

IBD REGISTRY DATA SYSTEMS MANAGER

ABOUT US

There are approx. 500,000 people in the UK with inflammatory bowel disease (IBD), which be debilitating and difficult to manage and is still not well understood. Our mission is to provide better understanding of IBD based on data, to improve care of and treatments for patients, better information for clinicians and other stakeholders, with the aim throughout of improving outcomes for patients.

We're the largest repository of UK IBD data in the UK, but we're also a young and dynamic not-for-profit company founded just two years ago from a long-running project within the BSG (British Society of Gastroenterology). We're fast re-shaping the way we serve our clinical stakeholders and patients by harnessing the best of the technologies available to us collect data and deliver results, and we've tripled our size in just three years (and still growing). We are deeply involved in the fast-moving and exciting area of health data, and the technologies that underpin and transform that data. We're a small and highly collaborative team, but we work with the biggest: with hospitals, doctors and nurses across the UK; with drug studies and pharmaceutical industry, with the NHS, with key Universities. Although now independent, we are owned and governed by the BSG, the Royal College of Physicians and Crohn's & Colitis UK; all of which give us further strong and close working relationships.

ABOUT THE ROLE

Our Data Systems Manager role is a new position in the IBD Registry that reflects both our fast growth and increasing technical maturity. The primary function of this role is to lead our and drive our work in developing the technical and data architecture platform for our data warehouse together with the tools that enable the capture, extraction, integration and curation of our IBD data, ready for the clinical data analysis that provides new information about IBD to help and support clinical teams, patients and other key stakeholders.

This is a fantastic opportunity for someone with the right background in computer or data systems with a demonstrated ability to learn to join a specialist and focused organisation working at the leading edge of health data. No two days are the same in this hands-on role that will give you exposure and experience across all aspects of our technical infrastructure, software development and data management architecture. You will also be exposed to the £5M project work in the curation, transformation and linkage of the IBD datasets required for the Hub with the Cambridge data specialists - a rare opportunity.

You will be part of a small and growing and highly collaborative team, reporting to and working closely with the CEO, as well as with clinical and academic data specialists including our Clinical Technical Lead and the healthdata specialists AIMES who provide our healthcloud platform.

ABOUT YOU

To be successful in this role you will be a graduate with a strong Bachelor's/Master's degree in a quantitative field such as Information Systems, Computer Science, Operations Research, Statistics, Mathematics etc.

You will have 5+ years of relevant experience (Masters 3+ relevant experience) in which you will have gained experience in modern data warehousing techniques (such as ETL, database design, data cleansing, data quality control, role based access control) and developed a proficiency in languages and tools with a focus on data management and analysis (such as SQL and stored procedures, C#, MySQL). Ideally you will have some exposure or understanding of systems integration and administration (such as using APIs, SSIS, data upload via SFTP) and enjoy problem-solving for new integrations, often with open source solutions (Authenticator, Shiny, OAuth). You will have the experience to lead by example on good practice software development (for maintainability and security as well as functionality), including structured development methodologies, design patterns and version control (including GitHub).

You will enjoy solving challenging data and technical challenges. We know that it's not possible to already know everything we use, so a willingness and enthusiasm to learn new languages and technologies is important. You will feel comfortable working both independently and in guiding team members, communicating clearly and efficiently in a fast-paced and developing environment. You will have strong analytical skills, a strong eye for detail, and demonstrate a liking to structure and organise things so that they make sense.

Ideally, you will have come from the healthcare or a similar highly-regulated sector, or as an alternative have a strong understanding of how both data protection and delivery are critical.

Your most important attributes will be your readiness and ability to learn, your 'can do' mindset coupled with a rigour of thinking and attention to details. Above all, you need to believe in our mission and want to join us to make a difference: our small team makes a big difference in IBD across the UK and this needs to be more than 'just a job' for you.

More information about our organisation can be found on our website: www.ibdregistry.org.uk

JOB TITLE

Data Systems Manager

REPORTING AND KEY RELATIONSHIPS

The role reports to the CEO and will work closely primarily with the Data Analytics Manager. The cross-functional nature of this role means that you will probably work with all teams in the organisation.

KEY RESPONSIBILITIES

Technical Leadership and Management

- To manage the work and relationships with our technical suppliers (healthcloud, clinical software, corporate systems and web hosting) ensuring that the delivery is to specification and within budget
- To lead the work of the data systems and tools function, setting and ensuring high standards for technical work so that our work is maintainable and secure as well as functional
- To deliver technical projects on time and on-budget, using our planning and project management tools and approach and working closely with the Programme Manager to ensure alignment with other key and interacting projects

- To support the CEO and Programme Manager in the area of technical delivery, providing concise and well-written reports as required; and in new business development, working closely on technical solutions designs and budgets for bid completion

Data Warehouse Management

- Working with the Data Analysis team to ensure clinically accurate methods, develop procedures (SQL, C#) for the loading, cleaning and curation of the data warehouse
- Develop and improve the ETL processes of the data warehouse (SSIS, SQL, C#) to optimise the dataflow from SFTP landing platform through to the research/analysis environment,
- Lead on our system security, ensuring the functioning of the various security techniques, including the role based access control of the data warehouse (Duo, Authenticator, RBAC)
- Working with hosting provider as required, ensure the ongoing running and administration of the databases (mostly MySQL, then SQLServer)
- Use APIs and system integration middleware to transfer data from our systems (REDCap, Infoflex) into the data warehouse, maintaining data integrity and security at all times
- Working with the clinical specialists, maintain the core Registry dataset, ensuring changes to the database fields and code lists are made as required to maintain alignment
- Identify as required and proactively suggest improvements to our security, technical processes, architecture and tools, plus anything else relevant to the role

Data Capture including Systems Integration

- Working as part of a cross-functional team, lead on the design and configuration of the data capture tools (currently REDCap, Infoflex) for new clinical requirements, as part of a full lifecycle approach including testing scripts and structured testing.
- Working as part of a cross-functional team, ensure the management of the data capture tools and corresponding databases on an ongoing basis, including cleaning and exporting data on authorised request
- Maintain and improve our client and server side data validation routines (Javascript, SQL, C#, regex) that ensure that data is validated at point of capture, or as close as possible, in a consistent manner across differing systems
- Support the client-facing teams in solving new data capture enquiries from NHS Trusts, including problem-solving technical issues unique to each Trust (e.g. uploading spreadsheets, integrating hospital systems)
- Develop testing processes and test data for full lifecycle data capture flow testing

Data Analysis and Reporting

- Develop routine and 'ad hoc' data reports from the data capture tools using our in-house tools, plus other methods and tools as may be approved
- Working with the data analysis team, support the technical development (including infrastructure) of their online clinical analytics platform (R, Shiny, OAuth)

Information Governance and Data Security

- Understand our IBD Registry Information Governance and Data Security (IG & DS) policies and procedures and ensure the effective implementation of these
- Working with our IG Lead, lead on the technical element of the completion of our annual Data Security Protection Toolkit review and submission; plus any associated security standards we may apply for, such as CyberEssentials Plus
- Ensure the audit trail information on access to the Registry systems and monitor for any inappropriate activity or inactive usernames.

Other

- An awareness of Health and Safety legislation, demonstrated in safeguarding the actions of both yourself and others at all times
- Work within company policies and procedures at all times, proactively raising suggestions for improvement where-ever seen.
- Maintain appropriate records and logs as may be required (proactively suggesting if none) so that there is a followable trail of information
- Provide appropriate and timely reports to management as required
- Deputise for key staff members as may be required
- Any other duties as may be reasonably expected and are commensurate with the level of the post.

PERSON SPECIFICATION:

Qualifications:

- Graduate with a strong Bachelor's/Master's degree in a quantitative field such as Information Systems, Computer Science, Operations Research, Statistics, Mathematics etc.
- Any further education or formal training in the management, curation and analysis of structured data is highly desirable

Experience in systems and data management (minimum of 5 years):

- Understanding of and experience of working with structured data, preferably within a data warehouse environment.
- Strong understanding of data curation, data modelling and dataset management (ideally with experience in both health data and in real world data)
- Demonstrable experience of good systems development approaches, programming and data engineering patterns, including use of Git for version control
- Demonstrable technical problem-solving approach, especially in sourcing appropriate technical tools and solutions, ideally with open source solutions
- Proficiency in languages and tools with a focus on data management, such as SQL and stored procedures, C#, MySQL, ideally also with some exposure or understanding of systems integration using APIs, SSIS, data upload via SFTP
- Experience of working in fast-moving technical projects, ideally with project management experience, with demonstrable ability to deliver

Other Experience (not expected but highly desirable):

- Exposure to working with health data, healthcare in general, pharmaceutical companies
- Any understanding of IBD or the issues faced by patients managing living with a chronic disease
- Any experience of or exposure to the following is highly desirable:
 - Working within a highly regulated and /or audited environment.
 - Working within an exacting Information Governance and Data Security framework

SALARY AND OTHER DETAILS

This is a permanent role for 3 or 4 days /week (the 4 day role will be considerably more hands-on) and offering a salary between **£43,000 - £45,000 FTE** (40 hours) depending on relevant skills and experience.

We make appointments at an initial salary level (90 or 95% of the proficient salary) or at the depending upon skills and abilities as assessed during the recruitment process. On successful completion of probationary period, proficient salary will be re-assessed).

We offer 25 days paid holiday each year plus 8 Bank Holidays with holiday allowance increasing by 1 day each completed year (all FTE, pro-rata for part time). We offer a pension contribution of 5% of your salary, together with flexible working and a move to a hybrid solution offering a proportion of home working.

We are currently reviewing our home/office working balance following our remote working experience during COVID-19 lockdown, and we expect to move to a hybrid model of remote working with focused face-to-face meetings and workshops that optimally support business needs.

To support individual work-life balance choices, we are introducing a flexible approach to start/finish times, based around our core working hours of 0930-1630. Given the nature of our work with clinicians, there may be a requirement sometimes to work (remotely) outside of standard office hours to fit in with clinical schedules.

Our office is in Epsom, only minutes from the station in brand new offices in a bright modern complex including library, cafes and restaurants. Epsom itself is only 30 minutes train journey from Waterloo, Victoria and Blackfriars, 15 minutes from Wimbledon.

OUR RECRUITMENT PROCESS

During the COVID-19 restrictions, our interviews will be by Teams video call. Additionally, the successful applicant will be fully supported to work from home for the initial period where restrictions on non-essential travel are in place.

There is no fixed closing date for this role. We want to appoint quickly, and we will be shortlisting and inviting to interview on a rolling weekly basis **by the end of each week (Fridays)**. We will close the process when we have appointed a candidate. Our interview process will involve a combination of two Teams video calls and 2-3 practical relevant tasks done offline, to allow you to demonstrate your ability in relevant key areas. This also aligns with how we work, which is very focused on end results.

HOW TO APPLY

To apply, all candidates are required to complete and submit our **Application Form**. This is asks questions in four sections: about you; about your education; about your experience; and about your fit for the role. The application form is available on our website or by email from our Finance & Business Manager (see below)

Please note that we will not accept applications that are just a generic CV and that we can only accept applications from candidates who have the right to work in the UK.

If you have any questions, or would like to talk with us beforehand, please email Katie Gray on finance@ibdregistry.org.uk (also for a talk - so that we can arrange a time for a conversation).

Your referees may be contacted prior to a final decision being made, and only after you have attended the interview and with your permission.

An employment decision and offer of employment will be made promptly. We will be looking for the successful candidate to start as soon as possible.

This document describes the main elements of the job. This a new role in a young organisation and this description is a guide to the expectations and main duties as we understand them currently, but it is not intended as a wholly comprehensive or permanent schedule and is not employment. This document is subject to review on an on-going basis.