



Royal College of Anaesthetists

Data Analyst

Directorate: Clinical Quality and Research

Reports to: Research Manager

Grade: 5

1.1 Job purpose

The purpose of this role is to analyse and utilise data from National Audit and Research projects to help support improvements in patient care and contribute to academic knowledge, support quality improvement and provide quality assurance via publications and online dashboards.

The role will involve working on Health Services Research Centre (HSRC) projects, predominantly the National Emergency Laparotomy Audit (NELA) and the Perioperative Quality Improvement Programme (PQIP).

The role will require specific analytical and statistical skills and experience of using and analysing large datasets.

1.2 Key tasks and responsibilities

Data Analysis and Reports

- Analyse data to produce a range of outputs, including annual reports; public reports for hospitals, commissioners and patients; internal reports for quality assurance; and peer-reviewed publications following the direction from the clinical leadership
- Contribute to the decision-making process for how to analyse the core data (which data, what style of reporting etc.), including drafting ideas arising out of workshops and meetings with clinical, national and regional users
- Write and modify statistical code using a range of statistical software and complex coding, in collaboration with the Research Manager, Head of Research, Statisticians and project clinical leadership
- Liaise with the wider project team and clinical leadership to produce text for reports where needed, and to ensure clinical commentary is valid and accurate, and logically follows from the statistical results
- Liaise with external bodies such as the Royal College of Surgeons of England's (RCSE) Clinical Effectiveness Unit and the Healthcare Quality Improvement Partnership (HQIP)
- Oversee the processes to individualise reports (mail merging and Excel Macros) and then carrying out thorough checks to ensure accuracy before dissemination of reports, including setting up checking spreadsheets
- Act on the findings of previous reports in preparing future reports
- Help develop, implement and test improved online reporting outputs
- Liaise with NHS Digital on the process of linking project data to Hospital Episode Statistics (HES), Office for National Statistics (ONS) and other data
- Work alongside Director and other members of HSRC, plus project leads for core HSRC projects such as (but not limited to) PQIP and NELA to use the linked data to analyse project outputs and determine case ascertainment rates
- Produce ad hoc data analysis for internal meetings, such as Project Team and Clinical Reference Group

- Review external requests for data and prepare data for release once approved
- Produce relevant resources and guides and give demonstrations to help project participants understand how to use the data and reports provided
- Support the project team in producing information to support patients/carers and interested members of the public in understanding reports
- Analyse data for use in written publications submitted to peer reviewed journals and conference posters and presentations and to contribute to writing the text
- Be familiar with and apply all laws, rules and responsibilities relevant to General Data Protection Regulation (GDPR), Section 251 approval, and Healthcare Quality Improvement Partnership (HQIP) Data Sharing Policy to RCoA research projects
- Be familiar with the latest datasets for RCoA research projects
- Be familiar with the latest web-tool and data collection platform specifications for RCoA projects, particularly the elements related to data extraction and online reporting. Contribute to updating the specification as and when required, and to advise on the likely impact of changes, ways to mitigate any risks, and appropriate test strategies when changes are made
- Carry out testing of changes to the web-tool to ensure they work correctly

General Responsibilities

- Liaise with the wider Clinical Quality and Research directorate and other RCoA teams to help communicate the outputs of research reports and use results to inform broader RCoA strategic workstreams
- Support the Director of Clinical Quality and Research in the submission of Research Governance applications and Data Sharing Agreements
- Promote assigned projects and other Research Team work to employees and members of the RCoA, outside organisations and build working relationships with other national bodies
- Attend and man RCoA stands at relevant events and conferences, both internal and external
- Undertake any other duties as may be reasonably expected and which are commensurate with the level of the post

1.3 Qualifications, skills, knowledge and experience

- Experience of using Excel to create graphical representations of data
- Experience of analysing large datasets using at least one of Stata or 'R'
- Experience of using data visualisation and data presentation platforms
- Coordination of a designated project or programme of work
- Experience of handling administrative work of a considerable variety and volume and prioritising successfully under pressure
- Ability to manipulate, analyse, and interpret quantitative data to draft reports
- Excellent communication skills, both written and oral
- Proven self-starter and team player who sets and delivers high standards with attention to detail
- Excellent time management, including ability to work under pressure and to deadlines
- Excellent literacy, numerical, oral, written and interpersonal skills
- Excellent organisation skills with the ability to carry out complex work with guidelines and ability to suggest improvements
- Ability to use standard Windows software and to "pick up" bespoke packages (training will be given) and adapt for use
- Ability to form good working relationships at all levels
- Consultative attitude to resolving problems
- Ability to maintain composure when dealing with various urgent issues simultaneously
- Ability to handle challenging people and situations with discretion, tact and diplomacy
- Knowledge of databases and visualisation and data presentation platforms

- Educated to degree level, or equivalent experience in Social Sciences or Statistics or a related topic

Signature:

Name:

Date: