Job description and Person Specification

Job Title:	Medical Statistician
Department	Data and Quality Improvement
Responsible To:	Registry Senior Statistician
Location:	London office OR home based with regular travel to the office
Duration:	2-year fixed term contract
Hours:	Full time 35 hours per week

Job Summary

The Cystic Fibrosis Trust is looking to appoint a medical statistician to join a growing team supporting the UK Cystic Fibrosis Registry. This currently includes a senior statistician, and two medical statisticians. An able communicator, creative problem solver, and team player, the post holder will have the opportunity to contribute the world-leading data resource used for research into cystic fibrosis, provision of information to people with cystic fibrosis, and to support clinical teams to monitor and improve the quality of their clinical care.

The post holder will undertake data management and analysis tasks to support a variety of observational studies, production of reports and data requests using patient data from the UK CF Registry. These include:

a) **CF Registry annual reports**: Since 2008 the Cystic Fibrosis Trust has generated annual reports based on patient annual review data collected on the UK CF Registry. In conjunction with other members of the Registry team, you will contribute to the management and analysis of Registry data related to the production of a final dataset for use by the Trust (as well as collaborators from CF organisations in the US and Europe) for future research and a series of annual reports. You will liaise with the UK CF Registry Steering Committee and the Cystic Fibrosis Trust's Registry Management Team, on the content and format of these reports.

b) **Phase IV post-marketing surveillance studies**. You will be the data manager and statistician for a selection of observational Phase IV post-marketing surveillance studies of CF treatments. Data for these studies will be extracted from the national UK CF Registry database of patient annual reviews. Within these studies, you will have a crucial role within research teams comprising of CF clinicians, the UK CF Registry team, and representatives from the relevant pharmaceutical companies. You will collaborate directly with the principal investigators, taking responsibility for the design, data cleaning and preparation, analysis, and interpretation of results as well as preparation of reports, whilst working to agreed deadlines.

c) **Further epidemiological studies**: The post-holder will be involved in other observational studies in CF that arise from Cystic Fibrosis Trust research collaborations. You will contribute to some or all elements (design, data collection, analysis, and dissemination of results) of these studies, working closely with a team of clinicians, the Registry Research Committee, and collaborators from the Cystic Fibrosis Trust.

d) **Data requests:** The post-holder will actively contribute to the data request process for the UK CF Registry. This includes extracting the requested data from the annual verified datasets and preparing for use by external researchers and collaborators. You may also be required to provided expert statistical review of requests and/or provide advice and support to those accessing Registry data for their own research.

This role requires an individual confident in working independently and communicating clearly to statistically and non-statistically trained colleagues both in the UK and internationally.

Main Duties

Data management

1. To extract, merge and prepare data from the CF Registry database for statistical analyses.

2. Work with clinical data manager, systems development manager and other as appropriate to support data collection, data management and data verification as needed.

3. Contribute to the data cleaning, validation, and archiving procedures for current and historic verified datasets.

4. To design and implement methods for ensuring the validity and reliability of data at all times.

5. To identify from the CF Registry relevant patient populations for pharmacovigilance studies.

6. To produce final annual review datasets for use at the Trust and to produce datasets for sharing with European and American colleagues

Data programming

1. Execute and build upon programmes for automated data cleaning and verification of results.

2. Write STATA programs for data management and analysis tasks.

3. Check programs written by other medical statisticians for verification of results.

4. To follow all Registry Standard Operating Procedures and protocols to ensure analysis files are stored and organised in accordance with good documentation practice.

Statistical

1. Assist in the design of observational studies in CF including pharmacovigilance Studies.

2. Perform statistical analyses on UK CF Registry data for the purposes of Phase IV studies, annual reports, and other studies in CF as required. to provide interpretation of descriptive and comparative analyses.

3. Develop and update statistical analysis plans as required.

4. Provide statistical advice to other staff, students, and collaborators.

5. Assist with the publication of findings from CF Registry related studies.

Communication

1. Assist with the writing of reports suitable for a range of audiences.

2. Present findings to colleagues and the CF community.

3. Liaise with collaborators at the Cystic Fibrosis Trust and CF organisations in the US and Europe and other stakeholders.

Other Duties

1. Undertake any necessary training and/or development.

2. Undertake appropriate administration tasks.

3. Maintain accurate and complete records of work.

4. Attend relevant meetings both in person and via tele/video conference.

5. Any other duties commensurate with the grade of the post as directed by line manager /supervisor.

PERSON SPECIFICATION: MEDICAL STATISTICIAN

	Essential	**Desirable**
Qualifications	Degree in Statistics OR Degree or equivalent academic qualification in Science or Health-related subject with substantial, demonstrative experience of quantitative/statistical analysis skills.	MSc in Statistics or other analytical subject
Knowledge & experience	1. Strong statistical programming skills in a statistical package (e.g. Stata, SAS, R) *2.* Experience of designing, undertaking, and interpreting statistical analyses *3.* Experience of working with large observational datasets *4.* Experience of data management	1. Experience of working successfully in a multidisciplinary team *2.* Experience of working with large observational healthcare datasets *3.* Experience of employing a wide range of statistical methods to analyse health and medical data *4.* Evidence of peer-reviewed publications and presentations at professional meetings 5. Knowledge or experience of research study design and methodology.
Skills & abilities	1. Willingness to engage in detailed data cleaning and management tasks 2. Excellent verbal communication skills with the ability to deal with a wide range of people. 3. Ability to communicate statistical concepts to scientists, clinicians, and other healthcare professionals 4. Excellent written communication skills and the ability to write clearly and succinctly for publication *5.* Proficient in the use of Microsoft Excel and Word 6. Ability to organise own work with minimal supervision 7. Ability to prioritise own work in response to deadlines	

	8. Ability to develop and deliver presentations to a wide range of audiences 9. An understanding of data protection legislation and health data information governance	
Personal attributes	1. Willingness to undertake any necessary training for the role 2. Willingness to work as part of a team and to be open-minded and cooperative 3. Meticulous approach and attention to detail 4. Flexible attitude towards work 5. Discipline and regard for confidentiality and security at all times 6. Willingness to travel both within the United Kingdom and abroad to attend conferences	