

NHS BLOOD AND TRANSPLANT

LIVER ADVISORY GROUP

SUMMARY OF CUSUM MONITORING OF OUTCOMES FOLLOWING LIVER TRANSPLANTATION

INTRODUCTION

1. NHSBT monitors short-term patient outcomes following organ transplantation through centre specific cumulative sum (CUSUM) analyses. These are undertaken monthly for liver transplantation. These 'within centre' analyses enable prompt detection of any changes in mortality rates, providing external assurance and enabling centres to compare current outcomes with their own past performance to assist in internal auditing. CUSUM monitoring compares current outcome rates with an expected rate.
2. Each month, CUSUM monitoring reports on 90-day mortality following liver transplantation are produced and sent to each centre. This paper summarises the results of these reports for the seven-month period since the last CUSUM monitoring update from October 2022. Where signals have occurred, actions that were taken and lessons learnt are noted.

RESULTS

3. **Table 1** shows that there was one signal in December 2022 against the national rate and no signals against the centre-specific rate for adult elective liver transplants.

Month CUSUM report issued	No. reports issued	No. signals	No. signals requiring investigation	No. investigations outstanding
October 2022	7	0	0	0
November 2022	7	0	0	0
December 2022	7	1	1	1
January 2023	7	0	0	0
February 2023	7	0	0	0
March 2023	7	0	0	0
April 2023	7	0	0	0
Total	49	1	1	1

CONCLUSION

4. Over the last seven months, there has been one signal against the national rate and no signals against the centre-specific rate for adult elective liver transplants.
5. The investigation is still ongoing for the centre which signalled against the national rate.

Maria Jacobs and Rhiannon Taylor
Statistics and Clinical Research

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