Royal Devon University Healthcare NHS Foundation Trust

JOB DESCRIPTION

JOB DETAILS	
Job Title	Senior Business Intelligence Developer
Reports to	Cogito Configuration Manager
Band	7
Department/Directorate	Cogito, Business Intelligence Shared Service

JOB PURPOSE

The post holder will be part of a team that supports the development of the Epic suite of Business Intelligence (BI) tools to enable and deliver the organisation's performance monitoring and information reporting requirements. The post holder's prime responsibility will be to deliver the data tools and reporting infrastructure required to provide the Trust's performance and national information requirements. It is an exacting role to ensure that the data fields in Epic translate to the relevant local and national requirements.

The Cogito team develop, maintain and provide training on the Epic EPR reporting infrastructure. The post holder will provide Epic data development support to the organisations on the Devon Acutes EPR system, and in particular to the business intelligence and EPR teams.

The post holder will fulfil all tasks and work as part of a dedicated team specific to the Cogito part of the business intelligence shared service team structure.

KEY RESULT AREAS/PRINCIPAL DUTIES AND RESPONSIBILITIES

The main duties and responsibilities of the post are:

- Complete all required Epic courses and certifications (in the UK or overseas) and within 6 months of commencement become qualified in the relevant Epic BI modules for which the role is responsible;
- Support the architecture, extraction, transfer and load of data from Epic's data warehouses into required national reporting requirements, local performance and contracting information. This may include loading in non-Epic data from external systems and third-party sources;
- Become fully conversant with the relevant data models and entity relationships within the Epic BI environment;
- Play a leading role in the design, development and maintenance of the Epic reporting infrastructure;
- Comply with Epic EPR documented quality standards;
- Be an Epic EPR subject matter expert (SME for assigned elements of the integrated reporting warehouse – Caboodle (including dimensional model design and development), Clarity, Radar, Slicer Dicer and the Reporting Workbench);
- Ensure that the BI capability includes: all mandated data set returns, all mandated performance reports, and all locally agreed dashboards and KPI reports;
- Facilitate the utilisation of Epic to drive scheduled reports and national returns and ensure these are produced accurately, to nationally and locally agreed standards, and delivered to agreed and mandated timetables. This may involve a complete re-design of extraction, transfer and load of data and therefore information output;
- To work closely with Cogito Systems DBAs within the Technical Design team to develop, maintain and optimise the Epic reporting infrastructure in Clarity and Caboodle, ensuring the technical requirements, solutions and their impacts are clearly documented and communicated to stakeholders. This includes maintaining documentation around metadata and data lineage;
- Ensure compliance with the Trust Governance Procedures, Policies and Standards as they apply to the Business Intelligence environment;

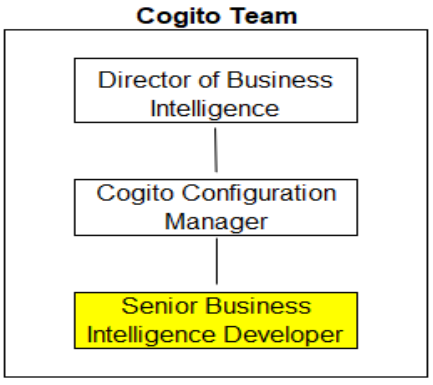
- In conjunction with the Business Intelligence teams and the EPR team, work with assigned Divisional and Departmental leads and operational colleagues to ensure that all their BI needs are met in a timely and sustainable way that allows them to become self-sufficient in the production of local analytics and dashboards;
- Triage and resolve service desk tickets from end users, including queries around and requests for access to reporting content, requests for guidance or training in self-service reporting, and new reporting requests;
- Use conflict resolution strategies in response to barriers of understanding or acceptance faced by or from the configuration teams and or wider Trust audience;
- To provide cover for other team members as required;
- To attend meetings as appropriate and, when required, to act as the Business Intelligence Shared Service representative;
- To promote new ways of working with Business Intelligence tools within the Trust;
- Develop and maintain a detailed understanding of NHS data standards, national datasets and reporting requirements, applying this knowledge to the delivery of statutory, commissioning, performance and operational reporting.
- Support the interpretation and implementation of new and changing national reporting requirements and develop expertise in NHS data flows and reporting frameworks where required.
- Use advanced SQL skills to develop and maintain the Epic reporting infrastructure, which includes query optimisation, testing, data validation, troubleshooting and doing root cause analysis in the event of a data load failure in the Epic data warehouses.

KEY WORKING RELATIONSHIPS

The post holder is required to deal effectively with staff of all levels throughout the Trust, the wider Healthcare community, external organisations and the public. This will include verbal, written and electronic media.

Internal to the Trust	External to the Trust
• Business Intelligence Shared Service teams • EPR team • Digital Healthcare Services • Clinical coding • Divisional Director and associated managers • Operational services • Finance • Information Governance • Data Quality	• Epic application experts • NHSE • Colleagues in other NHS and Social Care organisations • Colleagues in other Devon Acutes EPR partner organisations

ORGANISATIONAL CHART



FREEDOM TO ACT

- The post holder will work to achieve agreed objectives, and will have the freedom to execute these duties in their own way, acting within broad professional policies.
- The post holder will lead various areas of work and will regularly advise organisational staff on information issues without reference to line manager.
- The postholder will contribute to the setting of standards for staff within this area and working with their line managers to establish how professional and administrative policies and national guidance should be interpreted and implemented.

COMMUNICATION/RELATIONSHIP SKILLS

- Maintain good, productive working relationships with the Business Intelligence Team, Application Design and Delivery Team, the Technical Delivery Team, EPR Configuration Teams and the relevant IM&T Programme Managers to ensure the successful delivery of the enabling EPR;
- Effectively translate complex technical aspects of analytics environment into understandable concepts and language for other teams including operational and clinical teams, overcoming communication barriers by providing training and negotiating solutions to meet customer needs;
- Provide advice to colleagues on the technical interpretation of data produced by external organisations e.g. NHS England.
- Convey highly complex information concepts clearly by presentation in reports and/or to large groups of staff from a broad range of levels within the organisation and the wider health community;
- Capable of navigating complex and difficult situations, requiring persuasion and influence skills to deliver clear ideas and concepts where there may be barriers to understanding.
- Provision of expert advice on the availability, quality and completeness of information.
- Nurture key relationships and maintain networks
- Participate in relevant internal and external working groups/projects, services and initiatives to provide, information and analytical advice and expertise
- Maintain and publish reporting timescales to all appropriate personnel and co-ordinate the submissions and delivery of information

ANALYTICAL/JUDGEMENTAL SKILLS

- Ability to analyse and interpret highly complex information to support the delivery of business requirements, often where material is conflicting and drawn from multiple sources.
- Work with clients to clearly define their information management requirements and to explain the implications of adopting different technical and presentational approaches, presenting a range of options.
- 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 highly complex datasets and advise when lack of data, validation error or system errors prevents accurate or complete reporting.
- Using expert knowledge and experience, act upon incomplete information to make inferences and support decision making
- Analyse and interpret very complex information, pre-empt and evaluate issues, and recommend an appropriate course of action to address the issues
- Develop new tools to mine and analyse highly complex information within the Epic BI environments (Chronicles, Clarity and Caboodle);
- Make judgements on how to design and deliver BI reporting tools for assigned applications; using knowledge and experience to ensure that staff have confidence in the products and outputs.

PLANNING/ORGANISATIONAL SKILLS

- Plan across short, medium and long-term timeframes and adjust plans and resource requirements accordingly
- Initiates and plans data work programmes and makes adjustments to meet customer requirements

- Support the implementation and on-going management of complex projects, services and initiatives in accordance with the agreed priorities of the Team
- The post holder will be expected to plan and prioritise their own work and, as a senior member of the team, work with the Configuration Manager - Cogito to regularly risk assess progress and respond to, and escalate, issues as appropriate
- Participate in the planning of the BI delivery projects and strategy, including the delivery of BI reporting tools for the assigned applications and adjusting these plans as the BI strategy develops and new reporting requirements are identified;
- Strict deadlines will need to be met for daily, weekly, monthly and annual data processing.

PATIENT/CLIENT CARE

- Patient contact in this role is incidental

POLICY/SERVICE DEVELOPMENT

- Develop and implement work policies and procedures within the team and propose and implement changes to data processes that impact other areas within the organisation, including policies around version control, change control, testing, deployment and communication.
- Establish Standard Operating Procedures that meet national standards for the way in which the assigned applications within Cogito will be used
- Interprets policies for day to day operational processes
- Recommend and implement new systems and procedures for collecting, managing, analysing and presenting information.
- Provide coordination of and participate in relevant internal and external working groups and provide project advice, expertise and support where requested
- Provide relevant and timely specialist advice and guidance on own portfolio of projects/function
- Work with members of the team to investigate the causes of any variance from target/plan and proactively contribute to the implementation of solutions
- Support the robust application of Information Governance and Policies to corporate data through maintenance and administering of system security and user access, applying NHS Best Practice Guidelines.

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.

HUMAN RESOURCES

- No direct line management required
- Support, motivate and develop staff within the team to ensure that they are able to deliver the responsibilities of the team and organisational strategy
- Regularly provide complex specialist guidance, training and mentoring on technical issues within their role to assist other members of the team in the achievement of a quality service. Also provide specialist guidance, training and mentoring on complex technical areas such as Epic reporting, automation or data processes to the wider Business Intelligence teams, EPR analysts and operational colleagues.
- Provides BI application support and guidance to end-users and provides technical guidance to less experienced personnel. Serves as a point of contact for resolution of complex application problems;
- Conducts and/or participates in in-service development and mentors, and transfers knowledge to peers.

INFORMATION RESOURCES

- Design and develop information processes, working with colleagues to produce clear specifications. This may include the extension of the Clarity and Caboodle data warehouses or the creation of custom in-Epic reporting content such as SlicerDicer models, dashboards or reporting workbench content;
- Lead on implementation, monitoring and evaluation of new information processes as required;
- Support the Cogito Configuration Manager in the collation, processing, management and reporting of data;

- Responsible for monitoring data processes to ensure that they continue to meet changing needs and adapt and improve as required.
- Responsible for checking the quality of data contained within the Epic data warehouse. Support maintenance and improvement of data quality through automated and manual checks on data received, liaising with data providers to address issues.
- Ensure the Epic data warehouse, information sources, file contents, systems, tools and methods of analysis are fully documented, including accurate data lineage and metadata where appropriate, and that version control is applied.
- Ensure appropriate availability and access to data in line with Information Governance rules and guidance.
- Develop and maintain the Epic data warehouses 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.
- 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.
- Ensure all documentation is produced to an excellent standard.

RESEARCH AND DEVELOPMENT

- Accredited Epic technical competence will need to be maintained.
- 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.
- To ensure information delivery systems continually develop to meet changing requirements.
- Identify and recommend suitable data sources for new areas of reporting.
- Regularly test or adapt systems including applications.

PHYSICAL SKILLS

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

PHYSICAL EFFORT

- Independent travel between Trust sites may be required.
- There may be a need on a daily or weekly basis to attend meetings or visit clients, which may require driving or walking
- There will be a requirement to sit, stand and walk as needed

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
- Working conditions will be those which come with a job which requires travelling but is predominately office based.

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 1:1s / 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	Senior Business Intelligence Developer

Requirements	Essential	Desirable
QUALIFICATION/ SPECIAL TRAINING		
• Educated to degree level in a relevant subject plus master's degree level or equivalent experience.	E	
• Epic Certification in appropriate reporting modules *NB Epic certification must be achieved within 6 months of start date.	E	
KNOWLEDGE/SKILLS		
• Specialist knowledge of information analysis, in particular, of patient activity and use of information across the NHS acquired through relevant senior analytical and managerial experience	E	
• Advanced skills in report development using an enterprise reporting tool (eg MS PowerBI, Tableau, Business Objects)	E	
• Advanced SQL skills, including advanced querying and report writing	E	
• Demonstrate ability to interpret highly complex data and effectively present highly sophisticated analysis and findings	E	
• Knowledge of NHS clinical systems	E	
• Extensive knowledge of NHS Information standards	E	
• Possess excellent analytical and numeracy skills	E	
• Advanced Proficiency in MS Office	E	
• Ability to apply information intelligence to data and present complex information to multidisciplinary audience	E	
• Excellent oral and written communication skills and a good personal presence	E	
• Ability to effectively liaise with a variety of staff across all grades	E	
• Knowledge of strategic developments in health informatics	E	
• Extensive knowledge of NHS Commissioning information	E	
• Exceptional ability to plan, prioritise work and manage deadlines	E	
• Good organisational and personal effectiveness skills	E	
EXPERIENCE		
• Proven NHS experience at senior manager level in an information analyst role		D
• Good working experience of operational practice in an acute NHS setting		D
• Significant experience of using SQL and database administration and optimisation	E	
• Proven experience of working alongside clinicians and senior managers within the NHS	E	
• Experience of managing 3rd party suppliers to delivery of complex work packages	E	
• Experience of complex implementations requiring minimum disruption to end users	E	
• Experience of Stakeholder Management and communications	E	

• Prior experience of interpreting technical & professional IM&T policies, for non-technical staff	E	
• Significant experience of the NHS Data Model and its use in assuring information standards	E	
PERSONAL ATTRIBUTES		
• Able to prioritise tasks, work on own initiative and manage own workload	E	
• Excellent communication skills both written and verbal	E	
• Proven experience in the ability to interact with personnel at all levels both clinical and non-clinical within healthcare	E	
• Be enthusiastic, responsive to new demands, willing to learn new skills and welcome change	E	
• Demonstrate the ability to plan and organise effectively	E	
• Excellent interpersonal skills and professional presentation	E	
• Ability to produce and deliver, or receive and process, detailed complex and highly sensitive information	E	
• Self-motivated and able to take responsibility for decisions	E	
• Has good insight and the ability to respond well to constructive criticism	E	
• Team player	E	
• Logical and pragmatic approach to problem solving	E	
• Proven ability to work under significant pressure with competing priorities	E	
• Personal credibility, with ability to quickly gain the confidence of others	E	
• Honesty, openness and integrity	E	
OTHER REQUIREMENTS		
• An ability to maintain confidentiality and trust	E	
• Professional, calm and efficient manner	E	
• Occasional requirement to travel to other sites as required.	E	
• Commitment to continuing professional development	E	
• Positive and flexible approach to work	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				x
Heavy manual handling (>10kg)	N				
Driving	Y		x		
Food handling	N				
Night working	N				
Electrical work	N				
Physical Effort	Y	x			
Mental Effort	Y				x
Emotional Effort	Y	x			
Working in isolation	Y	x			
Challenging behaviour	Y		x		