## Relevance of the Postoperative Quality Recovery Score to Discharge Readiness

To the Editor:

The study by Royse et al. on the postoperative quality recovery score is interesting because it attempts to address the patient's perspective in some manner. Researchers have not paid much attention to the patient's opinion in the development of postoperative assessment tools. This may be important because, for instance, after laparoscopic cholecystectomy, most patients believed that they were not ready for discharge while nursing staff had the opposite view.<sup>2</sup> In a prospective study<sup>3</sup> of 194 outpatients, when patients determined their own discharge readiness, the time they felt discharge ready was significantly shorter than the actual time they were discharged based on nursing assessments. In light of these findings, we suggest that perhaps the patients' input should be considered with a view to improving the relevance of the postoperative quality recovery score. We believe that the patient's opinion is crucial and deserves a greater weighting in the "physiology domain" of the postoperative quality recovery score. In addition, we question the relevance of items that assess functional recovery from actual surgery as being too simplistic. The surgical literature has more sophisticated tools that are surgery specific (e.g., the Constance score for shoulder surgery). 4 Perhaps consideration should be given to underweighting items that pertain to functional recovery from surgery.

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In Reply:

We thank Vaghadia *et al.* for their correspondence regarding the Postoperative Quality of Recovery Scale (PQRS). <sup>1</sup> They

suggested that the use of subjective patient opinion might be more heavily emphasized among the multiple domains assessed in the PQRS. Interestingly, and presumably in support of this position, they quote two articles regarding the value of patient opinion in determining fitness for discharge—with opposing results! In the first of these articles, patients who underwent cholecystectomy would have delayed their discharge relative to the assessment of healthcare professionals<sup>2</sup>; in the second, the outpatients would have been discharged earlier than the health professional assessment.<sup>3</sup> This underlies the problem of excessive reliance on patient opinion and is one of the reasons our group chose to go forward with objective measurements. It is well-known, for example, that patients will not detect the same level of cognitive dysfunction compared with objective neuropsychological tests. <sup>4</sup> This was echoed in our study, <sup>1</sup> in which the patient perspective of cognitive recovery was twice that of the objective measures. One of the difficulties with excessive reliance on patient response in this domain is the influence of other factors on judgment, such as the desire to be discharged and the possibility of patients not having clarity of thought.

We identified that most current recovery assessment tools are based on subjective opinion or subjective recall of past events. This was considered a weakness, and we believe that the use of objective testing over repeated periods is the strength of the PQRS. Another strength is our concept of recovery (*i.e.*, "return to baseline values or better"). All patients undergo testing before surgery, which allows objective assessment of when they return to presurgery levels of function. We did include a subjective assessment domain called the "overall patient perspective." This was included to allow better comparability with other recovery scales in the literature and questions aspects of return to function, satisfaction, and cognition. It only commenced from day 1 onward.

The PQRS is not just another "readiness for discharge tool" nor does it cater for specific surgery end points (e.g., joint function or range of movement). If a particular operation, such as shoulder surgery, is only to be assessed for home readiness, then other published scales may offer a better solution, as Vaghadia et al. have commented. The strength of the PQRS is the objective assessment of multiple domains of recovery during the early, and late and long-term, periods. In the future, the PQRS may have broader application; at this stage, it is principally designed as a research or audit tool to assess how "what we do" affects the quality of recovery after anesthesia and surgery. It is far more complex than a simple tool to determine home readiness.

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