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Assessment of Emergency General Surgery Care Based Upon Quality Indicators

Emergency general surgery is associated with significant morbidity and mortality.[1] Furthermore, previous research has demonstrated substantial variation in outcomes after emergency general surgery procedures across hospitals.[2, 3] Despite the poor outcomes following emergency general surgery procedures and the potential for improvement, research surrounding the quality of emergency general surgery care is lacking. In a recent special report, the American Association for the Surgery of Trauma Emergency General Surgery taskforce called for further research in all aspects related to the quality of emergency general surgery care.[4] Currently, however, hospitals and healthcare providers have limited measures to specifically guide emergency general surgery care.

The objectives of this proposal are:

- 1) to develop indicators of high-quality care for emergency general surgery patients
- 2) to assess hospital-level compliance with these indicators in a retrospective manner

Quality indicators for emergency general surgery will be developed utilizing the RAND Appropriateness Methodology. The RAND Appropriateness Methodology is a modified Delphi technique that has been demonstrated to yield quality indicators that have face, construct, and predictive validity. The RAND Appropriateness Methodology was developed to identify best processes when the highest level of evidence is not available.[5] To briefly summarize the process, candidate indicators will be identified through a systematic review of the literature, assessment of existing guidelines and quality measures, and structured interviews. An expert panel will rate the potential quality indicators in an iterative fashion. The first rating will be conducted individually with no interaction between the experts. Summary statistics will be calculated for individual candidate quality indicators to assess the median and distribution of rankings. A second rating will be conducted over an in-person meeting under the leadership of a moderator. The focus of the discussion will be on areas of disagreement in addition to revising existing or introducing novel indicators as needed.

The second portion of this research project will measure compliance with the previously developed quality indicators at the patient and hospital level. Compliance will be measured retrospectively for six months.

Hospitals and healthcare providers are increasingly being scrutinized on the quality of care provided to their patients. This research will provide hospitals and health care professionals caring for emergency general surgery patients with quality indicators to assess their performance and to serve as the foundation for initiatives to improve outcomes.

References

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