

# Data Scientist

## Job Description

**Salary:** £30,550 - £45,259 per annum

**Job type:** Full-time

**Contract period:** Permanent

**Reporting to:** Head of Data Science

**Division:** Data Science Team

**Location:** Oxford / hybrid working in line with Picker's Home and Remote Working Policy

## About Picker

Picker is an Oxford-based charity with an international reputation as a key authority in the measurement and improvement of patient experience. Our mission is to make person-centred health and social care a reality for everyone. Our vision is person centred care for all, always.

Researching and measuring the experiences of patients, service users, and staff are key areas of our work. We develop and run surveys for a wide range of public and private healthcare organisations, as well as national bodies, voluntary sector organisations and international healthcare providers. Furthermore, we conduct original research using qualitative and quantitative social research methods to investigate issues related to people's experiences of care and organisations' efforts to improve services.

We operate in a Group structure, including Picker Institute Europe (the Charity, trading as Picker) and Picker HWA (a wholly owned subsidiary of Picker). This role is located within the Charity but will have a remit that extends across the Group.

## The Data Science Team

The Data Science team are experts in managing and interpreting data. They provide systems, processes, and services that support the charitable group to complete high quality work; make better decisions; and direct action. Their work encompasses:

- Developing Picker's approach to using, managing and processing data;
- Delivering Picker's internal and external reporting and analytics outputs; and
- Improving the insight gained from Picker's data assets further evidencing the case for person centred care

## Purpose of the role

The post holder will lead on the development, implementation and improvement of processes related to the preparation, analysis and interpretation of quantitative/qualitative data and associated outputs

across service delivery. They will help to maintain Picker's reputation for independently produced analytics, statistics, and insight.

As part of the Data Science Team, the post holder will support and participate in the development and improvement of standard processes to ensure the team's effectiveness. They will also be involved in supporting the organisation to make more effective use of data, including in business management as well as in service delivery.

## Duties and responsibilities

### Responsibilities for information resources

- Prepare complicated data sets, including validation and cleansing as required, to enable further analysis to be carried out.
- As required, carry out advanced complex and multivariate statistical analyses using large datasets.
- Regularly leading on the efficient creation of high-quality data outputs, using programming skills (including Python, SPSS, and/or R etc), using practices such as code versioning (Git) to maintain transparency and quality.
- Develop effective ETL pipelines (extract, transform, load) to develop and maintain a systematic approach to the charity's data warehousing capabilities
- Contribute to the design and development of improved processes and working practices around the preparation, manipulation, analysis, and interpretation of quantitative data.
- Develop and continuously adapt and improve computer programs (including statistical software syntax) to efficiently undertake partially or fully automated data manipulation and analysis tasks for colleagues.
- Demonstrate critical thinking through the exploration of data and development of conclusions based on the findings.
- Present statistical outputs and reports to colleagues, clients and other stakeholders, ensuring that complex statistical concepts are explained in a way that users can understand to enable informed decision making.
- Document methodologies and procedures used in the compilation and analysis of data, as well as data sources and limitation of their use, so that accurate process documentation is maintained at all times.
- Regularly carry out quality assurance of coding/syntax and data and contribute to the improvement of the division's quality assurance processes in relation to the Data Science Team's work.
- Ensure data and information, including confidential patient identifiable data and other sensitive information – are collated, stored and analysed in compliance with all company policies, internal working practices and external regulatory requirements.

### Responsibilities for research and development

- Provide advice and guidance to colleagues, clients and partners on research data and statistical matters.
- Occasionally contribute to the writing of proposals, including the writing of technical data analysis sections.

## Responsibilities for service development and implementation

- Identify opportunities to use data analytics to create knowledge and insight in support of Picker’s charitable objectives around person centred care, working with colleagues to communicate findings as appropriate.
- Actively support opportunities for colleague learning and development in data science matters, such that Picker colleagues are more effectively able to plan their projects and interpret complex information.

## General Duties

- Contributing to the work of Picker as a whole by:
  - Fully engaging and participating in the achievement of Picker’s aims and objectives.
  - Advocating new approaches, processes and methods to enhance Picker’s performance.
  - Promoting the sharing of knowledge and communications across teams within Picker.
- Ensuring compliance with all company policies, internal working practices & external regulatory requirements on data protection and ethical standards (e.g. Quality Assurance Framework, Data Protection Act, GDPR, ISO 27001, ISO 20252, and MRS Code of Conduct).
- Other reasonable duties, as requested by line manager.

## Person Specification

Experience, knowledge and understanding	
Knowledge of theoretical statistical issues related to quantitative research methods, including survey methodology in particular, and experience of statistics	E
Experience of quantitative research and analysis, likely to be gained in academia, government, other public sector, voluntary sector or market research settings	E
Experience of presenting complex data and information to a wide range of audiences through formal and informal presentations, both written and oral	E
Understanding of the principles of confidentiality and data protection (including GDPR)	E
An interest in healthcare quality and person-centred care	E
Project management experience	D
Experience or knowledge of the health/social care/charity sectors	D
Skills	
Experience and proficiency in using programming or scripting languages such as Python (essential), R, SPSS (desirable)	E
Collates, manipulates, analyses and interprets large volumes of quantitative data	E

Carrying out of advanced complex and multivariate statistical analyses using large data sets	E
Ability to analyse highly complex numerical and written data, assess options, draw appropriate conclusions and make recommendations	E
High levels of IT literacy, especially in Microsoft Word, Excel, PowerPoint, and Outlook	E
Confidently communicates and presents complex data and information to a wide range of audiences through formal and informal presentations, both written and oral	E
Ability to demonstrate high levels of attention to detail	E
Experience of using online data reporting packages such as Tableau or Qualtrics	D
Experience with JavaScript and charting libraries (e.g., D3, High Charts) for creating data visualizations, alongside knowledge or experience around web frameworks, implementation, and deployment.	D
Experience creating spatial data sets and use of visualisation tools such as GIS.	D
<b>Personal Qualities</b>	
Flexible and facilitative working style	E
Strong organisational skills with a methodical approach and excellent attention to detail	E
Ability to prioritise multiple demands and work to deadlines	E
Empathy with Picker and its aims	E
<b>Qualifications</b>	
Educated to degree level or equivalent knowledge or experience in a relevant discipline	E

**E = essential D = desirable**

**This job description is not contractual and is liable to change over time.**

Picker is committed to equality, diversity, and inclusion in all that we do. We welcome applicants from diverse communities and backgrounds and we are a Disability Confident employer.

All roles at Picker require a criminal record check. Picker will not automatically refuse to employ someone with a previous criminal conviction.

For further details, please contact Nicola Porter by email; [nicola.porter@pickereurope.ac.uk](mailto:nicola.porter@pickereurope.ac.uk)