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| JOB IDENTIFICATION |
| Job Title: Senior Information Development Officer  Responsible to: Information Development Manager for day-to-day management  Department(s): Digital Services  No of Job Holders: 3  Last Update: 28/09/2022 |

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| JOB PURPOSE |
| To design, develop, implement, and maintain innovative technical solutions to support the provision of business intelligence which will support the operational, planning and performance monitoring requirements of NHS Ayrshire & Arran, its operating divisions, and corporate departments, with particular focus on the deployment of Business Objects.  To liaise with a wide range of stakeholders to agree and prioritise requirements and, consequently, plan and implement the development and maintenance of local data warehouse to meet the specified requirements and quality standards, within the constraints of time and budget by using data extraction tools to generate appropriate Business Objects Universes and subsequent reports which are timeous and fit for purpose.  To provide specialist advice relating to Business Objects development and exploitation and respond to complex technical enquiries from a range of users within and out with NHS Ayrshire & Arran, providing assistance and advice as required to support clinical and managerial decision making. |

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| 1. **DIMENSIONS** |
| The postholder will be required to gather and document data requirements. They will design and develop complex custom Business Intelligence solutions that may incorporate data from multiple systems and data sources from the Ayrshire & Arran Data Warehouse. There may also be the need to design custom datasets to meet the reporting needs that are not met from the Data Warehouse.  The postholder is responsible for the delivery of these solutions to provide data and information to all departments, Operational Units, Corporate Services, National Services Scotland, and the Scottish Government.  The postholder may be required to work with third party contractors. |

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| ORGANISATIONAL POSITION |

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| ROLE OF DEPARTMENT |
| Deliver effective operational management & Digital services across NHS Ayrshire & Arran, based on the application of modern technologies and effective ways of working, to support and enable the modernisation of services.  Develop the technical infrastructure (servers, desktops, local and wide-area networks) to enable the sharing of information and knowledge across NHS Ayrshire & Arran in a secure managed environment. Define, promote, and lead the development and deployment of a Knowledge Management and Digital Services strategy, within and beyond NHS Ayrshire & Arran.  Develop and extend information literacy across the organisation by developing information sources, extending access, and ensuring that appropriate training and development programmes are provided for staff throughout NHS Ayrshire & Arran.  Provide support and professional advice on Information Technology; Business Intelligence; Library Services; Knowledge Management, Data Protection, and Information Governance.  Provide accurate, timely, information as well as systems and processes and most importantly analysis to meet the strategic and operational needs of NHS Ayrshire & Arran. This will include the information requirements and priorities set by SGHD (Scottish Government Health Department) as well as the needs of individual stakeholders.  Ensure that appropriate systems and information management processes are in place to comply with Information Governance Requirements, Data Protection and FOI legislation. |

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| KEY RESULT AREAS |
| It is a key feature of these result areas that the postholder will adopt matrix working practices within and across the teams that he/she will be involved with, to support the delivery of Integrated information delivery to support Care Pathways and Shifting the Balance of Care.   1. Liaising with customers to specify their information needs and thereafter to design, develop, implement, and maintain report development by ensuring technological solutions to support information systems that fulfil the customer requirements and meet internal and external audit requirements. 2. Responsible for the provision of technical support of the Business Objects environment to ensure that error messages and report running issues are resolved within an agreed timescale. The officer will resolve issues locally or via technical discussion with the Business Objects suppliers to ensure that new innovative solutions will consolidate and improve existing data capture and storage systems to expand the range, depth, quality, and timeliness of information available for routine and ad-hoc analysis and reporting within the Information System environment. 3. Investigate and understand a range of complex problems commensurate with a degree qualified graduate in software development / design, identifying workable solutions and recommending best options where appropriate which may involve provision of complex information to people with little knowledge of the specialist area in a way that is easily understood. 4. Working in collaboration with IT (Information Technology) colleagues and suppliers to enable NHS Ayrshire & Arran to take early and cost-effective advantage of beneficial technological innovations and more effective ways of working, by keeping up to date with appropriate technical journals and trades conventions, seminars, and Internet updates relevant to database reporting toolsets. 5. Responsible for the configuration, support, and maintenance of technical infrastructure for data warehousing. This will include the secure manipulation of data across multiple databases and/or technical platforms and the amendment and subsequent testing of systems to ensure continuing support of user requirements. 6. Design and deliver training and supporting documentation for (a) colleagues, within the Business Intelligence Development Team, and (b) customers in use of technical infrastructure and tools to meet the information requirements of NHS Ayrshire & Arran. 7. Provide appropriate technical advice and occasionally represent NHS Ayrshire & Arran on national groups to influence the development of standards of data management and work collaboratively with colleagues in, SGHD, PHS (Public Health Scotland) and other Health Boards to develop knowledge and skills of Business Intelligence and Operational Staff across NHS Ayrshire & Arran. 8. Assist the Information Development Manager in the creation of usable Business Objects reports which are created using the right data, at the right time to answer specified questions for service users. 9. Identify by interacting with data users where manuals, training and policy requires to be developed to ensure the successful roll out of Business Objects as the standard information gathering tool in NHS Ayrshire & Arran.  * Create and maintain project documentation regarding data universes, data dictionaries and appropriate ancillary documentation to enable other appropriately trained officers to understand the development and maintenance requirements of the Business Objects Environment. |
| 7a. EQUIPMENT AND MACHINERY |
| Operation of a wide range of office machinery/equipment, including;   1. Personal computer for production of relevant documentation and use of e-mail. 2. Laptop and data projector for delivering PowerPoint presentations. 3. Fax machine for the transfer of information in a timeous manner. 4. Car for transportation between sites. 5. Telecommunications |
| **7b. SYSTEMS** |
| |  | | --- | | * The postholder has primary responsibility for the security, maintenance and confidentiality of databases and information held on their own computer.   Development, maintenance and management of several wider system and departmental databases. E.g., Weekly Community Health Index update of new registrations and deaths.   1. Direct interrogation and operational reporting and report development from Primary Care and Acute   patient and clinical management systems. E.g., TrakCare, Care Partner, Symphony   1. Analytical input and modelling/scenario development to support Operational, Redesign and   Capacity Planning systems   * Business Objects local data warehouses. * Electronic data storage e.g., Word, Access, Excel, Powerpoint * Personal Development Planning System – E-KSF * Audit and monitoring reporting systems * Intranet / Internet / Sharepoint   The postholder will require extensive knowledge of software systems using some or all the following technologies:   * **Business Objects**   + Data Services   + Information Design Tool   + Web-intelligence   + Central Management Console * **Other software**   + MS SQL Server (current and past editions)   + Microsoft Office   + Microsoft365 (PowerBI, Power Apps)   + QlikView | |  | |  | |

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| ASSIGNMENT AND REVIEW OF WORK |
| The post holder will be responsible for managing their own workload within broad guidelines, subject to the overall direction of the Information Development Manager, prioritising requests and ensuring, where specified, timetables for the collection, submission, analysis, and dissemination of information through data warehouse are met. The post holder will be required to re-prioritise workload frequently as ad-hoc requests arise. The post holder will also work as a member of the Project Teams. In that role they will be accountable to the Project Manager.  The post holder acts as a specialist with reference to manager who has the freedom to make informed decisions within departmental policies, working to the key results and outcomes to support the Digital Services Strategy.  The post holder will also make specific recommendations to Project Boards or Management Teams e.g., on various technical issues or solutions relating to the provision of information. |

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| 1. **DECISIONS AND JUDGEMENTS** |
| * The postholder will identify and implement appropriate action plans to develop and improve services within areas of responsibility. * The postholder will be responsible for a range of complex decisions and judgements within areas of responsibility including information extraction, information reporting and efficient database design. * The post holder is expected to anticipate and resolve problems independently. Typical judgements include decisions around local priorities for information services, actions to ensure delivery of challenging targets and operational actions in response to service delivery. |

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| MOST CHALLENGING/DIFFICULT PARTS OF THE JOB |
| Developing, adapting, and implementing the technical infrastructure and reporting tools which will  facilitate an improvement in response to the significantly increasing demands for quality information to support decision making and planning within NHS Ayrshire & Arran.  Explaining complex technical issues to customers in terms which can be understood and acted upon.  Managing conflicting priorities and demands of multiple projects and customer requests will be extremely challenging.  Establishing an in-depth knowledge, understanding of the customers business, and managing customers' expectations. |

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| **11. COMMUNICATIONS AND RELATIONSHIPS** |
| Internal  The post holder will have key working relationships with staff at all levels within NHS Ayrshire and Arran, for example:   * Directors * Health Care Managers * Clinical Directors * Senior Nurses * Frontline staff * Finance * Information and Knowledge Management * Health and Safety * Department of O&HRD * Administrative personnel   External  The postholder requires to participate in diverse communication processes throughout Ayrshire and Arran with several partner agencies, including:   * PHS * Software Suppliers   All communication within this post will involve verbal, written, formal and informal, individual and group contacts. Excellent communication skills are essential to the post, as it will involve communicating sensitive or highly contentious and complex information to staff groups This may include formal presentations or across the table, negotiations with service partners, face to face discussions with staff and suppliers.  The post holder will be responsible for ensuring effective communications with the Head of System Development and Implementation, and the Project Manager especially when making decisions that affect database design and system integration. |

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| **12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** | |
| **PHYSICAL**   * The post will involve home and office-based work, which will involve the use of a VDU but will also involve the postholder travelling between sites. * Keyboard skills for production of paperwork and reports * Driving and walking between meetings.   **MENTAL**   * Frequent concentration for periods of approximately 2 hours at a time e.g., attending meetings, reviewing, checking, and amending documentation. * Intense concentration for extended periods when designing data extraction methods and checking quality of extract to ensure accuracy of data extracted.   **EMOTIONAL**   * Dealing with conflicting views, hostility, and confrontational behaviours, especially when trying to facilitate major changes or reviews within the service or partners agencies. * Dealing with people with challenging and aggressive behaviour and overcoming barriers to understanding especially when communicating contentious information. * The ability to maintain professionalism and not be provoked by displays of challenging and hostile behaviour. * Dealing with complaints and meeting with staff and service vendors. | |
| 13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB |
| **Education**   1. Educated to degree level Honours Degree in Information Technology or Software Design 2. Skills in the development of tools to manage large disparate data marts, reporting formats and plain English gained through a mixture of internal and external formal training, equivalent to postgraduate level qualification. e.g., graduate diploma qualification 3. Substantial experience of technical development & support in a Health Care environment with experience at a senior level 4. Specialist knowledge of the organisation’s information requirements 5. Highly developed IT and problem-solving skills with an in-depth specialist technical knowledge and experience of application of NHS data definitions, information standards and policies are essential 6. The post holder should have a theoretical knowledge base and practical experience of working with a skills-based staff. 7. Effective and confident communication skills are required to present, advise, and instruct analysis, procedures, and standards to a senior audience.   **Professional Experience**   * Evidence of previous experience in systems development with reference to Business Objects. * Experience and knowledge of services within areas of responsibility * Demonstrate in-depth understanding of governance principles and the development of systems and frameworks to establish clear accountabilities based on effective programme management protocols.   **Core Competencies**   * Ability to align processes and systems to support service delivery. * Demonstrate innovative approach, seeking new or alternative methods of database design to enable service delivery. * Awareness and understanding of relevant National and Local initiatives, imperatives and factors influencing information service provision. * Demonstrates sound understanding of influencing and decision-making protocols across all stakeholders and ability to shape stakeholder opinions. * Promote collaboration and team working across services, cultivating network of relationships internal and external to NHS Ayrshire and Arran |