ARCHIVES OF THE TURKISH SOCIETY OF CARDIOLOGY

Official journal of the TURKISH SOCIETY OF CARDIOLOGY

From Measuring Treatment Burden to Acting on Patient-Reported Outcomes

Tedavi Yükünün Ölçülmesinden Hasta Tarafından Bildirilen Sonuçlara Göre Harekete Geçmeye

LETTER TO THE EDITOR
EDİTÖRE MEKTUP

To the Editor,

Yıldırım et al.[1] provide an important patient-centered assessment of quality of life, symptom burden, anxiety, and depression among patients with pulmonary hypertension receiving therapies targeting the prostacyclin pathway. Their findings are clinically relevant: health-related quality of life was markedly impaired, anxiety and depression were common, and vomiting was independently associated with a 7.6-point increase in the emPHasis-10 score.

The challenge is determining how these patient-reported findings should influence care. Screening for symptoms, psychological distress, and impaired quality of life is valuable, but measurement alone does not ensure a clinically meaningful response. The study identifies several potentially actionable problems, including vomiting, anxiety, depression, and a high symptom burden, yet the corresponding clinical pathways remain undefined.

For example, what degree of deterioration in the emPHasis-10 score should trigger reassessment of treatment tolerability? When should vomiting prompt intensified supportive management, a review of dose titration, dose adjustment, or reconsideration of the route of treatment administration?[2] Similarly, positive screening results for anxiety or depression may require different responses depending on symptom severity, functional impact, patient preferences, and the availability of psychological or psychiatric support. Without predefined response pathways, patient-reported outcome measures risk documenting burden without alleviating it.

This issue is particularly important in pulmonary hypertension care, in which symptoms may reflect the disease itself, treatment-related adverse effects, psychological distress, comorbidities, or several of these factors simultaneously. A high score should therefore not automatically lead to a single intervention. Instead, it could initiate a structured assessment to distinguish disease progression from treatment intolerance and identify the healthcare professional best positioned to respond.

Patient-reported outcomes are increasingly incorporated into contemporary PAH research.[3] The emPHasis-10 questionnaire is among the most frequently used disease-specific instruments because of its established association with clinical outcomes and prognosis.[4,5] One unresolved question is whether the observed relationship between quality of life and clinical severity would also persist if quality of life were compared with categorical risk-stratification tools rather than continuous functional or biochemical markers—a comparison that, to our knowledge, remains underexplored in real-world PAH cohorts.

However, broader measurement does not, by itself, ensure better care. Future studies should move beyond cross-sectional associations and evaluate longitudinal care models in which patient-reported outcomes are linked to prespecified clinical actions. Relevant outcomes could include improvements in emPHasis-10 scores, reductions in gastrointestinal symptoms, treatment persistence, adherence, psychological well-being, and the avoidance of unnecessary treatment discontinuation. Such studies could also determine whether repeated assessments during titration and routine follow-up identify deterioration earlier than conventional clinical evaluations.

Ilma Nascimento

Caio Júlio Cesar dos Santos Fernandes

Pulmonary Circulation Unit, Heart Institute (InCor), Hospital das Clínicas, Faculty of Medicine, University of São Paulo, São Paulo, Brazil

Corresponding author:
Ilma Nascimento
✉ ilma.nascimento@usp.br

Received: July 18, 2026
Accepted: July 30, 2026

Cite this article as: Nascimento I, dos Santos Fernandes CJC. From Measuring Treatment Burden to Acting on Patient-Reported Outcomes. *Turk Kardiyol Dern Ars.* 2026;54(6):543-544.

DOI: 10.5543/tkda.2026.73624

Copyright@Author(s)
Available online at archivestsc.com. Content of this journal is licensed under a Creative Commons Attribution – NonCommercial-NoDerivatives 4.0 International License.

The value of patient-reported outcomes lies not only in revealing what patients experience but also in ensuring that this information leads to timely and appropriate care. The findings of Yıldırım et al.[1] provide a strong rationale for developing response pathways that translate measured treatment burden into individualized clinical action and for examining how quality-of-life assessments may complement, rather than simply reproduce, conventional risk stratification.

Conflict of Interest: The authors have no conflicts of interest to declare.

Funding: The authors declared that this study received no financial support.

References

1. Yıldırım F, Ok E, Ünver V, Sezgin D, Ataş H, Şentürk Saraç B. Quality of Life Outcomes in Patients with Pulmonary Hypertension Receiving Prostacyclin Therapy: Impact of Anxiety, Depression, Sociodemographic Characteristics, and Treatment-Related Factors. *Turk Kardiyol Dern Ars*. Jul 10, 2026. doi: 10.5543/tkda.2026.01628. [Epub ahead of print]. [CrossRef]
2. Kingman M, Archer-Chicko C, Bartlett M, Beckmann J, Hohsfield R, Lombardi S. Management of prostacyclin side effects in adult patients with pulmonary arterial hypertension. *Pulm Circ*. 2017;7(3):598-608. [CrossRef]
3. Nascimento IAO, Souza R, Fernandes CJCS. 2025 annual review of pulmonary arterial hypertension clinical research. *Pulm Ther*. 2026;12:463-483. [CrossRef]
4. Yorke J, Corris P, Gaine S, et al. emPHasis-10: development of a health-related quality of life measure in pulmonary hypertension. *Eur Respir J*. 2014;43(4):1106-1113. [CrossRef]
5. Lewis RA, Armstrong I, Bergbaum C, et al. EmPHasis-10 health-related quality of life score predicts outcomes in patients with idiopathic and connective tissue disease-associated pulmonary arterial hypertension: results from a UK multicentre study. *Eur Respir J*. 2021;57(2):2000124. [CrossRef]