

## *Job description*

<b>Job title:</b>	Data Architect
<b>Reporting to:</b>	Senior Data Architect
<b>Salary:</b>	£43,788 per annum plus excellent benefits
<b>Contract type:</b>	Fixed term contract until 30 June 2023
<b>Hours per week</b>	Full time team members work 37.5 hours per week, and with hybrid working those hours can be done any time between 7am – 7pm. Core working hours are 10am – 3pm. For this role we would need approximately 1-2 days per week in the office, in line with our hybrid working framework. Part-time and flexible working arrangements will be considered.

### **The Health Foundation**

We are an independent charity committed to bringing about better health and health care for people in the UK.

### **Improvement Analytics Unit**

The Improvement Analytics Unit (IAU) is based on a unique partnership between The Heath Foundation and NHS England that evaluates complex health care initiatives to support learning, improvement and policy development. The IAU sits within the Health Foundation's Data Analytics team, which aims to ensure that analytic and data-driven technology creates better health and care for all.

The IAU primarily uses statistically robust methods and novel counterfactual analysis to estimate the impact of a change programme or innovation, informed by a deep understanding of relevant policy and practice. By providing feedback to service leaders and decision-makers at both a local and national level, the IAU aims to identify what is working well and what might need to change in the future to improve outcomes. In addition, the IAU focuses on demonstrating the value of robust evaluation to commissioners and decision makers, in order to embed evidence-based decision-making in the health service. The IAU collaborates with partners across health and social care, and has a commitment to open coding and analytics in order to support robust analytics for health.

## **Data management function within the IAU**

The Improvement Analytics Unit uses a variety of novel and established data sets, such as the Secondary Use Services (SUS) data (similar to Hospital Episodes Statistics), general practice registration data, and datasets collected by local NHS partners to support the delivery of new care models. The IAU partnership includes NHS England colleagues in the National Commissioning Data Repository, who act as data controllers for much of the data the IAU processes.

All these data, as well as all other patient information processed by the Health Foundation's Data Analytics and other analysis teams are processed on a dedicated Data Analysis Platform (DAP) hosted by Amazon Web Services. Data management forms an essential part of the IAU's work programme. The data management function within the Data Analytics team is responsible for:

- Delivering the production environment for the team;
- Supporting analysts across a range of projects in obtaining health data for research and evaluation purposes on a national and local level;
- Contributing towards the development and analysis of new and bespoke datasets not previously used in health service research;
- Managing secure transfers of data to and from the DAP;
- Coordinating consistent approaches to data cleaning across multiple projects;
- Ensuring that research findings released from the DAP are anonymous and do not risk disclosure of the identity of patients or other data subjects;
- Shaping thinking on information governance and data security in the wider community and demonstrating good practice;
- Contributing towards the Health Foundation's overall information governance policy;
- Establishing, implementing, monitoring, reviewing and improving the majority of guidance, policies and procedures to support the DAP;
- Maintaining relevant accreditation (including the Data Security and Protection Toolkit and ISO27001).

## **Purpose of the role**

The Data Architect will work in the Improvement Analytics Unit (IAU) which is part of the Data Analytics team. The team conducts high-quality, in-house research and analysis, and collaborates with the NHS to develop approaches to improve health care that can be applied at local and national levels. Specifically, the successful candidate will support the IAU, a joint unit with NHS England that provides rapid feedback about the effects of new models of care and develops robust approaches to data management and information governance, applying analytics directly to real-world problems.

The successful applicant will work together with the Senior Data Manager to develop and deliver an ambitious data management agenda to support rapid-cycle evaluation. The Data Architect will help ensure that quality control, standardised cleaning and metadata collection is applied to the updating of core datasets used by the IAU, as well as help investigate the potential and use of new data.

The Data Architect will also work closely with statisticians and analysts in the team during the research and development phase of individual evaluations to develop and deliver data specifications and analysis datasets used by the IAU. They will also help to embed the

preferred approach to analysis within the production environment. Since the IAU has a complex and dynamic work programme, it is essential to be adaptive and to seek to improve approaches to data management over time. At all times the post holder will aim to embed our key behaviours - working together, achieving impact, discovering and learning – in all aspects of their day-to-day delivery in the role. The Data Architect will be part of a growing group of data management professionals who support work across the Data Analytics directorate, collaborating with a wide range of internal and external partners.

### **Key responsibilities and outcomes.**

1. Work collaboratively with IAU partners, including analyst teams, NHS England and the National Commissioning Data Repository.
2. Quality control incoming data and apply standardised data cleaning where appropriate.
3. Maintain metadata and data dictionaries for data sets, managing version control and documentation.
4. Create variables required for IAU analyses, with agreed variable and value labels.
5. Produce data specifications for evaluations and data extracts.
6. Work collaboratively with statistical teams to incorporate approaches to statistical analysis within the production environment, ultimately ensuring that these analyses can be replicated within the production environment on a regular basis.
7. Promote an open approach to collaboration, working with teams external to the Health Foundation to arrange appropriate access to data.
8. Contribute towards the analysis of data sets and the writing of reports and research articles.
9. Travel as needed, predominately within the four countries of the United Kingdom.
10. Collaborate as part of a multi-organisational team.

### **Wider contribution**

As with other staff at the Foundation, the postholder will be expected to contribute to corporate activities and initiatives, such as staff meetings, cross-Foundation leadership and development programmes and other corporate projects as necessary. The postholder will similarly be expected to play a role in supporting and helping to develop the Data Analytics team to enable it to improve its effectiveness.

**The post holder will at all times aim to embed our key behaviours – Working together, Achieving impact, Discovering and learning – in all aspects of their day to day delivery in the role.**

**We value equality, diversity and inclusion, and welcome applications from different backgrounds. We are also committed to making reasonable adjustments for candidates who have accessibility requirements.**

**Candidates should have the right to work in the UK at the time of appointment.**

# *Person specification*

	Criteria	Assessment (CV/SS- Shortlist, T- Test, I- Interview)	Essential Desirable (E/D)
<b>Behaviour</b>	<b>Commitment to Diversity and Inclusion -</b> Demonstrable ability to develop and maintain excellent working relationships in a diverse team and to take account of a wide range of views and opinions when making decisions	CV/SS, I	E
<b>Behaviour</b>	<b>Working together</b> - open, communicative, and approachable to all staff across the organisation irrespective of role or seniority	CV/SS, I	E
<b>Behaviour</b>	<b>Achieving impact</b> - The ability to achieve impact through an organised and methodical approach to work	CV/SS, I	E
<b>Behaviour</b>	<b>Discovering and Learning</b> - flexible and resilient with the demonstrable ability to discover and learn	CV/SS, I	E
<b>Knowledge</b>	Knowledge and demonstrable practical experience of data manipulation techniques	CV/SS, I	E
<b>Knowledge</b>	An understanding of governance arrangements for administrative data sources in the United Kingdom, and an ability to learn and understand requirements specific to the health sector.	CV/SS, I	D
<b>Knowledge</b>	A thorough understanding of data security.	CV/SS, I	E
<b>Knowledge</b>	An understanding of statistical concepts and data linking methodologies.	CV/SS, I	E
<b>Knowledge</b>	Experience of conducting analyses, preferably using large data sets such as administrative or survey data	CV/SS, I	D
<b>Skills and abilities</b>	Proficient in statistical or data management software to an advanced level, ideally R	CV/SS, I	D
<b>Skills and abilities</b>	Excellent analytical skills	CV/SS, I	E
<b>Skills and abilities</b>	Corporate approach to the post with a willingness to further the objectives of the Foundation	CV/SS, I	E