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Invited Commentary

A commentary on "Cost-effectiveness of a national quality improvement programme to improve survival after emergency abdominal surgery, Health Economic Evaluation" (Int J Surg 2019; Oct 8. pii: S1743-9191(19)30264-X [Epub ahead of print]). What is the real impact of a quality improvement (QI) Programme for emergency abdominal surgery in quality of life?

In this issue of International Journal of Surgery, [1], present a Health Economic Evaluation of a national quality improvement programme to improve survival after emergency abdominal surgery. The study reinforces the importance of being aware of the high risk of emergency abdominal surgery due to the high risk of death and the need for perioperative care [2]. In summary, it assessed the cost-effectiveness of a quality improvement (QI) programme for emergency surgery by using the perspective of the National Health Service and measures based on the quality adjusted life years (QALYs). It presents many uncertainties with the results and suggests that the QI may be cost-effective for patients with multiple surgical indications over a lifetime.

However, this study was based entirely on the recently published article in The Lancet (Peden CJ, Stephens T, Martin G et al. Effectiveness of a national quality improvement programme to improve survival after emergency abdominal surgery (EPOCH): a stepped-wedge clusterrandomised trial). Maybe it would widen the perspective by analysing another studies.

Also the stepped-wedge cluster study design clearly limited the time for QI efforts to affect change. The duration of the QI programme period varied between clusters from 5 to 85 weeks.

Another limitation to consider is that intraoperative decision making is key for optimal outcomes but difficult to measure, mainly in the diagnoses analyzed (intestinal obstruction or perforation).

By concluding that the QI programme does not appear cost-effective at standard cost-effectiveness thresholds, an interesting care to take when conducting cost-effectiveness studies is to follow-up the population in postoperative period. Many patients can end up with disabilities after major abdominal surgery [3]. It is necessary to measure the quality of life in the postoperative period. WHO [4] recommends that the possible gains in quality of life are typically measured in disability-adjusted life years (DALYs), which can combine the analysis of mortality and morbidity effects of an intervention.

More studies are necessary to clarify this question measure the impact of QI Programmes.

Provenance and peer review

Invited commentary, internally reviewed.

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