of a patient's URI or the initial evaluation of a patient with new back pain. In addition, it certainly is reassuring to know that the common practice of having APCs manage patients with new, common health concerns may not be associated with lowervalue care. However, health profession educators, practice leaders, and policymakers still are faced with substantive questions regarding how to ensure the ready availability of the deeper clinical competencies required for correct diagnosis and more comprehensive care for primary care patients who are, or prove to be, more medically complex.

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