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Improving anaesthetic chart documentation

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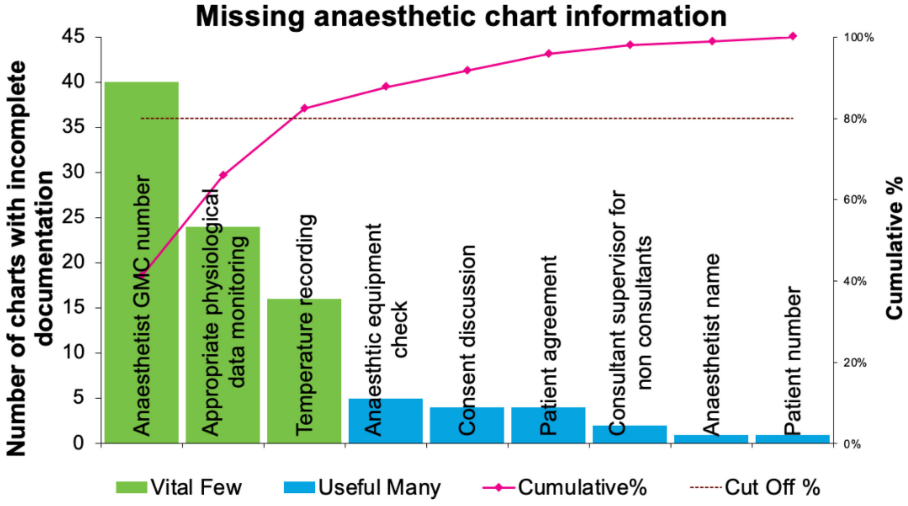

Fig 1. Information commonly missing from anaesthetic charts, as identified during the baseline data collection.

Introduction

Anaesthetic chart documentation is crucial to maintaining comprehensive records relating to perioperative events. Lack of adherence to documentation has medico-legal implications, and more importantly, can negatively affect the quality of patient care. The Royal College of Anaesthetists (RCoA) and the Association of Anaesthetists of Great Britain and Ireland (AAGBI) have produced guidelines outlining what constitutes the minimum required data set of information.[1,2] The aim of this quality improvement project was to improve paediatric anaesthetic record documentation at the Evelina Children's Hospital, with charts to contain ≥90% of the minimum required information by 4 February 2022.

Materials and methods

A scoring system was designed based on the minimum documentation requirements outlined by RCoA and AAGBI, and the percentage completion of anaesthetic charts was calculated. Baseline data were retrospectively recorded using these criteria. Three plan, do, study, act cycles were implemented over the following 5 months. The implemented interventions were: department education regarding protocol via e-mail; follow-up reminder emails with progress reports; and education through PowerPoint presentation. Performance data was plotted on a run chart and improvement was assessed using the rules outlined by Perla *et al.*[3]

Results and discussion

Our baseline data collection identified the anaesthetic charts to be clear, accurate and legible, containing on average 75% of the minimum required information. The main areas of poor documentation were the anaesthetist GMC number and physiological data monitoring at appropriate time intervals, in particular temperature monitoring, as summarised in Fig 1.

Following our interventions, we recorded a shift in chart completion, with more than six consecutive points recorded above the median line (Fig 2). This suggests the improvement cannot simply be attributed to chance and is likely a result of the interventions.

The recorded improvement did not sustainably reach the ≥90% goal we had set, which can be explained by the law of 'diminishing returns' whereby greater effort is required for improvement the closer the target is to 100%.

A shift from paper charts to the use of electronic systems for anaesthetic documentation is expected at the trust. This project helped us identify commonly missed fields during documentation which could aid in tailoring the new electronic system to the needs of the anaesthetists. Documentation flow could be improved by

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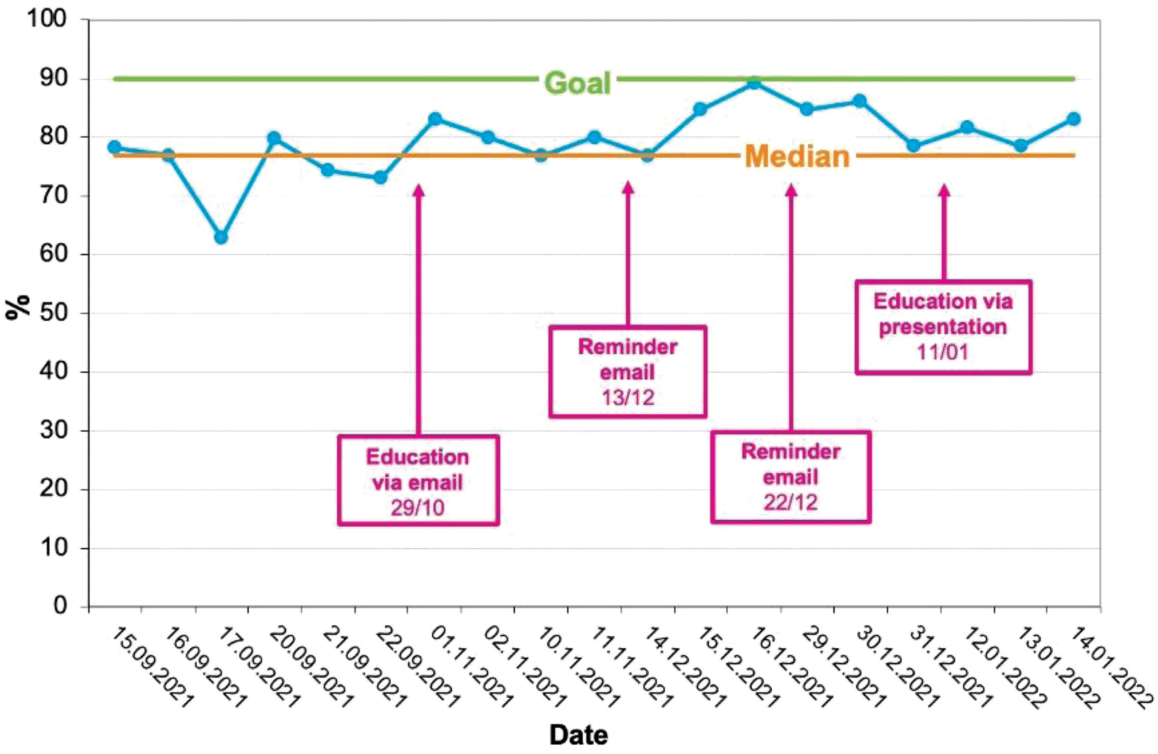

Fig 2. The effect of our interventions upon average percentage chart completion.

automatically exporting data, setting on-screen reminders, using autocomplete fields which would facilitate documentation.

Conclusion

The use of combined methods such as education and reminders proved helpful in improving anaesthetic chart documentation. Creating sustained, systemic change is difficult but our methods, which are relatively cost effective and not time consuming, could be relevant in enhancing other areas of medical documentations. ■

References

1 Royal College of Anaesthetists. *Raising the Standards: RCoA quality improvement compendium*. 4th edition. London: RcOA, 2021.
2 Klein AA, Meek T, Allcock E *et al*. Recommendations for standards of monitoring during anaesthesia and recovery 2021: guideline from the Association of Anaesthetists. *Anaesthesia* 2021;76:1212–23.
3 Perla RJ, Provost LP, Murray SK. The run chart: a simple analytical tool for learning from variation in healthcare processes. *BMJ Qual Saf* 2011;20:46–51.

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