



Job description

Job title:	Stroke Programme R specialist
Date:	February 2018
Grade:	N/A
Post number:	N/A
Department:	Care Quality Improvement Department (CQID)
Job context:	<p>The Royal College of Physicians (RCP) is the professional membership body for physicians, with over 33,000 members and fellows across the globe. Everything it does aims to improve patient care and reduce illness. It conducts examinations, carries out training, education and research activities, delivers quality improvement and patient safety programmes to support clinical teams, and advises the Government and the profession on health and medical matters.</p> <p>The Care Quality Improvement Department of the Royal College of Physicians manages a wide variety of programmes that focus on healthcare improvement and patient safety, and directly aligns to the RCPs strategic intent to improve care for patients. Its activities are grouped into three Units with matrix working across the Department to maximise opportunities for efficiency, sharing intelligence and skills whilst enhancing impact and thus maximising benefit for patients. Shared posts will deliver activities that cut across CQID units to maximize efficiencies. Staff are encouraged to meet at CQID-wide staff meetings, project activities and learning events.</p> <p>There is joint working with wider College teams to deliver other strategic aims such as developing physicians throughout their careers and shaping the future of health and healthcare; particularly with education, policy, research, international, conferences and exams. Business partner models support core functions such as communications, HR, IT and finance.</p>

	<p>RCP London is the primary base for most work currently, although some activities will be delivered at the RCPs new Centre of Excellence in Liverpool, RCP North. The work is delivered UK-wide and has some international reach – therefore travel, with occasional overnight stays, is required.</p>
<p>Purpose and scope:</p>	<p>The Stroke Programme is in the process of developing a new methodology for reporting on the rich data collected by the audit utilising the software R. A feasibility analysis has been undertaken and has highlighted key efficiencies and benefits to the proposed new methodology. The core outline of the code has been agreed upon, and we are entered the migration phase of this project. We seek an R specialist to assist with the testing, checking, and expansion aspects of this migration of code initially on a short-term basis.</p> <p>The Stroke Programme R Specialist will be an analyst with substantial experience of data manipulation and visualisation in R, preferentially with experience of automating reports with R Markdown, and creating interactive web applications in R with Shiny. Experience with at least some of the following R functions will be essential: Tidyverse, data.table, ggplot2, dplyr.</p> <p>The purpose of this role is to assist in transitioning from current static reporting procedures which uses Stata software to analyse data at fixed time points, to using open source software (R Programming) to create increasingly sophisticated and engaging reporting outputs, more conducive to continually improving patient care into the future. This includes the complete migration of SSNAP key indicator measures currently reported in Stata into R and wider testing of functionalities and capabilities, expanding the R methodology to all other indicators currently reported by SSNAP, as well as working towards the rollout and launch of R using the live SQL server after final piloting and testing is complete. The transition will improve the process, quality, timeliness, and efficiency of SSNAP reporting in order to maximise impact and usefulness for improving stroke patient care.</p> <p>This is a short-term role for approximately 9 weeks focusing on accelerating the uptake of R across the programme. The scope of this role will include:</p> <ul style="list-style-type: none"> - Facilitating the accelerated integration of R to the offline SSNAP SQL server - Embedding learning from the Informatics Director - Undertaking the transition phase from Stata into R - Undertaking extensive testing of the offline server using a sample of SSNAP key indicators - Comparing cohorts of patients identified in Stata and R to ensure consistency - Resolving any discrepancies between the two methodologies - Embedding interactive features/reporting into the SSNAP webtool using R

Reports to:	Stroke Programme Intelligence Manager
Direct reports:	None
Works closely with:	<p>Stroke Programme Clinical Director of Clinical Informatics Stroke Programme Intelligence Manager SSNAP Programme Manager Stroke Programme Research Director Stroke Programme Associate Clinical Directors SSNAP Project Manager SSNAP Data Manager Netsolving (Subcontracted Web Developer)</p>
Major responsibilities:	<p>To assist with the transition of SSNAP methodology from the software Stata to using R. To check, identify, and resolve any discrepancies in methodology, and to embed functionality within the SSNAP webtool.</p> <p><i>The post holder will:</i></p> <ul style="list-style-type: none"> • Support the project management team members with the running of the project working towards mutually agreed timetables. • Contribute to the sound governance of the project. • Have an awareness of the resource management aspects of project delivery. • Be an enthusiast who can deliver the Stroke Programme’s vision for the development of use of data to aid daily performance across teams. • Have substantial experience of data manipulation and visualisation in R, preferentially with experience of automating reports with R Markdown, and creating interactive web applications in R with Shiny. Experience with at least some of the following R functions will be essential: Tidyverse, data.table, ggplot2, dplyr. <p>Management The post holder will be directly responsible to the Stroke Programme Intelligence Manager</p> <p>Other programme work and activities</p> <ul style="list-style-type: none"> • Work collaboratively with SSNAP programme staff initially up to the end of March 2018 • Take a lead on sub-projects jointly agreed with the SSNAP programme manager around specific aspects of the programme (e.g. mapping, interactive dashboards). <p>Generic responsibilities</p> <ul style="list-style-type: none"> • Undertake any other duties as may be reasonably expected and which are commensurate with the level of the post. • Undertake all duties and responsibilities in compliance with the rules and regulations encompassing equality opportunities and the Data Protection Act

	<p>and the Care Quality Improvement Department Information Governance Policy. Adhere and comply with the provisions of the Health and Safety Policy of the RCP.</p> <ul style="list-style-type: none"> • Undertake all duties and responsibilities in compliance with the rules and regulations encompassing equal opportunities • Adhere to the RCPs Rights and Responsibilities document.
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Terms and conditions

Salary scale: Negotiable (£200 - £350 per day depending on experience)

Annual leave: N/A

Other benefits: N/A

The RCP operates a no smoking policy.

Applying for the role

If you are interested in applying for this position please send your CV and a short expression of interest to the Stroke Programme Intelligence Manager Lizz Paley lizz.paley@rcplondon.ac.uk

Similarly if you have any queries regarding the post please contact Lizz Paley on the email above or call 0203 075 1593.

PERSON SPECIFICATION

Position: Stroke Programme R Specialist

Job

Number:

Date: Feb 2018

Department: Care Quality Improvement Department – Clinical Effectiveness and Evaluation Unit

General and Professional Education	Application	Interview
<u>Essential</u> Educated to degree level	✓	
A-Level mathematics	✓	
Degree relating to mathematics and/or statistics or sufficient experience	✓	
<u>Desirable</u> Relevant qualification in statistics / programming	✓	
Experience of working with high level stakeholders to encourage collaboration	✓	
Technical Competencies	Application	Interview
<u>Essential</u> Extensive and varied experience of using R to manipulate data and to create data visualisations	✓	✓
Experience of automating reports with R Markdown	✓	✓
Experience with at least some of the following: Tidyverse, data.table, ggplot2, dplyr	✓	✓
Advanced knowledge and application of Microsoft Word, Access, Excel, Outlook and PowerPoint	✓	✓
Experience of managing a varied workload and delivering work on time	✓	✓
Relevant experience working in a role with defined responsibility for data analysis	✓	✓
<u>Desirable</u> Experience creating interactive web applications in R with Shiny	✓	✓
Advanced knowledge of Stata (preferably version 14)	✓	✓
Experience of using database software and SQL programming	✓	✓
Previous experience working within the NHS or similar complex organisation	✓	✓
Grade Competencies	Application	Interview
A1.1 iii Adapts to agreed changes and new ways of working positively, effectively and completely Motivates self and others positively, to accept changes and make them effective		

A2.2.ii <i>Exercises integrity and judgment in dealing with privileged information or giving information or advice.</i> Demonstrates integrity and discretion when dealing with sensitive information or advice		✓
A3.2.iii <i>Takes clear responsibility and initiates actions for own development.</i> Identifies personal learning needs from time to time, and plans and takes action to meet them		✓
B3.1.ii <i>Uses methods that reveal and acknowledge the diversity of viewpoints held, using communication styles that are appropriate to different people and situations.</i> Actively considers own communication style carefully when dealing with people in different contexts and with different viewpoints, using a range of communication styles effectively		✓
C1.2.iii <i>Uses a systematic approach to planning and organising, consulting with relevant people and monitoring to ensure tasks and projects are delivered on time, within budget, achieving the outcomes expected.</i> Uses a systematic approach to planning, organising, associated consultations and implementing projects, using a range of tools and techniques to monitor and control with positive results		✓
C2.2.ii <i>Uses the features of a range of software systems relevant to work.</i> Is proficient in the use of advanced features of a small selection of appropriate software and/or is proficient in the use of regularly used features of a wide section of work software	✓	✓
C2.3.iii <i>Keeps information and audit trails up to date and in a form which can be used by others.</i> Stores information according to department policy and provides audit trails to others to meet their requests		✓
D1.2.i <i>Monitors the relevant legal, regulatory, ethical and social requirements, ensuring compliance with law, industry regulations, organisational policies and professional codes.</i> Is aware of and can describe the basic legal requirements that affect their area of work, and monitors it to ensure compliance with regulations		✓
A4.5. <i>Works effectively with others who have different outlooks or viewpoints.</i> Values the different approaches that others bring, seeking ways to maximise the benefits of the multiple perspectives		✓
A3.1.iii <i>Learns from experience by reviewing activities and revising plans in the light of the review.</i> Frequently reviews own and others activities to revise plans		✓
C1.3.ii <i>Manages priorities to ensure that projects of the highest importance are delivered first (above those that are driven by crisis or pressure).</i> Identifies clearly the relative importance of task, to enable priorities to be set. Endeavours to reprioritise effectively when issues arise, asking for assistance where necessary	✓	✓