

JOB DESCRIPTION

JOB DETAILS	
Job Title	System Developer
Reports to	Data Architecture Manager
Band	Band 6
Department/Directorate	Business Intelligence (Finance)

JOB PURPOSE
<p>The post sits within the Data Architecture Team which forms part of the Business Intelligence (BI) Shared Service covering the Royal Devon University Healthcare NHS Foundation Trust (RDUH) and NHS Devon ICB. The BI Team is responsible for delivering a business intelligence service which provides high quality and timely information, analysis and decision support across the RDUH and ICB. The BI Team maintains and develops the organisations' reporting, monitoring and analysis framework.</p> <p>The post-holder will support the development and provision of both a comprehensive, efficient, secure data warehouse and processes, software tools, websites and systems to support organisational decision making. The scope of the role includes the provision and maintenance of a data warehouse and tools to support all aspects of organisational business.</p>

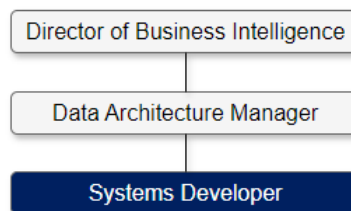
KEY RESULT AREAS/PRINCIPAL DUTIES AND RESPONSIBILITIES
<p>The main duties and responsibilities of the post are:</p> <ul style="list-style-type: none"> • Development of automation solutions related to data processes and systems. • Work closely with colleagues to identify opportunities for automation, co-develop solutions and deliver new, more efficient processes • Optimising automation solutions to ensure they are streamlined and innovative • The day-to-day management of the corporate data warehouses, data warehouse optimisation and development plus management and development of online applications. • Designing and building web applications (ASP.Net with C#, CSS, HTML, JavaScript). Working with clients to agree requirements specification, undertaking technical development and deployment. Managing content and programme of product support including improvement and development of additional functionality (involvement throughout Development Lifecycle). • Optimisation and administration of the corporate SQL Server data warehouses including management of server storage requirements and structure. Creation of tables, views, indexes and oversees receipt of routine data feeds (includes Secondary Uses Service (SUS), local contract data, data extracts from GP Practices, daily reporting). Improving the performance of very large datasets accessed by SQL queries, Power BI, Excel, and web applications. • Improvement of automated ETL processes and manual checks on data received, liaison with data providers to address issues. Facilitates analysis through application of local costing and Payment by Results rules to create specialised data views. Ensures high data quality standards and appropriate availability and access to clear and pseudonymised data. • Maintaining provider and commissioning information server infrastructure including ETL, Indexing, database replication, backups and external linked server connections. Liaison with 3rd party suppliers regarding installation of server/client software. • Ensuring robust application of Information Governance and Policies through planning for backup and recovery of database information, managing system security & user access. Applies NHS Best Practice Guidelines in the administration of secure Health & Social Care Network (HSCN) facing websites and user password management. • The day-to-day expert technical advice and support to the BI team including SQL query development, Excel report functionality and building reports using Power BI.

KEY WORKING RELATIONSHIPS

- The post holder will work closely with colleagues within the BI shared service and will support the Data Architecture Manager and Senior Systems Developer.
- The post holder will work closely with other members of the RDUH and ICB, including the commissioning, finance, contract and IT teams, health and social care providers, GPs and colleagues in other provider and commissioning organisations.
- The post holder will liaise with other system development staff in providers, commissioners, CSUs and NHS Digital. The post holder will work with a range of staff across the Trusts. Key contacts will include:

Internal to the Trusts	External to the Trusts
<ul style="list-style-type: none"> • Heads of Intelligence • Digital team • EPR team • BI team members • Corporate leads (finance, HR etc) • Transformation team 	<ul style="list-style-type: none"> • Other providers • NHS Digital • EPIC Technical Experts • EPIC Application Experts

ORGANISATIONAL CHART



FREEDOM TO ACT

- Works to achieve agreed objectives and is given freedom to do this working within broad professional or organisational policies.
- Lead specialist for specific systems or processes, using own initiative whilst resolving day to day issues.
- The post holder will be expected to follow national and local policies and guidelines, and respond to guidance by adjusting practice and procedure.

COMMUNICATION/RELATIONSHIP SKILLS

- The post holder will provide and receive highly complex information, where they will need to be able to communicate complicated information to those who may not be as familiar with the subject matter
- Provide advice to colleagues on the technical interpretation of data produced by external organisations e.g. NHS England.
- Develop a shared understanding of the system or software development needs of clinical, operational and managerial staff, overcoming communication barriers by providing training and negotiating solutions to meet customer needs.
- Provision of expert advice on the availability, quality and completeness of information.
- The post holder will be required to provide and present information to members of staff at various levels within the organisation and the wider health community.
- To communicate with staff, external organisations and colleagues in a courteous, professional and timely manner at all times.
- To manage email communication in a timely way and in line with the organisation's email best practice guide.
- To participate in team and directorate meetings as required.

ANALYTICAL/JUDGEMENTAL SKILLS

- Work with clients to clearly define their information management requirements and to explain the implications of adopting different technical and presentational approaches.
- The post-holder will be expected to lead on the development of new types of complex data management process or to adapt previously used approaches, to reflect the changing information requirements within the NHS.
- Investigate and resolve the cause for data anomalies and validation errors that occur during processing of complex datasets, and advise when lack of data or validation error prevents accurate or complete reporting.

PLANNING/ORGANISATIONAL SKILLS

- Initiates and plans data work programmes and makes adjustments to meet customer requirements
- The post holder will be expected to plan and prioritise their own work.
- Strict deadlines will need to be met for daily, weekly, monthly and annual data processing.

PATIENT/CLIENT CARE

- No patient or client care required.

POLICY/SERVICE DEVELOPMENT

- Supports robust application of Information Governance and Policies to corporate data through maintenance of backup and recovery systems for database information, and administering system security & user access. Applies NHS Best Practice Guidelines in the administration of secure (nww) websites and user password management.
- To implement work policies/SOPs within own work area and propose and implement changes to data processes that impact other areas within the organisation.
- Recommend and implement new systems and procedures for collecting, managing, analysing and presenting information.

FINANCIAL/PHYSICAL RESOURCES

- The post holder has no direct budgetary responsibilities.
- Responsible for ensuring the correct use of departmental datasets in accordance with sound information management practices to avoid corruption of data or inappropriate access and use.
- Use of a PC or laptop to extract, process, manipulate, analyse and present data on a daily basis.

HUMAN RESOURCES

- To provide mentoring and support to new/junior members of the team.
- No direct line management required.
- Provide training on technical issues within their role to assist other members of the team in the achievement of a quality service.

INFORMATION RESOURCES

- Support the Data Architecture Manager in the collation, processing, management and reporting of data.
- Monitor systems, data flows, websites and software tools to ensure that they continue to meet changing needs and adapt and improve as required.
- Be responsible for checking the quality of data contained within the data warehouse or tools developed by the BI Team. Support maintenance and improvement of data quality through automated (ETL/SSIS) and manual checks on data received, liaising with data providers to address issues.
- Ensure the data warehouse, information sources, file contents, systems, tools and methods of analysis are fully documented, and version control is applied.
- Facilitate analysis through application of local costing and Payment by Results rules to create specialised data views.
- Ensure appropriate availability and access to clear and pseudonymised data in line with Information Governance rules and guidance.
- Develop and maintain the data warehouse, webpages, systems and software using a range of tools and techniques, in order to support complex information analysis.

- Development of systems and methodologies to support the production of management information reports.
- To ensure all documentation is produced to an excellent standard.

RESEARCH AND DEVELOPMENT

- The post holder is required to keep themselves up to date with relevant national research and guidance.
- To contribute to the NHS service improvement by participating fully in new projects and developments such as redesign work, proposing changes to working practices and procedures.

PHYSICAL SKILLS

- Advanced keyboard skills are required, as speed and accuracy is needed to ensure data availability is timely.

PHYSICAL EFFORT

- Daily prolonged periods of dual VDU use and frequent long periods of prolonged concentration.
- Speed and accuracy are required to ensure data analysis and reporting is timely.
- Travel between Trust sites may be required which may require driving or walking.
- There may be a need on a daily or weekly basis to attend meetings or visit clients, which may require driving or walking

MENTAL EFFORT

- Frequent requirement for concentration when managing data warehouse tasks, occasionally prolonged.
- The work pattern can be unpredictable, with interruptions from customers particularly in resolving any dataflow or app issues

EMOTIONAL EFFORT

- Exposure to emotional circumstances is rare.

WORKING CONDITIONS

- VDU user
- Use of a PC or laptop to extract, manage, manipulate, analyse and present data on a daily basis.

OTHER RESPONSIBILITIES

Take part in regular performance appraisal.

Undertake any training required in order to maintain competency including mandatory training, e.g. Manual Handling

Contribute to and work within a safe working environment

You are expected to comply with Trust Infection Control Policies and conduct him/herself at all times in such a manner as to minimise the risk of healthcare associated infection

As an employee of the Trust, it is a contractual duty that you abide by any relevant code of professional conduct and/or practice applicable to you. A breach of this requirement may result in action being taken against you (in accordance with the Trust's disciplinary policy) up to and including dismissal.

You must also take responsibility for your workplace health and wellbeing:

- When required, gain support from Occupational Health, Human Resources or other sources.
- Familiarise yourself with the health and wellbeing support available from policies and/or Occupational Health.
- Follow the Trust's health and wellbeing vision of healthy body, healthy mind, healthy you.
- Undertake a Display Screen Equipment assessment (DES) if appropriate to role.

APPLICABLE TO MANAGERS ONLY

Leading the team effectively and supporting their wellbeing by:

- Championing health and wellbeing.
- Encouraging and support staff engagement in delivery of the service
- Encouraging staff to comment on development and delivery of the service
- Ensuring during 1:1's / supervision with employees you always check how they are

GENERAL

This is a description of the job as it is now. We periodically examine employees' job descriptions and update them to ensure that they reflect the job as it is then being performed, or to incorporate any changes being proposed. This procedure is conducted by the manager in consultation with the jobholder. You will, therefore, be expected to participate fully in such discussions. We aim to reach agreement on reasonable changes, but if agreement is not possible, we reserve the right to insist on changes to your job description after consultation with you.

Everyone within the Trust has a responsibility for, and is committed to, safeguarding and promoting the welfare of vulnerable adults, children and young people and for ensuring that they are protected from harm, ensuring that the Trusts Child Protection and Safeguarding Adult policies and procedures are promoted and adhered to by all members of staff.

At the Royal Devon, we are committed to reducing our carbon emissions and minimising the impact of healthcare on the environment, as outlined in our Green Plan available on our website. We actively promote sustainable practices and encourage colleagues to explore and implement greener ways of working within their roles.

PERSON SPECIFICATION

Job Title	System Developer
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Requirements	Essential	Desirable
QUALIFICATION/ SPECIAL TRAINING		
Educated to degree level in a subject which incorporates relevant skills to the post, or equivalent level of experience of working at a similar level in a specialist area relevant to the post.	E	
KNOWLEDGE/SKILLS		
Good organisational and personal effectiveness skills	E	
Knowledge of NHS information systems		D
Possess excellent analytical and numeracy skills	E	
Advanced knowledge of development lifecycles (e.g. Waterfall, Agile (TDD)) plus an understanding of the selection criteria to be applied in their selection		D
In depth knowledge of a range of contemporary development environments, application frameworks plus their usage and configuration e.g. Visual Studio	E	
Expert use of SQL Server as a database administration and optimisation tool	E	
In depth expert knowledge of Transact SQL.	E	
Knowledge of version control systems such a Git for tracking code changes		D
Advanced use of MS Excel including Pivot Tables and Statistical Functions		D
Knowledge of the application of the Data Protection Act, Computer Misuse Act, Freedom of Information Act and Caldicott documentation.	E	
Knowledge of the IT infrastructure that supports provider and commissioning information hardware & software platforms plus their configuration.	E	
Knowledge of the protocols underpinning developed information support systems (e.g. http, https, tcpip)	E	
Ability to apply an information intelligence to the data and present information to multidisciplinary audience	E	
Excellent oral and written communication skills and good personal presence. Ability to effectively liaise with a variety of staff across all grades	E	
Knowledge of strategic developments in health informatics	E	
Ability to plan, prioritise work and manage deadlines	E	

Ability to deal with material of a confidential nature	E	
EXPERIENCE		
Experience of Web Application development and support using C#, ASP.Net, CSS, JavaScript	E	
Experience of database administration and optimisation	E	
Experience in communications and stakeholder management	E	
Significant experience of the NHS Data Model and its use in assuring information standards		D
Experience of working with clients in the production of system specifications and the successful implementation of these specifications to completion for medium sized systems (20+ users) and above	E	
Experience of implementing new systems and ways of working within organisations and teams, with large datasets preferably across a number of organisations (e.g. EIS, data warehousing, websites, etc.)	E	
PERSONAL ATTRIBUTES		
Excellent interpersonal and communication skills and able to act with discretion	E	
Ability to organise, plan, prioritise and manage tasks/projects to deadlines	E	
Ability to work on own initiative	E	
Ability to work as part of a team	E	
Ability to problem solve	E	
Good attention to detail	E	
Reliable and flexible	E	
OTHER REQUIREMENTS		
An ability to maintain confidentiality and trust	E	
Professional, calm and efficient manner	E	
Commitment to continuing professional development	E	
Positive and flexible approach to work	E	
Ability to travel to other Trust locations as required	E	
The post holder must demonstrate a positive commitment to uphold diversity and equality policies approved by the Trust.	E	

WORKING CONDITIONS/HAZARDS		FREQUENCY (Rare/ Occasional/ Moderate/ Frequent)			
		R	O	M	F
Hazards/ Risks requiring Immunisation Screening					
Laboratory specimens	N				
Contact with patients	N				
Exposure Prone Procedures	N				
Blood/body fluids	N				
Hazard/Risks requiring Respiratory Health Surveillance					
Solvents (e.g. toluene, xylene, white spirit, acetone, formaldehyde and ethyl acetate)	N				
Respiratory sensitisers (e.g isocyanates)	N				
Chlorine based cleaning solutions (e.g. Chlorclean, Actichlor, Tristel)	N				
Animals	N				
Cytotoxic drugs	N				
Risks requiring Other Health Surveillance					
Radiation (>6mSv)	N				
Laser (Class 3R, 3B, 4)	N				
Dusty environment (>4mg/m3)	N				
Noise (over 80dBA)	N				
Hand held vibration tools (=>2.5 m/s2)	N				
Other General Hazards/ Risks					
VDU use (> 1 hour daily)	Y				✓
Heavy manual handling (>10kg)	N				
Driving	Y		✓		
Food handling	N				
Night working	N				
Electrical work	N				
Physical Effort	Y	✓			
Mental Effort	Y				✓
Emotional Effort	Y	✓			
Working in isolation	Y	✓			
Challenging behaviour	Y	✓			