2. Abstract

Background

Introducing major trauma networks into UK practice has significantly reduced mortality through organisational improvements in trauma care. The trauma pathway reflects the responsibility and organisation of networks from injury to rehabilitation. I identified three areas of concern in this pathway and suggested solutions.

a) **Pre-hospital:** A significant proportion of trauma patients aren't treated in the MTC. Question 4 investigates why and whether their outcomes differ.
b) **Definitive care:** The surgical demand of major trauma is poorly described. Question 5 quantifies the demands on the different specialities.
c) **Rehabilitation:** Problems reported by patients associated with early rehabilitation were due to sub-optimal discharge. Question 6 presents the results of an enhanced discharge intervention (QTD).

Methods

I retrospectively analysed TARN registries and used unpublished data from the QTD initiative. The methodologies are included in each question.

Results

a) Major trauma patients who weren't transferred to the MTC were older than patients who were (72 vs. 54, $p<0.0001$). Trauma Units had a higher mortality than the MTC (20.19% vs. 12.27%, $p<0.0001$).

b) Surgical requirements of major trauma patients were lower than expected. General surgeons were required infrequently but urgently, with 45.31% of their operations within 4 hours.

c) Improved discharge has reduced unscheduled GP attendances by 20% (p=0.0037) and improved patient activation in 39% of patients.

Conclusion

The odds of survival following major trauma has improved substantially since the introduction of MTNs through mostly organisational changes. Examination of the trauma pathway has presented several areas to improve the structure of trauma delivery.

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