

nia (CAP)^{2,3} but also they can be useful for the differential diagnosis of chest pain and dyspnea in the emergency department.^{4,5} We agree that point-of-care ultrasound (POCUS) should be explored in future studies on clinical decision rules for CAP, in addition to other point-of-care (POC) tests such as c-reactive protein.

However, POCUS is not yet ubiquitous nor has it replaced CXR as the current reference standard for diagnosing CAP. We express caution about the broad use of POCUS, as it suffers from subjective interpretation where interrater reliability varies⁶ and should be limited to clinicians with sufficient training and adequate patient volume.⁷ Most previous studies have been done in the emergency department or inpatient settings where there is a higher volume; whether primary care clinicians can duplicate that accuracy with lower volume requires further study. In addition, because pneumonia is relatively rare in primary care patients (about 3% to 4% of patients with lower respiratory tract symptoms), even a fairly accurate test can have a poor positive predictive value, leading to antibiotic overuse. We, therefore, advocate that future studies focus on the integration of simple heuristics, the overall clinical impression,⁸ validated clinical decision rules, and validated POC tests (eg, c-reactive protein)⁹ to identify patients at very low risk of CAP in the outpatient setting, as well as those who may benefit for further diagnostic testing, whether it be CXR or POCUS.

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References

1. Marchello CS, Ebell MH, Dale AP, Harvill ET, Shen Y, Whalen CC. Signs and symptoms that rule out community-acquired pneumonia in outpatient adults: a systematic review and meta-analysis. *J Am Board Fam Med* 2019;32:234–47.
2. Pereda MA, Chavez MA, Hooper-Miele CC, et al. Lung ultrasound for the diagnosis of pneumonia in children: a meta-analysis. *Pediatrics* 2015;135:714–22.
3. Chavez MA, Shams N, Ellington LE, et al. Lung ultrasound for the diagnosis of pneumonia in adults: a systematic review and meta-analysis. *Respir Res* 2014;15:50.
4. Buhumaid RE, St-Cyr Bourque J, Shokoohi H, Ma IWY, Longacre M, Liteplo AS. Integrating point-of-care ultrasound in the ED evaluation of patients presenting with chest pain and shortness of breath. *Am J Emerg Med* 2019;37:298–303.
5. Zanobetti M, Scorpiniti M, Gigli C, et al. Point-of-care ultrasonography for evaluation of acute dyspnea in the ED. *Chest* 2017;151:1295–301.
6. Gravel CA, Monuteaux MC, Levy JA, Miller AF, Vieira RL, Bachur RG. Interrater reliability of pediatric point-of-care lung ultrasound findings. *Am J Emerg Med*. In press.
7. Ebell M. Point-of-care ultrasonography: an effective tool when used appropriately. *Am Fam Physician* 2019;99:143.

8. Dale AP, Marchello CS, Ebell MH. Clinical gestalt to diagnose pneumonia, sinusitis, and pharyngitis: a meta-analysis. *Br J Gen Pract*. In press.

9. van Vugt SF, Broekhuizen BD, Lammens C, et al. Use of serum C reactive protein and procalcitonin concentrations in addition to symptoms and signs to predict pneumonia in patients presenting to primary care with acute cough: diagnostic study. *BMJ* 2013;346:f2450.

doi: 10.3122/jabfm.2019.05.190231

Re: Timely Outpatient Follow-Up Is Associated with Fewer Hospital Readmissions Among Patients with Behavioral Health Conditions

To the Editor: I commend Dr Nadareh Pourat and colleagues¹ for their important work on timely outpatient follow-up and hospital readmissions among patients with behavioral health conditions. I do, however, have a few concerns.

First, the concept of trust in the doctor-patient relationship is an essential one that affects clinical outcomes,² while distrust has been associated with treatment discordance.³ Thus, patients that were dissatisfied with the inpatient care during the index admission may not be predisposed to attend follow-up or comply with treatment. It would have been informative if their regression models accounted for patient's trust in their health care providers and how it may affect compliance with follow-up, especially in this patient population.

Second, although the authors admirably adjusted for many confounders in their regression models, I wonder if Pourat and colleagues¹ considered controlling for anxiety or homelessness/unstable housing, both of which are drivers of hospitalization and readmissions.^{4,5} It may be interesting and revealing to assess compliance with follow-ups in homeless individuals with behavioral health conditions, such as anxiety disorders, and how both factors might affect timely follow-up outpatient visits.

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The author is thankful to his research mentor Dr. Linda Cottler for her support.

To see this article online, please go to: <http://jabfm.org/content/32/5/000.full>.

References

1. Pourat N, Chen X, Wu S-H, Davis AC. Timely outpatient follow-up is associated with fewer hospital readmissions among patients with behavioral health conditions. *J Am Board Fam Med*. 2019;32:353–61.
2. Birkhäuser J, Gaab J, Kossowsky J, et al. Trust in the health care professional and health outcome: a meta-analysis. *PLoS One*. 2017;12:e0170988.

3. Dean LT, Moss SL, McCarthy AM, Armstrong K. Health-care system distrust, physician trust, and patient discordance with adjuvant breast cancer treatment recommendations. *Cancer Epidemiol Biomarkers Prev.* 2017;26:1745–1752.
4. Masson C, Sorensen J, Phibbs C, Okin RL. Predictors of medical service utilization among individuals with co-occurring HIV infection and substance abuse disorders. *AIDS Care.* 16:744–55.

5. Raven MC, Billings JC, Goldfrank LR, Manheimer ED, Gourevitch MN. Medicaid patients at high risk for frequent hospital admission: real-time identification and remediable risks. *J Urban Heal.* 2009;86:230–41.

doi: 10.3122/jabfm.2019.05.190172

The above letter was referred to the author of the article in question, who declined to respond.