Sandwell **NHS**

Primary Care Trust

JOB DESCRIPTION

Job Title: Senior database analyst (CLAHRC Primary Care)

Pay Band: NHS Agenda for change band

Department/Locality: Public Health

Based at: Kingston House

Reports to: Deputy Head of Public Health Intelligence

Professionally Responsible to: Assoc Director of Information and Intelligence

Last updated: September 2008

Job Purpose: To extract clinical data from electronic primary care databases to identify patients at high risk of cardiovascular disease and to evaluate the effects of a patient identification programme. To manipulate data and create a dataset for statistical analysis. This is to evaluate an innovative programme identifying and treating patients at high risk of cardiovascular disease in primary care. The prevention programme is based in practices in Sandwell, Solihull and South Birmingham PCTs and is a 'Collaborations for Leadership in Allied Health Research and Care' research project (CLAHRC).

Dimensions

At least 20 general practices in Sandwell, 12 in Solihull and a similar number in South Birmingham PCT

Key Relationships:
- University of Birmingham CLAHRC lead for cardiovascular prevention research theme
- University of Birmingham CLAHRC researchers for cardiovascular prevention theme: in particular the statistician and health economist
- Sandwell PCT information management and technology department
- Sandwell PCT cardiovascular prevention lead for primary care
- Solihull PCT information management and technology department
- Solihull PCT cardiovascular prevention lead for primary care
- South Birmingham PCT information management and technology department
- South Birmingham PCT cardiovascular prevention lead for primary care
- Equivalent persons in any PCT that takes part in this project

Key Result Areas:

- Extract electronic primary care data from practices in several primary care trusts that are take part in the cardiovascular prevention project. Create and manage a data warehouse of this data. This will include clinical and demographic details of individual patients in a target age range.

- Obtain data from providers of smoking cessation services, physical activity services and other lifestyle services. Link these data to extracted electronic primary care data.

- Using expert knowledge and practical experience the post holder will be responsible for the development of programs and procedures to transfer data from a variety of sources into a homogenous database, working with partners to enable transfer and using discretion to overcome problems

- To co-ordinate the resolution of problems associated with records that fail validation tests during loading into the data warehouse under minimum peer supervision

- To perform complex queries on the data warehouse in order to identify patients at high risk of cardiovascular disease using an algorithm and to return this data to participating practices.

- To perform complex queries on the data warehouse and analyse the results in order to determine blood pressure levels, cholesterol levels and other risk factor status of patients before and after the date of implementation of the cardiovascular prevention project. This data will be provided to statisticians and health economists for analysis.

- To produce and maintain documentation of data held within the data warehouse and other database systems, providing data dictionaries and definitions, written for and communicated to less technically minded colleagues

- To develop, write and implement robust programming routines to process and monitor the integrity of the data and provide regular data quality reports. This is a long term complex task that requires thorough planning and organisation to establish and maintain the upmost data integrity and quality.

- Develop programming routines that provide record matching to data from a variety of sources, taking guidance from internal and external contacts when necessary

- Meet with project staff/researchers to gain input into the planning, design and querying of databases by fully understanding the needs of the project staff/researchers and the overall objectives of the research theme. This will result in the frequent need to plan and organise database development work

- Communicate with internal and external data providers to ensure high quality data sharing and transfer, resolving any quality or transfer issues that ensue.

- Ensure that all aspects of the work are performed in full compliance with Information Governance agenda

- Attend project research meetings and communicate technical issues and developments to non-technical groups of colleagues

- Provide database design and querying expertise to colleagues in the form of advice, guidance and training when necessary through ad hoc individual or group training

- Anticipate future developments in database technology to plan to improve functionality and performance of health and housing data warehouse.

The post holder will undertake other duties as may be required to achieve the PCTs' objectives, commensurate with the grading of the post.

General Information:

PCT Policies and Procedures

The post-holder will be required to comply with all policies and procedures issued by and on behalf of Sandwell PCT. In addition if the post-holder is required to work at other organisations premises they must adhere to the specific policies relating to the premises in which they work.

Clinical Governance & Risk Assessment

The post-holder must be aware of and ensure compliance with the PCTs Clinical Governance systems and Risk Management Programme.

Confidentiality

The post-holder must at all times maintain the complete confidentiality of the material and information he/she handles.

Data Protection

If required to do so, the post-holder will obtain, process and/or use information held on a computer in a fair and lawful way; and hold data only for the specified registered purposes and to use or disclose the data only to authorised persons or organisations.

Equal Opportunities

Sandwell PCT is striving towards being an equal opportunities employer. No job applicant or employee will be discriminated against on the grounds of race, colour, nationality, ethnic or national origin, religion or belief, sex, marital status or on the grounds of disability or sexual preference.

Selection for training and development and promotion will be on the basis of an individual's ability to meet the requirements of the job.

As a member of staff at Sandwell PCT the post-holder will have personal responsibility to ensure they do not discriminate, harass or bully, or contribute to the discrimination, harassment or bullying of a colleague or colleagues, or condone discrimination, harassment or bullying by others.

The post-holder is also required to co-operate with measures introduced to ensure equality of opportunity.

Health and Safety

The post-holder must make him/herself aware of the responsibilities placed on them by the Health and Safety at Work Act [1974] to ensure that the agreed safety procedures are carried out to maintain a safe environment for other employees and visitors.

The post-holder will have at all times a duty to conduct themselves and to undertake their work, in a safe manner, so not to endanger themselves and others around them. Clearly, the degree of such responsibilities carried out by a particular individual will depend on the nature and extent of his/her work. Should any individual feel concerned over the safety aspects if his/her work, it should be brought to the attention of his/her manager/supervisor and/or Trade Union Safety Representative.

The post-holder must adhere to the health and safety rules and procedures of the PCT. He/she has a legal duty to use safety devices and equipment provided.

All staff will receive a general introduction to health and safety at work as part of their induction. They will also be given advice on fire, security and lifting procedures.

Infection Control

Infection Control is everyone's responsibility. It is a requirement that all staff, both clinical and non-clinical, comply with Infection Prevention and Control policies to prevent cross infection and minimise potential hazards. Staff have a duty to attend mandatory infection prevention training and facilitate relevant patient and staff education

No Smoking Policy

The PCT has a no smoking policy. Staff are not permitted to smoke on any of the PCTs premises nor in any vehicle used on PCT Business.

Public Service User and Carer Involvement

Under Section 11 of the Health and Social Care Act we have a duty to involve patients and the public at all levels within the organisation. The post-holder will be required to recognise and value the benefits of listening and responding to patients and recognise that the patients experience is the catalyst for doing things differently to improve the way we deliver services.

Untoward Incidents

The post-holder must take responsibility for incident and near miss reporting and must ensure they adhere to all departmental policies and procedures.

Review of the Role

This job description will be subject to review and amendment, in consultation with the post holder, to meet the changing needs of the service and the organisation.

This role profile is designed to identify principal responsibilities. The post holder is required to be flexible in developing the role in accordance with changes within the PCTs management agenda and priorities.

Post Holder's Name:

Post Holder's Signature: **Date:**

Manager's Name:

Manager's Signature: Date:

Sandwell **NHS**
Primary Care Trust

PERSON SPECIFICATION

Post Job Title: CLAHRC Senior database analyst (Primary Care)	Reference No:
Location/Department: Kingston House/Public Health	Date: Aug. 2009

All candidates will be considered on their ability to meet the requirements of this person specification.

	Criteria	How identified
General Education and Qualifications	Degree level or equivalent in a discipline such as Health Informatics, Computer Science with database element, Information Science, GIS with database design element (E) Postgraduate qualification in similar disciplines as stated above <u>or</u> the equivalent level of experience, relevant experience of database design and analysis (E)	A
Professional Qualifications	Microsoft certification (D)	A
Experience	Relevant practical expert experience of database design, construction and management (E)	Application/ Interview
	Experience of working in a multi-agency environment (E)	A/I
	Advanced MS Office experience (E)	A/I
	Experience of using electronic primary care database systems e.g. EMIS, Torex and Vision (E)	A/I
	Experience of web-enabled database design (D)	A/I
	Experience of record linkage (D)	A/I
	Experience using health outcome data (D)	A/I
	Experience of writing technical documents (D)	A/I
Skills/Abilities	Flat file database management (E)	A/I
	Advanced database querying (E)	A/I
	Ability to prepare technical documentation using plain English (E)	A/I
	Research and evaluate new technologies and continually learn new skills (E)	A/I
	Able to work effectively with a wide range of primary care clinical staff (GPs, nurses and practice managers) in a	A/I

	variety of locations in Birmingham, Solihull and the Black Country (E)	A/I
	Access to own transport (E)	A/I
	Plan, prioritise and schedule the workload (E)	
	Work between operational and research environments (D)	A/I
	Relational database design and implementation using Microsoft SQL Server or equivalent (D)	A/I
	Problem solving (D)	
Knowledge	Expert knowledge of database design, construction and management (E)	A/I
	A good understanding of Information Governance issues (E)	A/I
	Knowledge of Health outcome data including mortality and morbidity (D)	A/I
	Database linkage techniques (D)	A/I
Personal Attributes	Proven ability and willingness to innovate (E)	A/I
	Good communication and interpersonal skills (E)	A/I
	Self starter with ability to work under own initiative as well as within a team (E)	A/I

Additional Notes for Candidates:

(E) = Essential – You must already have the criteria in order to be considered for the role

(D) = Desirable – There is no requirement to have the criteria but it could be an advantage to being able to perform the role. These criteria are only used in shortlisting where an excessive number of applicants all meet the desirable criteria (exemptions to this apply to disabled candidates)