Re-audit of rate of follow-up of obstetric patients having anaesthetic procedures, following the implementation of an online database system

Claire-Marie Agius[1], Jonathan Smith-Williams[1], Adnaan (Billy) Qureshi[1], Katherine Whitehouse[1]

[1] Department of Anaesthesia, Royal Victoria Infirmary, Newcastle-upon-Tyne

Introduction

Complications following neuraxial anaesthetic procedures are rare[1], but potentially severe and eminently treatable. To this end, the Royal College of Anaesthesia recommends that all patients are followed up after anaesthetic procedures[2] to detect any problems.

In our tertiary obstetric unit, a 2020 audit showed a face-to-face paper-based follow-up rate of 57% after obstetric anaesthetic procedures. To improve the rate and quality of follow-up, we implemented an online electronic database (http://newcastleproms.co.uk); which automatically requests follow-up from patients via text messaging and thus ensured that patients who were discharged early could be followed up. Following the introduction of the electronic follow-up system, we undertook a re-audit to assess the impact on follow-up rates.

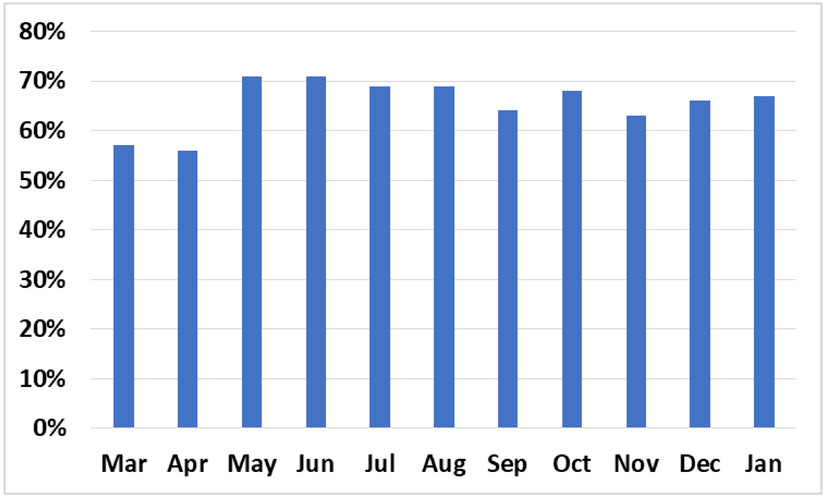
Methods

Comparison was made between the proportion of cases with completed electronic follow-up following the implementation of the online database in April 2021, and the rate when using the paper logbook, face-to-face follow-up in 2020.

Results

The audit of paper-based follow-up conducted between February and March 2020 showed a follow-up rate of 57%.

Following the implementation of the electronic database in April 2021, follow-up climbed to between 63% in November 2021 and 71% in May and June 2021.



Graph showing the rate of follow-up per month prior to (Mar 21) and following the implementation of the electronic system

Discussion

Although paper follow-up has advantages, predominately its familiarity and resilience, the 2020 audit demonstrated that it was not resulting in adequate feedback. It has numerous pitfalls, namely requiring timely face-to-face contact with patients post-delivery, within a resource-stretched service.

We have demonstrated a significant increase in the follow-up rates achievable when an automated electronic system is introduced. Furthermore, the system highlights patients who report problems by compiling an Action List, thus prompting clinicians to arrange further assessment.

Other benefits include data security, and clinicians getting access to detailed metrics of their own performance as well as valuable free text feedback from patients. Concerns voiced about the exclusion of some patient groups were addressed with the implementation of accessibility tools and online language selection with more than 100 languages being available to patients completing follow-up.

References

1. Cook, Counsell and Wildsmith. "Major complications of major neuraxial block: report on the Third National Audit Project of the Royal College of Anaesthetists". *British Journal of Anaesthesia* 2009 **102 (2)**: 179–90.

2. Brambley, Russel. "Postnatal obstetric anaesthetic adverse effects and complications". *Raising the Standards: RCoA quality improvement compendium* 262-3