

# What would we measure for post-op outcome?

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Measuring clinically relevant and patient-centered perioperative outcomes provides the knowledge that enables: clinicians to optimize their practice and guide shared decision-making, researchers to set a future agenda and policy makers to prioritize healthcare spending.

Efforts are underway to standardize and define which outcome measures should be used in perioperative medicine research and audit.<sup>1</sup> Patient-centered outcome measures describe what the patient actually experiences and the impact an intervention has on their functional capacity, physical comfort and emotional health. This includes *quality of recovery* and longer-term health after surgery.<sup>2</sup>

The QoR Score was the first validated quality of recovery scale.<sup>3</sup> This was followed by the 40-item QoR-40<sup>4</sup> and the 15-item QoR-15.<sup>5</sup> The QoR-40 has five recovery domains including emotional state, physical comfort, psychological support, physical independence and pain control, and is scored on a scale from 40 (very poor recovery) to 200 (excellent recovery). Both the QoR-40 and QoR-15 have recently been evaluated to determine the *minimal clinically important difference*.<sup>6</sup>

Another health economic measure gaining increasing recognition in medical research is *days alive and at home within 30 days of surgery* (DAH<sub>30</sub>).<sup>7</sup> As such, DAH<sub>30</sub> combines mortality and morbidity into a single continuous outcome that is objective, easy to define and measure, and does not require adjudication. Most importantly DAH<sub>30</sub> reflects the primary patient goal of returning home and avoiding hospital readmission, which would make it an ideal perioperative outcome measure.

*Disability-free survival* is a novel perioperative outcome measure that is a combination of survival (1 – mortality) and freedom from clinically significant disability as indicated by the WHO Disability Assessment Schedule (WHODAS) score.<sup>8</sup> In a cohort of 510 surgical patients we used the WHODAS to identify rates of DFS as 72% and 58% in ASA III and IV patients respectively. Disability-free survival is an ideal outcome metric for research and clinical audit, but also for shared decision-making.

Future clinical trials in Perioperative Medicine should utilize clearly defined, validated and standardised patient-centered outcome measures.

## References

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