

# COMMENTARY & PERSPECTIVE

## We Should Weigh the Benefits and Costs of Preoperative Medical Evaluation for Total Joint Arthroplasty

Commentary on an article by Rakesh R. Veerareddy, MBBS, et al.: "The Impact of Preoperative Medical Evaluation in an Orthopaedic Perioperative Medical Clinic on Total Joint Arthroplasty Outcomes. An Observational Study"

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A preoperative medical evaluation (PME) is a crucial aspect of the overall care provided to patients undergoing total joint arthroplasty (TJA) and may be beneficial in terms of risk assessment, the optimization of comorbidities, patient education, prescription management, anesthesiology evaluation, and surgical planning<sup>1,2</sup>. The study by Veerareddy et al. provides valuable insights into the impact of a PME within 30 days prior to surgery (Periop30) on TJA outcomes. However, it is important to acknowledge the limitations that may affect the generalizability and interpretations of the findings.

First, the study design was observational, which means that the researchers neither controlled nor randomized the assignment of patients to the Periop30 or Usual Care groups. This may have introduced selection bias, as patients in the Periop30 group could have differed systematically from those in the Usual Care group in ways that were not fully accounted for. Hence, the ability to draw causal inferences regarding the impact of Periop30 is limited.

Second, the study relied on a retrospective analysis of data from a departmental database. Such data can be susceptible to inaccuracies, missing information, and recall bias. Additionally, despite statistical adjustments, there may have been unmeasured or residual confounding variables that influenced the observed associations. Factors such as socioeconomic status, specific comorbidities, or surgeon experience could have impacted the outcomes but may not have been fully accounted for.

Finally, the most important limitation is that the evaluation was conducted within a single academic health system, which may limit the generalizability of the findings to other health-care settings. This is especially relevant to public health-care systems with different patient populations, resources, and practices. The determination of whether the expected additional costs associated with implementing Periop30 are affordable in a public health-care system setting depends on various factors, including the available budget and the priorities of the specific health-care system. Therefore, conducting a thorough cost-benefit analysis is essential<sup>3</sup>. The expected additional costs must be assessed against the potential benefits, such as reduced length of stay, lower odds of extended hospitalization, and potentially improved patient outcomes. The consideration of both financial and nonfinancial benefits is crucial because public health-care systems often operate within stricter budgetary constraints<sup>4</sup>.

Although there may be up-front costs associated with implementing Periop30, further investigations are needed to assess whether the intervention has the potential to generate long-term savings through reduced hospitalization costs, fewer complications, and improved overall patient health. It is crucial to weigh the potential benefits against the financial implications and to make informed decisions based on the specific context and priorities, especially in the setting of a public health-care system.

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