Reducing emergency hospital admissions in England: the importance of the co-ordination of care at specialised neuromuscular services

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Abstract

Background

A 2 part project conducted over a 6-year period aimed to identify the reasons for preventable unplanned admissions in order to improve care and reduce emergency admissions in patients with neuromuscular diseases (NMDs) in the South-East England.

Methods

Two NHS audits (retrospective case note studies) on unplanned admissions in patients with NMDs in the South-East of England were performed 5-years apart. Inclusion criteria were emergency admission codes and NMD diagnosis ICD-10 codes. Exclusion criteria were incomplete medical notes, elective admissions, absence of a NMD and obstetric admissions.

Intervention: In between both audits, recommendations and a partnership approach project were developed to co-ordinated care and to prevent known NMDs complications in the analysed regions.

Results:

Audit 1 showed a substantial proportion of preventable admission in this patient population. Positive impacts of implemented changes included more referrals to specialised centres and more admissions under Neurosciences care (77%, as compared to 14.9% in 2009-2011). Improvements also included a reduction in preventable admissions directly related to previously known NMDs (from 63% to 32.8%) and reduction in re-admissions (from 25.1% to 12.4%). Mortality rate dropped from 4.5% to 0.3%. Patients known to NMD specialised services had shorter hospital stay and fewer ITU admissions than patients who were not known to such services.

Conclusions

Audit 1 suggested issues related to patients' care contributed to the high frequency of unplanned admission in this patient population. Improvement in the provision of NMD services reduced emergency admissions and improved outcomes, which were successfully documented in Audit 2.