

Job Profile – HDRC Data Scientist

Department: Health Determinants Research Collaboration (HDRC)

Responsible to: HDRC Data Manager

Responsible for: N/A

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**Job purpose**

The successful candidate will be a creative thinker who can bring analytical skills and experience in statistical packages and/or programming (SQL, R, Python or similar), or a willingness to learn, to work with, link and analyse data across multiple domains.

They will manage and analyse complex data related to wider health determinants and inequalities in our community alongside developing and maintaining data pipelines and infrastructure to support analysis.

They will use whole system of linked data across Local Government, the NHS and other local agencies for epidemiology, modelling, visualisation, decision support and evaluation. They will also work within a wider team to provide the data and intelligence that will inform and drive the research programme and inform policy and decision making.

Key responsibilities

1. Provide data science skills, knowledge, and expertise in the HDRC.
2. Establish links with project partners (internal and external) and work to provide data-led solutions to Bradford and the wider City of Bradford Metropolitan District Councils’ (CBMDC) authority areas’ challenges.
3. Collaborate with other departments, partners, and stakeholders to develop a broad understanding of locally available datasets.
4. Represent the HDRC at relevant meetings and contribute to presentations, policy documents and other outputs.
5. Support the development of local authority skills and knowledge in advanced analytics, data analysis and visualisation.
6. Work with leading researchers, public health consultants and internal and external data partners to deliver the aims of the HDRC.
7. Plan and deliver research activity in collaboration with project investigators and other members of the HDRC team.
8. Contribute to the overall research of the HDRC by producing measurable outputs, such as peer-reviewed papers and conference presentations.
9. To demonstrate a commitment to perform duties in the best interest of the HDRC, its partners, staff, and other users, adopting the highest standards of professionalism.
10. To act in accordance with Data Protection Act principles and maintain confidentiality at all times.
11. To participate in ‘in-service’ training and other training programmes as required and maintain personal and professional development in order to meet the changing demands of the post.
12. To service meetings by organising, minute taking and tracking of actions.
13. The successful candidate, although supported, will be able to undertake the duties and responsibilities of the role with a high degree of autonomy, using independent thinking and reasoning. They will be conscious of the links of this role to others across the HDRC and work in a holistic manner.
14. To promote and establish the HDRC team across CBMDC and to external organisations, in relation to its aims and objectives, raising awareness and protecting its reputation.

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| **Dimensions of role (direct/ indirect as applicable) e.g. total number of staff managed/ total budget/ total scope of role** |
| Scope and Impact of role   * No direct line management responsibility * Horizontal and vertical impact across CBMDC and other organizations in volved in the HDRC, e.g., NHS, Universities and Voluntary Community and Social Enterprises * Reporting and networking across the other authorities that are NIHR-funded HDRCs, collaboration and sharing of findings and best practice.   Budget   * No direct responsibility for budget management, however the successful candidate will have a responsibility for efficiently deploying finite resources to support the effectiveness of the role * To suggest proactive and innovative ideas for efficiencies in the resources required to undertake the post holders’ role as well as remit of the wider team. |
| **Structure Chart** |
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| **Qualifications** | Bachelor's degree, Master's degree or PhD (or equivalent experience) in data, statistics, mathematics, computer science, public health, epidemiology or a related field. |
| **Experience** | Expertise may have been gained in the context of quantitative social science, computing, mathematics/statistics, geography, public health, or related field in the public, private or academic sectors.  Likely to have worked or trained in a data analyst/science environment.  Demonstrate a keen interest in using data science for public good using statistical or data analytic techniques. |
| **Skills and knowledge** | Quantitative analysis of data, i.e. wrangling, linkage, scraping, visualisation, geospatial, modelling and analysis.  Knowledge and application of innovative data science techniques to explore complex data, identify trends and patterns, and generate insights to inform policy and decision making.  Knowledge and experience of using the statistical programming language(s) such as SQL/ R/ Python or similar for data science.  Experience of working with large unstructured (or ‘messy’) data.  Experience of developing and maintaining datasets and infrastructure to support data analysis and decision-making.  Experience of collaborating with internal stakeholder(s) and external partners, taking a collaborative approach.  Excellent communication and presentation skills, with the ability to convey complex information to a variety of audiences.  Ability to work independently and as part of a team, with excellent time management skills and attention to detail.  Good project-management skills.  Uses a range of specialist ICT systems across own work area and or across other areas of work.  Uses, interprets, analyses, communicates complex information. |
| **Core Employee competencies at manager level to be used at the interview stage.** | |
| **Carries Out Performance Management** – covers the employees’ capacity to manage  their workload and carry out a number of specific tasks accurately to a high standard. | |
| **Communicates Effectively** - covers a range of spoken and written communication skills required as a regular feature of the job. It includes exchanging information/building relationships, giving advice and guidance, counselling, negotiating, and persuading and handling private, confidential, and sensitive information. | |
| **Carries Out Effective Decision Making** - covers a range of thinking skills required for taking initiative and independent actions within the scope of the job. It includes planning and organising, self-effectiveness and any requirements to quality check work. | |
| **Undertakes Structured Problem-Solving** **Activity** - covers a range of analytical skills required for gathering, collating, and analysing the facts needed to solve problems. It includes creative and critical thinking, developing practical solutions, applying problem solving strategies and managing interpersonal relationships. | |
| **Operates with Dignity and Respect** - covers treating everyone with respect and dignity, maintains impartiality/fairness with all people, is aware of the barriers people face. | |
| **Management Competencies: to be used at the interview stage.** | |
| **Operates with Strategic Awareness** Our managerswork with corporate priorities and policies in a joined-up way with others, internally and externally. Works democratically, transparently, and accountably. | |
| **Practices Appropriate Leadership** Our managers motivate their staff to exceed expectations through raising their awareness of goals and moving them beyond self-interest for the sake of the team or service. They consider serving the District in all that they do. | |
| **Delivering Successful Performance** Our managers monitor performance of services, teams & individuals against targets & celebrate great performance. They promote the District’s vision & work to achieve Council’s values & agreed outcomes. | |
| **Applying Project and Programme Management** Our manager’s work to ensure that outcomes and objectives are achieved within desired timescales, make best use of resources, and take a positive approach to contingency planning. | |
| **Developing High Performing People and Teams** Our managers coach individuals and teams to achieve their potential and take responsibility for continuous improvement. They champion the Council’s values and goals. | |
| **Working Conditions:** | |
| Must be able to perform all duties and tasks with reasonable adjustment, where appropriate, in accordance with the Equality Act 2010 in relation to Disability Provisions.  Hybrid and flexible working details to be agreed with the successful candidate. | |
| **Special Conditions:** | |
| A satisfactory standard DBS check will be required for this role. | |

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| **Completed by:** | Ellen Flint / Caroline Tait | **Date:** | 23/07/2023 |
| **Quality checked:**  **(HR)** |  | **Date:** |  |