



SBNS Neurosurgical National Audit Programme

Management of Outlying Performance

Introduction

This policy defines the role of the Society of British Neurological Surgeons (SBNS) in monitoring the performance of neurosurgical units taking part in the Neurosurgical National Audit Programme (NNAP).

Background

The SBNS was founded in 1926 and is one of the world's oldest national neurosurgical societies. The charitable objective of the SBNS is the advancement of neurosurgery for the public benefit and the benefit of the community. In 2013 the SBNS established the NNAP as part of a major quality improvement initiative. The NNAP is intended to support neurosurgical units in the UK and Ireland to improve patient care, outcomes, safety and experience by providing high quality, robust audit data that is analysed and presented in a consistent and clinically-relevant way. The NNAP makes available outcome and safety data to patients and public bodies through the SBNS website in easily accessible and interpretable formats.

NNAP Governance Committee

The programme is directed by the NNAP Governance Committee comprising SBNS officers, elected and co-opted members of council representing the four UK nations and Ireland, an academic advisor, an external medical advisor, a lay member and a data management and protection advisor. This committee oversees the quality assurance of the programme; liaises with local units; advises on the management of outlying performance; publishes reports and communicates with public bodies. Sub-committees manage specialist audits and registries.

NEC Software Solutions (NEC) provides the NNAP with statistical support, data linkage, data analysis, and performance reports. The NEC team undertakes systematic analysis of HES-based unit and consultant performance data, providing a range of case-mix adjusted performance indicators.

Performance Indicators (PIs)

HES-based PIs employed by the NNAP provide a surrogate measure of a provider's quality of care. They include: mortality within 30 days of procedure; median length of stay, unplanned readmission within 30 days and unplanned readmission for infection within 30 days. The PIs for specialty audits and registries if used, selected by the audit/registry sub-committees and endorsed by the NNAP governance committee include direct measures of clinical outcome not captured in HES coding.

Case-mix adjustment

The NNAP employs a neurosurgery-specific case-mix adjustment model based on age, sex, elective vs non-elective admission, high risk neurosurgical diagnoses, high risk neurosurgical procedures, organ support and co-morbidity corrected for acquired neurosurgical morbidity.

Data Quality Assurance

The NNAP will promote improvements in HES coding and the engagement of clinicians in the quality assurance of coding. HES coding will be cross-correlated with specialty audit and registry ascertainment. The NNAP will provide independent review of case records.

Management of outlying performance

The principles for the identification and management of outlying performance are outlined below:

Performance Levels

Performance levels are statistically defined and are based on deviation from the target performance - national mean or median value for the relevant PI as follows:

i. Potential Concern

A PI is identified lying more than 2 standard deviations (SD) but less than 3 SD from the target performance.

ii. Confirmed Concern

A PI is identified lying more than 2 SD but less than 3 SD from the target performance in two consecutive audit cycles or in two audit cycles within five years

iii. Serious Concern

A PI is identified lying more than 3 SD from the target performance.

NNAP Responses

i. *Potential Concern*

- a. The NNAP National Audit Officer will inform the Unit audit lead (registered with the NNAP) within 10 working days that a potential concern has been identified
- b. The NNAP will recommend local validation of the relevant data and if appropriate a clinical case review
- c. The NNAP will receive a report from the Unit audit lead within 60 days of the identification of the potential concern. The outcome of the local enquiry and any corrective actions will be logged.

ii. *Confirmed Concern*

- a. The Chair of the NNAP Governance committee will inform the Unit audit lead, and the Trust audit lead (registered with the NNAP) within 10 working days that a confirmed concern has been identified.
- b. The NNAP will recommend a Trust enquiry. The NNAP will provide the Trust with relevant informatics support.
- c. The NNAP will receive a report from the Trust audit lead within 60 days of the identification of the concern. The outcome of the Trust enquiry and any corrective actions will be logged.

iii. *Serious Concern*

- a. The Chair of the NNAP Governance Committee will inform the Trust's Medical Director, the Trust audit lead, Unit audit lead and all appropriate individual surgeons within 5 working days that a serious concern has been identified.
- b. The NNAP will recommend a Trust enquiry. The NNAP will provide the Trust with relevant informatics and professional support.
- c. The NNAP will receive a report from the Trust audit lead within 30 days of the identification of the concern. The outcome of the Trust enquiry and any corrective actions will be logged.

Units should be aware that the accuracy and completeness of audit and registry data is not the responsibility of the SBNS but that of the Units and Trusts. The role of the SBNS is to provide regular consistent analysis and case mix adjustment of data received from units into national datasets including HES and all other national audits and registries that fall within the Neurosurgical National Audit Programme. The SBNS takes no responsibility for any inaccuracies or omissions in the data submitted by units.

NNAP Governance Committee May 2022