

CAPSULE COMMENTARIES

Capsule Commentary on Blumenthal et al., Using a Self-Reported Global Health Measure to Identify Patients at High Risk for Future Healthcare Utilization

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Understanding which patients are at high risk for future emergency department (ED) visits and hospitalization has long been a goal of both healthcare systems and practicing clinicians. Identification of the highest-risk cohort, in particular, has been a target of interest, as these patients account for a disproportionate amount of healthcare expenditure. Efforts do to this have largely focused on the use of administrative data, though more recent studies suggest the addition of patient-reported outcome measures (PROMs) may better capture changes in health status.

This retrospective cohort study by Blumenthal et al.¹ investigated the association between patient-reported health scores collected at routine primary care visits and healthcare utilization. After adjustment for confounders, patients with the lowest reported physical health scores were found to have higher rates of subsequent hospitalization. Conversely, mental health scores were not found to be predictive of hospitalization, and neither physical nor mental health scores were associated with the risk for ED visits. The addition of physical health scores to administrative data led to a modest increase in sensitivity for detecting patients with the highest healthcare utilization (from 36 to 44%).

This research builds on previous studies showing PROMs to be associated with future healthcare expenditures,² readmission rates,³ and mortality.⁴ Despite these correlations, most models lack the ability to accurately predict future healthcare use.⁵ Low sensitivity is particularly problematic. The implication is that those who report low physical health scores are likely to be high users of healthcare, but not all high users of

healthcare will report low physical health scores. Perhaps it is the second group that is of most interest and not easily identified by current methodology. In fact, the low sensitivity of most risk prediction models raises the question of whether they add significantly to clinician gestalt.

Nevertheless, routine collection of PROMs is a relatively simple intervention, and understanding its contribution to risk prediction models is important. Given the interest in focused interventions in high-risk populations, it makes sense to use every tool at our disposal to identify the patients who might benefit the most.

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Compliance with Ethical Standards:

Conflict of Interest: The authors have no conflicts of interest with this article.

REFERENCES

1. **Blumenthal KJ, Chang Y, Ferris TG, et al.** Using a Self-Reported Global Health Measure to Identify Patients at High Risk for Future Healthcare Utilization. *J Gen Intern Med.* doi:10.1007/s11606-017-4041-y
2. **Fowles JB, Weiner JP, Knutson D, Fowler E, Tucker AM, Ireland M.** Taking health status into account when setting capitation rates: a comparison of risk-adjustment methods. *JAMA.* 1996;276(16):1316–1321.
3. **Soley-Bori M, Soria-Saucedo R, Ryan CM, et al.** Functional Status and Hospital Readmissions Using the Medical Expenditure Panel Survey. *J Gen Intern Med.* 2015;30(7):965–972. doi:10.1007/s11606-014-3170-9.
4. **DeSalvo KB, Bloser N, Reynolds K, He J, Muntner P.** Mortality prediction with a single general self-rated health question. A meta-analysis. *J Gen Intern Med.* 2006;21(3):267–275. doi:10.1111/j.1525-1497.2005.00291.x.
5. **Kansagara D, Englander H, Salanitro A, et al.** Risk prediction models for hospital readmission: a systematic review. *JAMA.* 2011;306(15):1688–1698. doi:10.1001/jama.2011.1515.