



Royal College of Anaesthetists

Data Analyst

Directorate: Education, Training and Examinations

Reports to: Psychometric and Standard Setting Manager

Grade: 5

1.1 Job purpose

The purpose of this role is to provide expertise on all matters relating to examination data transfer and analysis, examination standard setting methods, and psychometric input to results data.

This role supports the data management and production of results for all FRCA and faculty examination deliveries and creates regular reports for each exam delivery. In addition, this role assists in research into the development of assessments and work with the Examinations Team to deliver College exam results and provide operational and administrative support to all areas of the examinations.

1.2 Key tasks and responsibilities

Data Manipulation, Analysis, Statistics, Standard Setting and Reporting

- Produce routine statistical analyses to evaluate the validity and reliability of examinations
- Ensure exam quality by checking accuracy of exam data as part of the results production process
- Produce routine written reports detailing analysis of exam performance and candidate outcomes and other exam data requests as required, with support from the Examinations Administrators
- Support all examinations committees, working parties and internal and external stakeholders in the provision of item, test, candidate, cohort and examiner performance analysis, for all examination deliveries and ensure that all analysis produced meets regulatory requirements and best practice
- Present and discuss outcomes of analysis to various stakeholders where required
- Support the Examinations Administrator (statistics) in the production and submission of General Medical Council (GMC) annual exam data outcomes
- Create, maintain and produce Excel spreadsheets and charts for the statistical analysis of FRCA and Faculty examinations
- Assist the Examinations Team with the management and creation of formula in spreadsheets and mail-merge documents
- Conduct data entry and data cleaning activities
- Support the Psychometric and Standard Setting Manager ("the Manager") in the production of moderation reports after each exam diet
- Assist the Manager in identifying areas for development of College assessments
- Support the Manager in quality assurance and the ongoing development and evaluation of assessment tools (including research and piloting)
- Assist the Head of Examinations and the designated project manager in the implementation and management of exam projects as directed

FRCA Written Examinations

- Act as lead for FRCA written examinations
- Oversee the maintenance of the Multiple Choice Question (MCQ) question banks and exam paper production
- Liaise with the relevant core groups to ensure standard setting and Angoff referencing is carried out
- Provide support for MCQ meetings and attend MCQ standard-setting meetings

FRCA and Faculty Examinations Operational Support

- Act as secretary to the Final Examiner Review Group (FERG)
- Attend internal and external best practice meetings
- Set up all examinations floors and provide floor support
- Any other duties that may be reasonably required of you to ensure the smooth running of all examinations

Examinations General Administration Support

- Update and maintain the College database
- Shared responsibility for exams helpdesk and generic email correspondence
- Shared responsibility for examiner feedback and exam receipt requests
- Provide general administration, including filing and document management
- Deal with all email and telephone queries as required
- Any other duties that may be reasonably required of you to ensure the effective administrative support of the examinations

1.3 Qualifications, skills, knowledge and experience

- Experience of analysing large datasets using at least one of Stata or 'R'
- Experience of conducting research and writing reports
- Previous experience in the use of SPSS or other statistical software
- 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 verbal
- 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, verbal, written and interpersonal skills
- Demonstrate ability to successfully interact with key stakeholders and explain findings and outcomes
- 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
- Ability to identify areas for improvement and make recommendations for change
- Ability to maintain composure when dealing with various urgent issues simultaneously
- Ability to handle challenging people and situations with discretion, tact and diplomacy
- A commitment to maintaining high customer care standards and organisational values
- Excellent Microsoft Office knowledge and skills with advanced knowledge of Excel
- Bachelor of Science in Statistics / Psychology / Science / Maths OR degree with strong quantitative research methods element(s)

Desirable:

- Previous experience of working in an education setting
- Knowledge of UK Post Medical Education
- Knowledge of medical training processes

Signature:

Name:

Date: