#### **Detailed Job Descriptions:**

Job Title: Data Scientist/Programmer (1 Position) Duty Station: Kampala Reports To: Senior Technical Advisor- Strategic Information

**Job Summary:** To organize, analyze and interpret data and statistical information to support project staff and stakeholders use it to make evidence based decisions. Support the implementation of Health Information Systems at UEC through enhancing existing systems, developing and rolling out innovative tools for the data management cycle.

## **Documentation and Tools management**

- Prepare documentation of steps taken to facilitate analysis of data (Data analysis plans)
- Select most appropriate data analysis programs or packages based on user needs and intended results
- Prepares data for analysis using software packages
- Design appropriate tools to support analysis and presentation of data

## Analysis, interpretation, and dissemination

- Analyse data to identify trends on various project indicators
- Organize and interpret statistical information to support staff and stakeholders use it to make decisions
- Respond to data related queries and calls, and keep track of these
- Produce reports and charts communicating trends within data to both data and nondata clients, staff, and managers
- Choose and use most appropriate methods of presenting analysed data to the different audiences

# Data quality, Reporting, and learning

- Lead data cleaning efforts for the various data sets within UEC or jointly with MoH and Monitoring and Evaluation Technical Support Program (METS) to ensure that data submitted in reports is accurate and usable
- Support project M&E staff to collect, organize and report on project outputs, outcomes and impact to the various stakeholders including UEC, CDC, MoH, Districts, and facilities
- Produce relevant graphics to include in the various narrative reports
- Support compilation of UCMB's annual health sector reports, and other reports as appropriate
- Provide synthesized data to support abstract writing
- Identify data sets that can be used for information learning sessions
- Provide data to project staff to use during program review meetings with various stakeholders including UCMB, facilities, MoH, CDC, METS, districts, and Implementing Partners

#### **Database programming**

• Write scripts, procedures, or queries for HIS solutions and databases

- Monitor performance of deployed HIS solutions, document and fix bugs and errors and share back with users using appropriate platforms
- Requirements gathering from users and stakeholders to support enhancements of deployed HIS solutions
- Design appropriate interim data collection applications to address UEC's emerging data collection and use needs
- Support User Acceptance Testing (UAT) of new HIS products to determine suitability for use
- Work with Monitoring and Evaluation Technical Support (METS) Program to ensure that deployed HIS solutions are in synch with Uganda EMR and other approved national systems like Clinic Master
- Build capacity of UEC and facility staffs in use of the deployed systems, including Uganda EMR, Healthstats, Viral Load dashboard, and others as need arises

# Qualifications, experience and skills

- Degree in Computer Science, Statistics, Mathematics, a master's degree in Software engineering or computer science with at least 6 years of experience
- Knowledge of and experience with DHIS2, HRIS and PEPFAR related software platforms
- Data Visualization (PowerBI, Tableau, Advanced Excel)
- Statistics and research analysis: STATA, SPSS, Advanced Excel, Epi-Info
- Deep working knowledge of the main programming languages often used within analytics, data mining and data science including R, SAS, Python and SQL, and knowledge of Java, C/C++, Perl and Ruby
- Experience in development and management of data tools, enterprise level Web based, Desktop based and Mobile applications using Microsoft .NET, Java and other Technologies such as C#, ASP.net, Bootstrap, JQuery, CSS, HTML5, MSSQL and MySQL
- Database/tools Design skills (SQL, MS Access, ODK, KOBO, Research Electronic Data Capture (REDCap), DHIS2/DATIM/HIBRID
- Experience developing and maintaining project databases for monitoring implementation of project activities. Technical expertise in data collection, processing and analysis, and feedback mechanisms is required
- Expertise in the use of mobile technologies for data reporting and collection preferred.
- Ability to develop effective working relationships with counterparts at all levels, local organizations, and other program partners.
- A high level of mathematical and or statistical ability
- The ability to sift, analyze, model and interpret data from multiple sources, looking for trends that highlight problems (early warning indicators) or opportunities
- Strong organizational, interpersonal and management skills