

**Job Title** – Macmillan/ National Cancer Audit Collaborating Centre (NATCAN) **Data Scientist**

**Salary** - £39,984 to £51,872 per annum depending on qualifications and experience

**Contract Type** – Full- time, fixed term (3-year position)

**Location** – Clinical Effectiveness Unit – National Cancer Audit Collaborating Centre (NATCAN), based at the Royal College of Surgeons of England and supported by the London School of Hygiene and Tropical Medicine (LSHTM).

*The post is available for remote working at any UK location, to be discussed upon appointment.*

*However, there is an expectation that post holders attend RCS Eng regularly for in person meetings*

### **About the Data Scientist role**

This [Macmillan Cancer Support](#)-funded post offers a unique opportunity to work at the [National Cancer Audit Collaborating Centre \(NATCAN\)](#) within the Clinical Effectiveness Unit (CEU) at the Royal College of Surgeons of England (RCSEng). NATCAN is a national centre of excellence dedicated to strengthening NHS cancer services and reducing variation in care and is the home of all 10 National Cancer Audits in England and Wales. NATCAN is the largest centre evaluating cancer services in the UK, with 45 staff members, employed at the RCSEng or the LSHTM, from a wide range of backgrounds (medicine, statistics, epidemiology, data science, quality improvement, project management).

This post will support a Macmillan funded partnership with NATCAN to improve understanding of how to:

- Reduce health inequities within cancer treatment and care;
- Support those with cancer and other long-term conditions;
- Reduce unwarranted variation in cancer treatment and care.

The successful candidate will complete a PhD focused on one of the following thematic areas:

1. Hub and Spoke model – understanding variation in outcomes between hubs (tertiary centres) and spokes (general hospitals)
2. Treatment Attrition – understanding who drops out of treatment and why
3. Under-treatment and over/inappropriate treatment - understanding why some people receive less or no treatment, or treatment that differs from clinical guidance

This is a key role in data science and reporting in NATCAN, working closely with senior cancer specialists, clinical fellows, methodologists, data managers, and other multidisciplinary team members. The post holder will develop advanced analysis and research skills. Having large detailed linked datasets provides opportunities to be involved in methodological development and in epidemiological studies assessing the quality of care and answering the most pressing questions about why some cancer patients receive different treatments and outcomes than others. The results of the work will be disseminated as peer-reviewed academic papers, and conference presentations as well as audit reports and their online dashboards. Work of the post holder will also include some of the following: supporting development to improve the efficiency of data analysis and reporting within the centre; working on the data flow into and within NATCAN; data validation; data science processes; automated reporting; state-of-the-art data visualisation and dashboards.

## Responsibilities

- Carry out statistical analyses to explore the thematic area using national datasets on hospital care, surgery, chemotherapy and radiotherapy.
- Extract, wrangle and curate large scale linked clinical datasets ready for analysis using SQL or statistical software
- Develop reusable data pipelines and apply algorithms to derive required variables
- Produce reports, dashboards and data visualisations to support local quality improvement
- Ensure projects comply with information governance policies
- Communicate findings in seminars, conference presentations, reports and academic journals

## About you

We are looking for applicants with

- Bachelor Level/ Higher degree in medical statistics, data science, epidemiology, operational research or equivalent academic qualification
- A good understanding of health-related research methods and study designs
- Experience of undertaking analyses using large complex datasets in a statistical package
- Evidence of contributions to written output, preferably peer-reviewed
- Experience of applying information governance principles to health care data

## About us

The Royal College of Surgeons of England is one of the best known professional membership organisations in the world, with a name and reputation that speak for excellence in the UK and across the globe. We provide education, assessment and development to nearly 30,000 surgeons, dental surgeons and members of the wider surgical and dental teams at all stages of their career; we set professional standards, facilitate research and champion world-class surgical outcomes for patients.

The National Cancer Audit Collaborating Centre (NATCAN) sits within the Clinical Effectiveness Unit (CEU), based at the Royal College of Surgeons of England.

## What we can offer you

- 27 days paid holiday + bank holidays and up to 4 college closure days
- Flexible working
- Enhanced contributory pension scheme & other leave entitlements
- Variety of learning and development opportunities
- Wellbeing programme & Employee Assistance Scheme

## Interested Candidates:

If you have any questions about this position please contact [RCSHR@rcseng.ac.uk](mailto:RCSHR@rcseng.ac.uk).

If you wish to apply please email your CV together with a cover letter addressing how you meet each of the criteria in the Personal Specification to [RCSHR@rcseng.ac.uk](mailto:RCSHR@rcseng.ac.uk).

Any personal data collected from you, or that you provide to us, will be processed by us in accordance with our recruitment processes. If unsuccessful in your application, your information will be held by us on our database for a period of 6 months before deletion. If you would like your information removed sooner, please contact [RCSHR@rceng.ac.uk](mailto:RCSHR@rceng.ac.uk)

**Closing date: 25.05.26**

The Royal College of Surgeons of England is an Equal Opportunities Employer. We are open to all talent, and we actively ensure that all qualified applicants will receive equal consideration for employment without regards to race/ethnicity, nationality, religion, pregnancy, marital status, sexual orientation, gender identity/expression, age and disability

The Royal College of Surgeons of England is committed to protecting your privacy. We are registered as a data controller with the Information Commissioner's Office (ICO). All College employees are responsible for records held, created and used as part of their work for the College including patient/client, corporate and administrative records. Records are managed according to the requirements of the Data Protection Act 2018 and ensure confidentiality. The College ensures that staff are trained to handle the information you submit to us with care and discretion, seeking advice where necessary.