

# General Internists in Pursuit of Diagnostic Excellence

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We thank Wallace and Matthias for their response to our call for diagnostic excellence in primary care.<sup>1</sup> In their letter, they point to limitations of likelihood ratios of symptoms and signs, giving the example of “cough, fever and auscultation” as being “insensitive and nonspecific for the diagnosis of pneumonia”. However, we believe this view downplays the relationship between inadequate data acquisition via history/exam and diagnostic error. Recent studies continue to support long-standing beliefs about the value of history and exam in diagnosis.<sup>2</sup> While we recognize the shortcomings of history or exam features, especially in isolation, several studies have found that inadequate histories and exams, as well as problems ordering subsequent tests based on gathered data, are frequently responsible for diagnostic errors.<sup>3, 4</sup> In fact, clear red-flag symptoms/signs are often missed by clinicians, sometimes even when they exist in constellation.<sup>5, 6</sup>

Nevertheless, we agree with Wallace and Matthias that in our current practice environment, technologies such as point-of-care ultrasound (POCUS) can play an important role in the diagnostic process. Rather than *replace* the history and physical, POCUS should be used to *augment* the information gathered at the bedside and serve as a patient-centered tool that enhances the gathering and interpretation of useful diagnostic data.<sup>7</sup> Technology can be an adjunct to diagnosis, but it is unlikely to be useful unless physicians are equipped with the history and exam skills necessary to point them in the right direction.

While future research will guide how best to integrate POCUS and similar technologies at the bedside, we must continue to emphasize the value of the history and exam, not only for diagnosis, but also to build relationships with patients

and making informed shared decisions about their care. In sum, the pursuit of diagnostic excellence requires renewed emphasis on clinical reasoning and bedside skills—a mission that rightfully includes the use of additional technologies, such as POCUS, that help us gather and interpret useful diagnostic data.

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#### Compliance with Ethical Standards:

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