WELSH AMBULANCE SERVICES NHS TRUST
JOB DESCRIPTION

JOB DETAILS:

Job Title	Senior Data Warehouse Developer
Pay Band	Band 6
Hours of Work and Nature of Contract	37.5
Division/Directorate	Digital Services
Department	Health Informatics
Base	Cwmbran, St Asaph or Swansea

ORGANISATIONAL ARRANGEMENTS:

Managerially Accountable to:	Head of Information
Reports to: Name Line Manager	Principal Data Warehouse Developer
Professionally Responsible to:	Assistant Director for Data and Analytics

ORGANISATIONAL VALUES AND BEHAVIOURS

DUTIES/RESPONSIBILITIES:

Job Summary/Job Purpose:

The overall purpose of Informatics has been defined as to:

"Enable promote and support the effective use of data, information, knowledge and technology to support and improve health and health care delivery"

Therefore, the role of Informatics is to ensure an NHS organisation has the required cost effective systems, information and technology services needed to provide excellent clinical care to its patients, in conjunction with its partners throughout the wider health community.

The post holder will have a very high level of technical expertise and be expected to have the skill to routinely analyse and solve highly complex technical problems with only an infrequent need to call upon senior staff for advice.

The main aspect of the role is to develop robust Business Intelligence (BI) solutions and to undertake any associated administrative tasks in accordance with advice and guidance provided by senior staff and customers. The post holder must ensure that BI solutions integrate and perform to the requirements and satisfaction of senior staff, users and clinical and technical design standards.

The post holder shall also assess and instruct junior colleagues, analysing their strengths and weaknesses and working with them to develop their skills and technical expertise.

MAIN DUTIES AND RESPONSIBILITIES.

It should be noted, that all the areas below would require the close working partnership of the other key managers within the Operational and Clinical Directorates whilst maintaining regular links with our Health Informatics Department.

- Regular contact with internal and external senior stakeholders orally or in writing regarding highly complex information such as communicating complicated statistical intelligence, operational issues and/or serious data quality breach incidents which may impact on patient care through significant service change proposals.

- Communicating highly complex statistical intelligence to large groups of both technical and non-technical staff both internal and external to the Trust such as Trust Board, NWIS, and Local Health Boards about sensitive issues on contentious matters. Prepare and/or delivering presentations by using PowerPoint, Keynote or any other presentation software.

- Specialist knowledge of health informatics data analysis procedures and practices including statistical methods, such as probability, correlation or others when it is appropriate for the analysis work that is being undertaken.

- Act as autonomous business intelligence advisor, using additional specialist knowledge gained from significant work experience and higher knowledge gained by working with senior practitioners within the field of health informatics.

- Use highly complex statistical methods for analysis and information development where decisions made through the interrogation process are based upon multiple options and will be complicated in nature.

- An excellent understanding of an object oriented programming, procedural, declarative or structured querying programming language.

- An in-depth understanding of at least one popular software development methodology (such as Agile).

- A good understanding of the principles of software craftsmanship and good software design.

- An excellent understanding of relational databases, database design and the Structured Query Language.

- Proven experience using an Integrated Development Environment (IDE) to write code and produce elegant, robust and maintainable BI solutions.

- Practical experience using a popular BI toolset (such as the Microsoft BI Stack – SSRS, SSAS, SSIS).

- A command of the principles of good application design using the principles of SOLID and object oriented programming.

- Practical experience of writing manual or automated unit and integration tests.

- Ensure all regular and routine reports, both internal and external, are distributed in

accordance with nationally agreed data standards and within defined time scales.

- Prepare accurate complex statistical and contextual information that can be requested by any person as part of the Freedom of Information Act 2000 which may involve multiple sources and interrogation and analysis of information.

- Responsible for developing software to enable transform highly complex raw data from multiple data sources (e.g. NHSDirect/111, Clinical Desk, EMS CAD) into meaningful intelligence that can be used to inform decision making.

- Responsible for the developing Trust's internal software for creating automated reporting solutions using highly specialised and highly complex technical skills to meet the specifications of internal and external stakeholders at all levels including CEO and WG senior officials.

- Responsible for designing, modifying and developing highly complex intelligence dashboards on an ongoing basis to enable users to interrogate and analyse data from quality assured datasets on a self-serve basis.

- Compile mandatory and statutory statistical returns to distribute to Welsh Government and Emergency Ambulance Services Committee in accordance with defined schedules as part of the statistics regulation authority regulations

- Responsible for the Trust's BI Platforms (Qlik Sense and Report Manager) for providing self-service reporting and information. This involves adapting the solution to meet the needs of the service by incorporating and linking various, highly complex data sources and datasets.

- Work autonomously without supervision within Trust policies and procedures and propose service changes within health informatics.

- Work closely with colleagues and customers on a daily basis and primarily through face-to-face communication to complete tasks.

- Discuss progress and notify senior staff of impediments during regular team meetings such as Daily SCRUMS (as part of an Agile Programming methodology).

- Discuss ideas with colleagues and review tasks and priorities in collaboration with other team members and senior staff.

- Contribute ideas on how the team can become more effective – at regular team meetings such as Sprint retrospectives for example.

- Mentor junior colleagues, analysing their strengths and weaknesses and providing advice and guidance to develop their skills and abilities (particularly their technical expertise).

- Work with operational colleagues to ensure that data quality is continually improved by producing exception reporting to highlight and evidence anomalies caused by inadequate data capture practices.

- Clarifying requests for complex information with Health Informatics' customers, which could include going out to meet with them in order to establish specifications and negotiate deadlines.

- To assist in the development of an 'information culture' within the Trust by providing

advice, guidance and general support on information management issues. Also providing Presentations and training when appropriate

- Attend internal and external meetings, acting autonomously as subject matter expert and deputising for the BI & Development Manager as required, ensuring that you are representing the Health Informatics department or the Welsh Ambulance Services Trust in a positive manner.

- Deputise for the BI & Development Manager where necessary and attend or chair meetings and conferences when required.

- To ensure that the Trust's statutory obligations are met with regards to the Data Protection Act, Computer Misuse Act, Caldicott Guardian, Risk assessment and system security.

HEALTH AND SAFETY.

All employees have a responsibility to abide by the safety practices and codes authorised by the Trust. They have an equal responsibility with management for maintaining safe working practices.

WORKING RELATIONSHIPS.

Internal

- Executive & Trust Board
- Service Directors and Managers
- Operational staff, Departments and Managers

External

- IM&T staff and other NHS Trusts.+ Chief Ambulance Service Commissioner
- JESG & specifically Police/ Police Commissioners/ Fire & Rescue
- NHS Executive Officers.
- Outside Suppliers and Service Providers.
- Key stakeholders including 3rd Sector/ Businesses/ NRW/ PHW/ Delivery Unit

CONFIDENTIALITY

During the course of your employment you may see, hear or have access to, information on matters of a confidential nature relating to the work of the Trust or to the health and personal affairs of patients and staff. Under no circumstance should such information be divulged or passed on to any unauthorised person(s) or organisations.

OBJECTIVES, PERSONAL DEVELOPMENT AND APPRAISAL

Each year personal objectives will be agreed with the postholder. Performance in achieving these objectives will be discussed regularly and there will be an annual formal appraisal.

A Personal Development Plan will be agreed with the postholder and updated at least annually. You will be directly managed for your PDR by the Principal Data Warehouse Developer and professionally by the Head of Information

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NOTE:

The above duties and responsibilities are intended to represent current priorities and are not meant to be a conclusive list. Any major changes will be made in discussion with the post holder in the light of service needs.

PERSON SPECIFICATION

ATTRIBUTES	ESSENTIAL	DESIRABLE	METHOD OF ASSESSMENT
Qualifications and/or Knowledge	• Bachelor's degree in Software Development or equivalent qualifications, knowledge or experience. • Evidence of continuing professional development and post qualification learning and development.	• Foundation qualification in an agile development methodology (for example the BCS Foundation Agile). • Advanced qualification in an agile development methodology (for example the Professional Scrum master).	Application form and pre-employment checks
Experience	• Proven experience of software development role in a formal development environment. • Evidence of experience with Windows PC and server operating systems. • Proven experience using the Microsoft BI Stack, including: SSRS, SSAS, SSIS • Excellent working knowledge of relational database systems.	• Experience developing software for Clinical Information or Healthcare systems. • Good working knowledge of database administration activities • Experience of working in an Agile Development environment (e.g. Scrum). • Experience of using Qlik BI Software.	Application form and interview
Aptitude and Abilities	• Highly skilled in BI analysis and development using a suitable IDE and	• Understands the Data Protection Act and its	Interview

	programming language.	implications for the holding of patient information NHS Information flows / services.	
	• Ability and confidence to speak publicly to groups of people, demonstrating ideas, concepts and working software and answer related questions.	• Ability to speak Welsh	
	• Excellent planning skills.		
	• Able to work individually, or as part of a team.		
	• Able to establish good working relationships with people at all levels.		
	• Be methodical and disciplined in work with meticulous attention to detail.		
	• Able to work under own initiative.		
	• Able to communicate with staff on complex business or clinical processes.		
	• Display high quality written and verbal communication skills.		
	• Able to learn new technologies and IT systems quickly through both self-study and professional courses.		
	• Enthusiastic, determined, patient and self-motivated.		
	• Highly professional and flexible attitude to work.		

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Physical Skills	• Able to operate a PC and communicate with team members in person.	• Full driving licence.	Application form and interview
Freedom to Act	• Ability and judgement to lead smaller software development projects according to well defined industry good practice. • Able to assess and mentor junior staff to address and improve areas of weakness.		
Mental Effort	• Display high levels of concentration to analyse and solve complex problems.		

GENERAL REQUIREMENTS

Include those relevant to the post requirements

➢ **Values:** All employees of the Health Board are required to demonstrate and embed the Values and Behaviour Statements in order for them to become an integral part of the post holder's working life and to embed the principles into the culture of the organisation.

➢ **Registered Health Professional:** All employees who are required to register with a professional body, to enable them to practice within their profession, are required to comply with their code of conduct and requirements of their professional registration.

➢ **Healthcare Support Workers:** Healthcare Support Workers make a valuable and important contribution to the delivery of high quality healthcare. The national Code of Conduct for NHS Wales describes the standards of conduct, behaviour and attitude required of all Healthcare Support Workers employed within NHS Wales. Health Care Support Workers are responsible, and have a duty of care, to ensure their conduct does not fall below the standards detailed in the Code and that no act or omission on their part harms the safety and wellbeing of service users and the public, whilst in their care.

➢ **Competence:** At no time should the post holder work outside their defined level of competence. If there are concerns regarding this, the post holder should immediately discuss them with their Manager/Supervisor. Employees have a responsibility to inform their Manager/Supervisor if they doubt their own competence to perform a duty.

➢ **Learning and Development:** All staff must undertake induction/orientation programmes at Corporate and Departmental level and must ensure that any statutory/mandatory training requirements are current and up to date. Where considered appropriate, staff are required to demonstrate evidence of continuing professional development.

➢ **Performance Appraisal:** We are committed to developing our staff and you are responsible for participating in an Annual Performance Development Review of the post.

➢ **Health & Safety:** All employees of the organisation have a statutory duty of care for their own personal safety and that of others who may be affected by their acts or omissions. The post holder is required to co-operate with management to enable the organisation to meet its own legal duties and to report any hazardous situations or defective equipment. The post holder must adhere to the organisation's Risk Management, Health and Safety and associate policies.
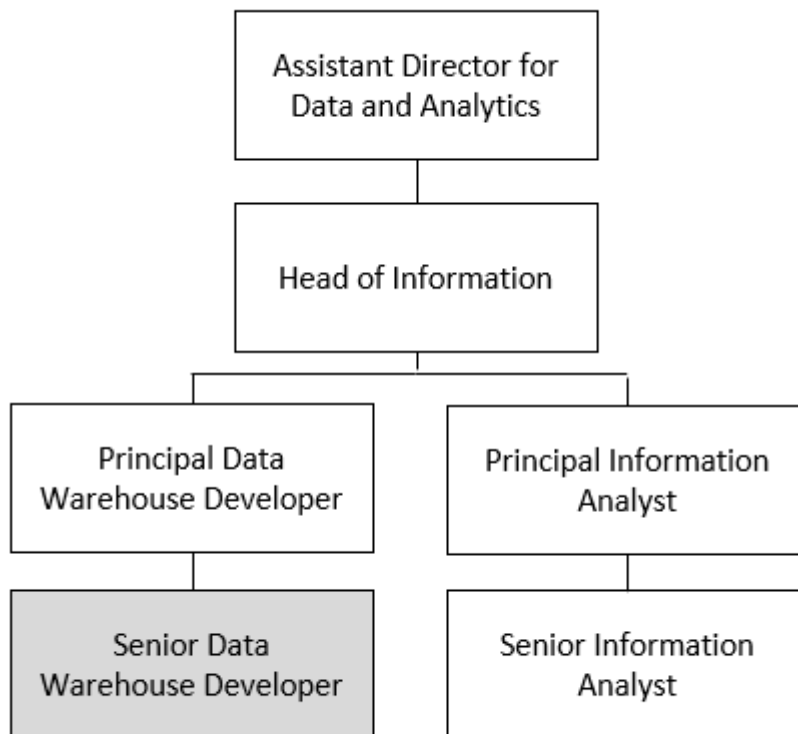
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➢ **Risk Management:** It is a standard element of the role and responsibility of all staff of the organisation that they fulfil a proactive role towards the management of risk in all of their actions. This entails the risk assessment of all situations, the taking of appropriate actions and reporting of all incidents, near misses and hazards.

➢ **Welsh Language:** All employees must perform their duties in strict compliance with the requirements of their organization's Welsh Language Scheme and take every opportunity to promote the Welsh language in their dealings with the public.

➢ **Information Governance:** The post holder must at all times be aware of the importance of maintaining confidentiality and security of information gained during the course of their duties. This will in many cases include access to personal information relating to service users.

➢ **Data Protection Act 1998:** The post holder must treat all information, whether corporate, staff or patient information, in a discreet and confidential manner in accordance with the provisions of the Data Protection Act 1998 and Organisational Policy. Any breach of such confidentiality is considered a serious disciplinary offence, which is liable to dismissal and / or prosecution under current statutory legislation (Data Protection Act) and the HB Disciplinary Policy.

➢ **Records Management:** As an employee of this organisation, the post holder is legally responsible for all records that they gather, create or use as part of their work within the organisation (including patient health, staff health or injury, financial, personal and administrative), whether paper based or on computer. All such records are considered public records and the post holder has a legal duty of confidence to service users (even after an employee has left the organisation). The post holder should consult their manager if they have any doubt as to the correct management of records with which they work.

➢ **Equality and Human Rights:** The Public Sector Equality Duty in Wales places a positive duty on the HB to promote equality for people with protected characteristics, both as an employer and as a provider of public services. There are nine protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex and sexual orientation. The HB is committed to ensuring that no job applicant or employee receives less favourable treatment of any of the above grounds. To this end, the organisation has an Equality Policy and it is for each employee to contribute to its success.

➢ **Dignity at Work:** The organisation condemns all forms of bullying and harassment and is actively seeking to promote a workplace where employees are treated fairly and with dignity and respect. All staff are requested to report and form of bullying and harassment to their Line Manager or to any Director of the organisation. Any inappropriate behaviour inside the workplace will not be tolerated and will be treated as a serious matter under the HB/Trust Disciplinary Policy.

➢ **DBS Disclosure Check:** The post holder does not require a DBS Disclosure Check.

➢ **Safeguarding Children and Adults at Risk:** The organisation is committed to safeguarding children and adults at risk. All staff must therefore attend Safeguarding Children & Adult training and be aware of their responsibilities under the All Wales Procedures.

➢ **Infection Control:** The organisation is committed to meet its obligations to minimise infections. All staff are responsible for protecting and safeguarding patients, service users, visitors and employees against the risk of acquiring healthcare associated infections. This responsibility includes being aware of the content of and consistently observing Health Board Infection Prevention & Control Policies and Procedures.

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> ➢ **No Smoking:** To give all patients, visitors and staff the best chance to be healthy, all Health Board sites, including buildings and grounds, are smoke free.

Flexibility Statement: The duties of the post are outlined in this Job Description and Person Specification and may be changed by mutual agreement from time to time.

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Organisational Chart

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        ┌──────────────────────┐
        │  Assistant Director for│
        │   Data and Analytics  │
        └──────────┬───────────┘
                   │
        ┌──────────┴───────────┐
        │  Head of Information  │
        └──────────┬───────────┘
           ┌───────┴────────┐
   ┌───────────────┐  ┌────────────────┐
   │ Principal Data│  │   Principal    │
   │   Warehouse   │  │  Information   │
   │   Developer   │  │    Analyst     │
   └───────┬───────┘  └───────┬────────┘
   ┌───────────────┐  ┌────────────────┐
   │  Senior Data  │  │     Senior     │
   │   Warehouse   │  │  Information   │
   │   Developer   │  │    Analyst     │
   └───────────────┘  └────────────────┘
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Supplementary Job Description Information

Please complete information on Physical Effort, Mental Effort, Emotional Effort and Working Conditions in order to assist the Job Matching process.

Physical Effort

This factor measures the nature, frequency and duration of physical effort (sustained effort at a similar level or sudden explosive effort) required for the job.

Please ensure any circumstances that may affect the degree of effort required, such as working in an awkward position; lifting heavy weights etc. are detailed, such as:

'Working in uncomfortable/unpleasant physical conditions; sitting in restricted positions; repetitive movements; lifting heavy weights; manipulating objects; kneeling, crouching, twisting; heavy duty cleaning; working at heights; using controlled restraint; driving as part of daily job - **N.B. Walking /driving to work is not included'**

Examples of Typical effort(s)	How often per day / week / month	For how long?	Additional Comments
There is frequent requirement for sitting at a computer for a substantial portion of the working time.	**80% of the working week and most days**	**Ongoing more or less continuously**	
Occasional light physical effort is required for moving of equipment and technical hardware, lifting and carrying of computer equipment for presentations, training, desks,	**<5% of the working week**	**Short periods <30 mins duration**	

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Mental Effort

This factor measures the nature, level, frequency and duration of mental effort required for the job, for example, concentration, responding to unpredictable work patterns, interruptions and the need to meet deadlines.

Please identify the normal requirement to concentrate in the post and determine, how often and for how long it is required to concentrate during a shift / working day, e.g. :

'Carrying out formal student assessments; carrying out clinical/social care interventions; checking documents; taking detailed minutes at meetings; operating machinery/equipment; carrying out screening tests/microscope work; carrying out complex calculations; carrying out non-clinical fault finding; responding to emergency bleep; driving a vehicle; examining or assessing patients/clients.

Examples of Typical effort(s)	How often per day / week / month?	For how long?	Additional Comments
The work pattern is unpredictable for investigating problems, analysis of performance, data and policies, interruptions requiring immediate response requires frequent changes arising from customer/client demands.	**>50% of the working week**	**Long periods** **>1 hr duration**	
Prolonged concentration is required for tasks such as managing the work request database system that requires intense mental effort to ensure coding meets data quality	**>10% of the working week**	**Long periods** **>1 hr duration**	

Emotional Effort

This factor measures the nature, frequency and duration demands of the emotional effort required to undertake clinical or non clinical duties that are generally considered to be distressing and/or emotionally demanding.

Please identify how often the post holder has exposure to direct and/or indirect distressing and/or emotional circumstances and the type of situations they are required to deal with.

For example,' processing (e.g. typing/transmitting) news of highly distressing events; giving unwelcome news to patients/clients/carers/staff; caring for the terminally ill; dealing with difficult situations/circumstances; designated to provide emotional support to front line staff; communicating life changing events; dealing with people with challenging behaviour; arriving at the scene of an accident.' **N.B. Fear of Violence is measured under Working Conditions**

Examples of Typical effort(s)	How often per week / month?	For how long?	Additional Comments
Frequent direct exposure to emotionally demanding circumstances in a highly-paced, stressful environment, where emotionally demanding is defined as "dealing with strong feelings such as frustration, anger and desperation" at work e.g. staff/client emotional demands/ disciplinary/grievance matters.	**Once a week on average**	**Up to 1 hr duration on average**	

Working Conditions

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This factor measures the nature, frequency and duration of demands on staff arising from inevitably adverse environmental conditions (such as inclement weather, extreme heat/cold, smells, noise and fumes) and hazards, which are unavoidable **(even with the strictest health and safety controls),** such as road traffic accidents, spills of harmful chemicals, aggressive behaviour of patients, clients, relatives, carers.

Please identify unpleasant working conditions or hazards which are encountered in the post holder's working environment and establish how often and for how long they are exposed to them during a working day / week / month.

Examples are – use of VDU more or less continuously; unpleasant substances/non-household waste; infectious material/foul linen; body fluids, faeces, vomit; dust/dirt; fleas/lice; humidity; contaminated equipment or work areas; driving/being driven in normal or emergency situations - ***Driving to and from work is not included**

Examples of Typical Conditions	How often per week / month?	For how long?	Additional Comments
The post holder shall be required to use a Visual Display Unit (VDU) more or less continuously throughout the working day subject to the provision for adequate breaks.	**80% of the working week and most days**	**Ongoing more or less continuously**	