#### Form JE 5



**JOB DESCRIPTION**

|  |  |
| --- | --- |
| 1. JOB IDENTIFICATION | |
| Job Title: **Business Informatics Developer**  Responsible to: Lead Pharmacist for Clinical Informatics  Department(s): Pharmacy  Directorate: Pharmacy  Operating Division: Corporate and Board  Job Reference: Sco6-5870N  No of Job Holders:1 | |
| 2. JOB PURPOSE | |
| The post holder will be responsible for the successful development, testing, deployment and training of Business Intelligence applications across the organisation, including but not limited to Power BI, Intellefront, Business Objects and QlikView. The BI developer will act as a key point of contact for all BI development needs within the organisation and will provide assurance, and technical guidance to the BI core development and deployment team. The post holder will ensure all BI applications are developed and deployed in line with the key deliverable dates outlined by the Pharmacy Leadership Team and wider organisation. The BI developer will support the development and project management lifecycles in relation to BI development plans and conform to best practice. Additionally, the BI developer will provide recommendations to ensure the continued development and delivery of BI applications across the organisation. | |
| **3. DIMENSIONS** | |
| The post holder will work with colleagues across Health and Social Care to implement Business Intelligence applications. Keys examples include:  Working with the HEPMA team and clinical teams to develop dashboards that will be used to support audit / QI, antimicrobial stewardship, service development and management.  Examples of teams that are likely to use these dashboards include the HEPMA team, patient safety team, antimicrobial team and the acute leadership team.  Working with the HEPMA team and front line clinical teams to create dashboards that will be used to support day to day clinical care. Examples of teams that will use these include pharmacy and ward based clinical teams  While HEPMA data will be the key focus it will also be an objective to develop reports and dashboards that can pull data from HEPMA and other clinical systems e.g. EPR.  Prepare one off reports on request from clinical teams  Work is likely to focus on reporting within acute, along with others areas that have inpatient beds and are using HEPMA. | |
| 4. ORGANISATIONAL POSITION | |
|  | |
| 5. ROLE OF DEPARTMENT | |
| The aim of the Pharmacy Department is to assure quality of patient care in the provision of treatment with medicines. To this end the objectives are to provide pharmaceutical care to individual patients by meeting their particular needs whilst maximising efficiency in the use of resources and to provide medicines through systems of quality control, which ensures safe,  effective and economic use. | |
| 6. KEY RESULT AREAS | |
| To advise, develop, implement and use BI applications to co-ordinate and inform the production of appropriate action plans to address areas of poor performance. To advise, develop, implement and use BI applications to support the development of the future performance framework. To advise, develop, implement and use BI applications to ensure local and national targets are understood and contribute to them being met.  To work closely with HEPMA Lead Pharmacist; eHealth Department, and Business Unit colleagues to develop a BI learning and development programme for the department, to ensure that all relevant staff are proficient in the development and deployment of BI applications.  To ensure that the HEPMA Lead Pharmacist; and project team are provided with regular written reports on the development and deployment of various BI applications across NHS Tayside. Provide the HEPMA Lead Pharmacist; and project team with clear procedure/guidance notes on all BI applications, as a mean on risk mitigation.  To maintain the BI development project documentation and provide the HEPMA Lead Pharmacist; with a weekly update of any risks to the delivery of BI tools and provide sound mitigating recommendations.  Responsible for developing BI applications/dashboard to replace the organisation’s current manual Board reports, weekly performance monitoring to the Senior Leadership Team and various committees and any relevant reports as required, providing detail analysis of the data and causative factors.  To provide and develop accurate BI forecasting applications which deliver ongoing monitoring of the key performance targets and balanced scorecard indicators to highlight areas requiring improvements in performance to assist NHS Tayside to achieve its strategic priorities.  To work in conjunction with Service Managers and other senior managers to provide necessary tailored BI reports to improve operational performance.  To support the Organisation as a whole to maximise performance management capabilities of the NHS Tayside’s data capture systems, through the use of BI reporting tools.  To develop appropriate and robust BI applications to manage the production of organisational wide monthly performance scorecards, commissioning and the development of patient level throughout the organisation.  To work closely with Data Quality and Information Governance to highlight areas of data quality that require action whilst contributing to the overall improvement of data quality for NHS Tayside, though the use of appropriate BI Tools. To develop all BI applications in line with the current brand image and aesthetics of the department. Using appropriate BI tools, to assist in the development of local and national improvement initiatives through improved performance monitoring information.  Carrying out any other necessary monitoring and management duties which facilitate the development of Performance Management within NHS Tayside in relation to BI applications development.  Responsible for the development of appropriate and robust BI applications to analyse market trends including activity and referral patterns, financial information and other factors affecting the development and implementation of the organisation’s longer-term strategy. Develop all BI applications to undertake both quantitative and qualitative analysis to support the business planning process, drawing on a wide range of local and national intelligence.  Develop BI applications to support research into, and comparative analyses of, other healthcare organisations (both NHS and the independent sector) and prepare appraisals of possible performance improvement and business opportunities. This may include proposals to collaborate with others for particular services and defining specific market offerings.  Ensure BI applications are developed to highlight, analyse and prepare local interpretations of the impact of government policy and provide decisional support to the senior leadership team.  Pro-actively develop relationships with relevant external stakeholders to support the gathering of information and intelligence, and to help ensure that NHS Tayside is well-profiled and positioned in the local health economy. To provide clinical information and analysis to Service Managers in a timely manner as required using BI applications.  **General**  The post holder may be required to undertake other duties not specified in this job description, but within the general scope of the post as determined by the Director of Pharmacy and HEPMA Lead Pharmacist.  The post holder will be expected to comply, and require system users to comply, with the Health Board's Information Governance Policy, IM&T Security Policy and other relevant IT and Information policies and procedures. The postholder will also be expected to comply with national data security and confidentiality legislation and policies.  To support NHS Tayside values of quality, teamwork, care and compassion, dignity and respect, and openness, honesty and responsibility through the application of appropriate behaviors and attitudes. | |
| 7a. EQUIPMENT AND MACHINERY | |
| A wide range of standard office equipment is used (photocopier, fax, telephone etc) | |
| **7b. SYSTEMS** | |
| The post holder is expected to use a full range of common IT office products as well as specialist statistical/analytical reporting systems. These are used to create, develop and update reports to management requirements. Systems used include: -  Microsoft Word; Excel, Access, Acrobat Reader, Outlook, Explorer, NHSnet  Power BI, Intellefront, Business Objects/QlikView/Gooroo/R  Intranet/Internet  An advanced standard of keyboard skills is expected from the post holder. Also a frequent requirement to produce and source reports in a unique format to meet specific information requests from senior NHS Tayside management.  Must have ability to quickly grasp new technologies and maintain awareness of advancements within technology, which can be exploited for project(s). | |
| 8. ASSIGNMENT AND REVIEW OF WORK | |
| The Lead Pharmacist for Clinical Informatics is responsible for the management of the service and directly line manages this post-holder. The post-holder supports the lead Pharmacist by taking a lead on technical aspects of the setup of reports and dashboards using data from HEPMA and other linked systems. The postholder will also work in conjunction with other members of the HEPMA team and the wider clinical team to develop reports / dashboards.  The post-holder will work alongside their line manager on a daily basis and undertake performance development review annually.  **Responsibility for Records Management**  All records created in the course of the business of NHS Tayside are corporate records and are public records under the terms of the Public Records (Scotland) Act 2011. This includes email messages and other electronic records. It is your responsibility to ensure that you keep appropriate records of your work in NHS Tayside and manage those records in keeping with the NHS Tayside Records Management Policy and with any guidance produced by NHS Tayside specific to your employment. | |
| **9. DECISIONS AND JUDGEMENTS** | |
| The post holder will have the autonomy to organise their own workload on a day to day basis in close liaison with the Lead Pharmacist for Clinical Informatics.    The post holder will have discretion in tasks relating to own work and can seek direction or guidance as necessary from the Lead Pharmacist for Clinical Informatics.    The post holder will be subject to formal performance management in terms of objectives agreed with the Lead Pharmacist for Clinical Informatics. | |
| 10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB | |
| Prioritisation of workload to meet strict deadlines.  Continuing to provide a high quality of service in light of the challenges posed.  Explaining statistical and analytical issues in a clear way to non-information managers.  Developing meaningful analysis from sometimes incomplete information.  Ensuring all development projects deliver within agreed time scales and within agreed budgets.  Keeping abreast of all the latest development and database technologies.  Accurate estimation of development times and schedules.  Ensuring all developments, including those supplied from commercial suppliers, are consolidated within local and national IM & T Strategies  Documenting the complexities of intricate systems code.  Ensuring Service Levels are maintained according to agreed standards. | |
| **11. COMMUNICATIONS AND RELATIONSHIPS** | |
| Provide verbal and written reports through immediate line manager identifying all progress in relation to multi-threaded project plans plus communicate any known problems or issues.  Report through immediate line manager any new issues and/or trends that are liable to have an impact on the department meeting its objectives in the future.  Liaise with other local support and development teams obtaining advice and providing solutions on highly complex technical issues.  Obtain and analyse information from both business and clinical end-users relating to highly complicated or highly complex technical/system problems and deliver feedback to resolve issues in a non-technical manner.  Discuss detailed and complex requirements, communicate available options, estimate time-scales and prepare cost models to meet end-user and end user department expectations and contribute to building a professional and positive impression of the organisation.  Participate in informal and formal discussions with any other IT professional within the NHS covering highly complex technical problems and solutions, and play an active role in appropriate local and national working groups.  Liaise with external Service/Product suppliers in order to specify complex NHS requirements, provide solutions and monitor service level agreements.  Participate in software development groups and project teams in order to encourage and improve best practice within NHS Tayside.  Ensure all NHS Scotland data protection, Caldicott, Freedom of information, IM & T Good Practices Guidance, policies and procedures are followed when accessing or communicating sensitive information.  Provide detailed training, mentoring and support in your own area of expertise to other members of staff.  Prepare and deliver presentations to both business and clinical user community, working groups, senior management teams requiring the ability to translate complex technical issues.  **Key contacts**:  Executive Team  Service Managers  Business Managers  Clinical Leads  Heads of Departments  Commissioners  Information Governance  Business Unit (includes the Cancer Team therefore removed below)  Infection Control Team  Specialities  Finance Staff  E-Health  Qliktech  Primary Care  Community Health Partnerships | |
| **12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** | |
| **Physical:**  The post holder may be expected to travel at a local level and/or across Scotland to represent the project to any relevant national focus/working groups.  Occasional requirement for manual handling (moderate effort) of sensitive electronic equipment, display equipment, media etc. without aids.  Prolonged, continuous VDU equipment usage.  **Mental:**  This post demands extensive use of I.T. equipment and advanced ability in PC operations. Frequent prolonged use of application design & development packages and project management applications will require advanced keyboard skills and a detailed knowledge of computer graphical user interfaces in addition to manipulation / usage of fine tools and materials while working on the development of IM&T systems.  The post holder must continually keep abreast on complex technical matters and emerging technologies.  Frequent requirement for sustained concentration across several complex technical matters and throughout interruptions from staff, clinicians and other project stakeholders.  Concentration when work pattern is unpredictable and involves emergency situations.  Effective questioning and listening skills to provide responses to queries across all levels of user sophistication.  **Emotional:**  Prioritisation of multiple responsibilities, timescales and demands.  Retention and communication of complex knowledge and information.  Exposure to sensitive, contentious and confidential issues.  Communicating difficult and contentious information between staff of all disciplines and grades  **Environmental:**  Occasional unpleasant conditions, direct exposure to dirt, dust, smell noise e.g. server rooms, installing/maintaining electronic equipment and software.  Compliance with Health & Safety / risk management policies. | |
| 13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB | |
| The post requires an IT/Maths professional qualified to degree level or with appropriate demonstrable skills and knowledge. The knowledge required should equate to extensive post graduate experience with a comprehensive track record in software development gained in a large and complex development environment. The post holder will also be able to demonstrate a practical knowledge/experience of statistical and analytical techniques and procedures.  The skills/experience should include the following:-   * Expert knowledge of SQL programming language acquired through completion of a relevant post-graduate qualification, or equivalent experience. * Expert knowledge of relational databases. * Knowledge of data warehousing concepts and products. * Working knowledge of Business Intelligence software packages such as SAP products, QlikView, R to develop information reports and dashboards.   + Ability to provide specialist knowledge and professional advice regarding aspects of data collection, analysis and use of information across the organisation.   + The ability to manage the development lifecycle with little assistance, for several small development projects simultaneously or a single large scale development project.   + Must possess a good understanding of computer systems and demonstrable full lifecycle software development experience.   + Must be familiar with working in a project team environment in order to utilise the expertise and knowledge of everyone involved, encourage synergy of ideas to resolves problems, improve communication and support new initiatives and change.   + Must have an understanding of project management techniques and experience in a project life cycle from initiation through to completion.   + Must possess a sound technical knowledge of application and database concepts, good communication skills and develop others.   + A detailed understanding of Web based development techniques as well as the skills needed to interact with large-scale database systems using stored procedures.   + Ability to capture end-user requirements and present any proposed solutions back to end-user work teams.   + Preparation and creation of highly complex logical and physical database models including database sizing archiving and retention procedures.   + Preparation and responsibility for documentation at all stages of the software development process.   + Software fault tracking including within highly complex systems.   + Preparation of full test plans covering both unit and system testing functions.   + Fully aware of Security, Audit logs & Data Protection issues and able to implement their requirements within any application development.   + Ability to interpret and effectively communicate complex information or requirements in a non-technical way to a wide range of staff at all levels.   + Ability to manage, advise and develop other departmental staff.   + Ability to work independently or as a team member.   + Ability to prioritise conflicting demands, manage own time and work within both agreed and imposed deadlines.   + Ability to persuade others through well-informed and well-presented argument, use of influencing and negotiation skills.   + Logical, analytical thinking with problem solving skills.   + Possess team-working skills and have the ability to work using own initiative to provide a highly respected quality service with enhanced job satisfaction.   + Maintain a high level of self-development, specifically relating to the methods employed for data collection, statistical analysis, information presentations and web developments.   + Committed to working corporately and flexibly and to continuing personal professional development. | |
| **14. JOB DESCRIPTION AGREEMENT** | |
| A separate job description will need to be signed off by each job holder to whom the job description applies.  Job Holder’s Signature:  Head of Department Signature:  **(I confirm that the Job Description accurately reflects the duties and**  **responsibilities of the postholder and does not impact upon any other**  **postholders role)** | Date:  Date: |