## NHS PROPERTY SERVICES LTD

## Job Description

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| **Job title:** | **Senior SQL BI Developer** |
| **Level:** | 3 |
| **Type of role:** | Permanent |
| **Base:** | London |
| **Travel requirements:** | If/when required (across England) |
| **Responsible to:** | Lead BI SQL Developer |
| **Directorate:** | Technology Services |
| **Job reference:** | |

## Job Summary

Established in 2013, NHS Property Services is a property owner, service provider and advisor, helping to shape the estate of the NHS for the future. We have one goal: to ensure the NHS makes the right property choices that enable excellent patient care.

Our portfolio is one of the largest in the UK, comprising more than 3,000 properties with 7,000 tenants across England. At a total value of more than £3bn, this represents about 10% of the total NHS estate.

Our properties range from listed buildings through to award-winning, state-of-the-art integrated health campuses.

**Main purpose/scope of the role**

The Senior SQL BI Developer role is responsible for developing and maintaining BI applications and solutions which deliver a single and trusted source for data and reporting to the business. It will support the Lead BI SQL Developer in developing the Enterprise Data Hub (EDH), including the Enterprise Data Warehouse and Data Lake. The role provides technical expertise in developing and maintaining the data migration between source systems and the Data Warehouse, in developing fit for purpose data marts, and in developing automated reporting solutions to support rapid BI and BI automation.

Key to the role is a high understanding of SQL, TSQL, Azure, SQL Server, ETL, and warehousing, but other skillsets may need to be developed as the data landscape evolves. The role will include developing new Data Transfer Interfaces between systems into the EDH, updating and curating the Operational Data Store and Dimensional layers, building on the Reporting Layer used to access data in the EDH, documenting changes made to

the Data Landscape in relevant Governance toolsets, and assisting in PowerBI report development.

The role will also include ownership of multiple components of the EDH (e.g. particular Data Transfer Interfaces, parts of the ODS or Reporting Layer) which will need to be monitored for issues, reviewed periodically for enhancement opportunities, and the application of new best practices.

It will be key for changes that impact the wider Data Landscape are communicated and approved in conjunction with the Data Architect to ensure a consistent and efficient Data Architecture artefacts (e.g. the Enterprise Logical and Physical models, and the Data Architecture components of the Enterprise Architecture) are maintained and understood by all.

## Key Responsibilities

### Create Azure Data Storage and Movement Processes

- Design, develop, test, and roll-out effective Azure data repositories, such as databases, data lakes, data marts, blob storage, and analytics models to support the Reporting Specialists to deliver automated MI reporting, BI dashboards, a self-service BI architecture, and ad-hoc data discovery analysis
- Develop Data Factory, SSIS, Logic App, and other data movement processes as required to support reporting, auditing, and other data needs in the business
- Leverage the relevant data management components such as Reference and Master Data Management, Data Governance, Data Quality, and Meta-data to maintain the integrity of the data warehouse and deliver best in class BI capability

### Perform Data Manipulation, Migration, and Management

- Design, develop, test, and maintain data extraction, transformation, and loading routines (ETLs) to bring relevant data from source systems to the BI Data Warehouse in line with BI and reporting requirements as defined by the Performance
- Maintain the operational reporting layers across the group from a BI technical point of view, ensuring reports are meeting business requirements and support real or near real-time delivery of operational data to operational teams
- Support the delivery of the more complex reporting requirements in line with the business requirements as specified by the Business Relationship Managers
- Maintain and performance tune the cloud-based data storage solutions to support the operational as well as the BI application environment

**Design, Document, and Audit Data Structures**

- Develop and implement error and exception management processes, ensuring causes of poor data quality are identified and escalated to the Data Quality Analysts and Data Architect
- Support data archiving, purging, and GDPR compliance processes by developing the required ETLs
- Ensure work is fully documented and referenced in line with agreed processes and formats

## Person Specification

| | **Essential** | **Desirable** |
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| **Qualifications** | • Master's Degree or Professional Qualification in Computer Science, Management Information Systems, or related IT Science subject | • Microsoft SQL or BI certification |
| **Knowledge** | • Must be knowledgeable in software development lifecycles/methodologies i.e. agile and waterfall<br>• Up to date knowledge of popular Rapid BI and OLAP tools<br>• Good knowledge of database administration principles and best practice<br>• Entity relationship modelling<br>• Kimball methodology | • Query tuning<br>• Database performance tuning techniques |
| **Experience** | • Significant experience (minimum 7 years) with SQL and TSQL<br>• Significant ETL experience<br>• Proven experience of working and developing with Microsoft BI solutions (including SQL Server, SSIS, SSRS, SSAS)<br>• Experience working with Master Data Management Solutions (including MS MDS)<br>• Experience with Azure DevOps | • Proven experience in hands-on database development<br>• Azure database development<br>• Experience in near real-time data integrations<br>• 1-2 years PowerBI report development experience |
| **Skills** | • Proficient in writing SQL<br>• Applied knowledge of Agile software/Project delivery methodology<br>• Design and development of best practice ETL processes<br>• Data warehousing and best practice BI Architecture | • Use of Visual Studio<br>• Exposure to Azure Data Factory<br>• Polybase exposure<br>• Exposure to analytic tools such as Tableau<br>• MS Dynamics CRM knowledge |

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| | • Data aggregation and dimensional modelling, OLAP<br>• ODBC/APIs<br>• Data preparation (sourcing, acquisition, integration)<br>• Business Analytics Data Modelling | |
| **Personal qualities/ abilities** | • Excellent analytical and problem-solving skills<br>• Strong problem solving, time management and organisational skills<br>• A "can do" attitude<br>• Excellent knowledge sharing and teamworking skill | |
| **Other requirements as applicable** | • Ability to document database models, ETL processes, and report designs to a high level | |