



Ministry of Health, Wellness and Elderly Affairs

Health System Strengthening Project

Terms of Reference

Data Analyst

Prepared: February 3, 2023

1: Introduction

The Government of Saint Lucia (GOSL) has obtained financing channeled through the World Bank (WB) for the financing of Health System Strengthening Project (HSSP) to support its strategy in achieving Universal Health Care. The HSSP in the amount of US\$25.942 million (including the additional financing for the contingency Emergency Response Component activation by the COVID 19 Pandemic and the Pandemic Emergency Facility Grant) is strengthening Saint Lucia's health system, focusing on the establishment of an Essential Package of Health Services (EPHS), strengthening institutional readiness and performance particularly at the primary care level, and improving public health emergency preparedness and response.

Component 2 of the HSSP will strengthen service delivery of an Essential Benefits Package. Subcomponent 2.1 seeks to improve Service Delivery through Performance-Based Financing (PBF) (US\$4 million). It proposes a PBF scheme focused on diabetes and hypertension to improve the efficiency of health expenditure by providing bonuses based on performance. PBF for health has been implemented in several countries to achieve health outcomes by linking incentives with results. Commonly referred to as pay for performance or performance-based incentives, programs reward the suppliers of health services, healthcare providers or facilities upon achieving certain results. Activities to be financed include the revised design of the PBF scheme, health facility outreach, and PBF bonus payments based on performance.

Most of the requisite data for the PBF Scheme will be extracted from the Saint Lucia Health Information System (SLUHIS) of the Ministry of Health, Wellness and Elderly Affairs (MoHWEA). The SLUHIS is implemented in the 35 primary health care facilities on the island by the Health Management Information Unit (HMIU). The PBF Pilot is estimated to be completed by October 2023.

With the Financing Agreements of the HSSP, the GOSL established a Project Implementation Unit (PIU) with staff satisfactory to the World Bank to undertake the fiduciary aspects of projects which include financial management, procurement, safeguards and monitoring and evaluation. The PBF Unit (PBFU) is located within the PIU and is responsible for the general coordination of the PBF Pilot.

To support the implementation of the PBF Pilot, the PBFU within the PIU requires a Data Analyst to provide technical expertise to clean, process and analyze data in order to extract actionable, relevant information and insights that help primary care service providers and policy-makers make informed decisions to improve service delivery to clients who access health services. It is envisaged that the services provided will result in:

- Improved client targeting for health promotion, follow-up, and continuity of care;
- Improved knowledge of clients' habits, socio-economic status and broader determinants of targeted diseases, drawing on data from SLUHIS and other data sources;
- Improved management of operational costs by indicating which areas need more resources and which areas should be scaled back or eliminated
- Better problem-solving methods using information to make informed decisions

- Acquisition of relevant, accurate and timely information, suitable for developing future strategies, plans, and realigning goals and objectives

2: General Scope of Services

The Data Analyst serves as an analytics specialist, focusing on the management of data from various sources and providing data-driven insights to the PBFU/PIU, MoHWEA and their stakeholders. He/she is responsible for collecting data from SLUHIS and other sources, organizing, cleaning, analyzing and interpreting/transforming the data into actionable information to facilitate well-informed decisions for greater efficiency and improved quality of health services.

2.1: Specific scope of Services

The Data Analyst will report directly to the PBF Coordinator, work closely with the staff of the PBFU/PIU, staff of the PIU and departments in the MoHWEA in general, particularly the HMIU. The PBF Coordinator will review and approve monthly reports and annual work plans, and submit to the PIU Project Coordinator for final approval. He/she and will have the responsibilities listed (but not limited to) below:

- A. Management/support/collaboration/strategy
 - a. Act as the day-to-day contact for insights and analytics to the PBFU/PIU departmental heads of the MoHWEA – managing deliverable schedules, project timelines, and sharing concerns about deliverables, timelines, and other issues;
 - b. Collaborate/interface with the M&E Officer of the PIU to:
 - i. Capture PBF performance and results including routine service delivery data reporting, baseline and endline assessments and all monitoring for process and outcome evaluations
 - ii. Implement data management aspects of the PBF Pilot including data flow and timely data collection and reporting
 - iii. Monitor and evaluate PBF interventions, document results and provide feedback to stakeholders to guide decision-making and implementation;
 - iv. Participate in PBF evaluations and operational research from design to implementation, including data collection, data management and data analysis
 - v. Ensure high quality of data through data verification procedures, including data quality audits
 - c. Support and works with these departments/agencies to review and collect reporting requirements through workshops, interviews, document analysis, surveys, use cases, process descriptions, and workflow analysis
 - d. Provides on-going analytical support through the utilization of data management, and technology
 - e. Work collaboratively with the various units/departments and staff of the PBFU/PIU and MoHWEA
- B. Definition of detailed data requirements
 - a. Determine purpose of data analyses and appropriate types of data to be used
 - b. Formulate data analysis plans

- C. Data collection
 - a. Collect data from SLUHIS, MoHWEA departments, other government departments and other sources including case studies, surveys, interviews, questionnaires, focus groups, direct observation
 - b. Organize, collate and enter collected data to facilitate analysis

- D. Data cleaning
 - a. Remove white spaces, duplicate records and basic errors and inconsistencies from collected data
 - b. Ascertain that all data is cleaned prior to data analysis, including consistency checks on data already entered

- E. Data analysis
 - a. Use data analysis software and other tools to:
 - i. Interpret and understand the data
 - ii. Arrive at logical conclusions
 - b. Identify, analyze, and interpret trends and patterns in data sets, drawing insights that will aid in the development of a suitable course of action

- F. Data interpretation and reporting
 - a. Transform conclusions into actionable information to facilitate problem-solving and decision-making
 - b. Prepare Periodic Reports and disseminate to internal and external stakeholders of the PBFU/PIU:
 - i. Status Reports on RMIs, QIP and Evaluation indicators (at least quarterly)
 - ii. Financial Reports on use of funds (at least quarterly)
 - iii. Monthly activity Status Reports
 - iv. Other Reports as required by the PBFU
 - c. Develop presentations and present clear/understandable analytics insights to relevant departmental heads of the MoHWEA, PIU/PBFU management, and stakeholders
 - d. Work with HMIU and PBFU/PIU staff to provide dashboard solutions that will enable the achievement of the overall goals and objectives of the PBF Pilot

3: Deliverables

No.	Deliverable	Timeline
1	Collated datasets for analysis (financial, quality assessments, supportive supervision, etc.)	3 months after contract signing
2	Status Reports on RMIs, QoC and Evaluation Indicators, at least quarterly	15 th day of 1 st month of new quarter
3	Reports on Use of Funds, at least quarterly	15 th day of 1 st month of new quarter
4	Monthly Activity Status Reports	7 th day of new month
5	Other intermittent Reports as required by the PBFU	Upon Request of PBF Coordinator

4: Required Qualifications and Experience

1. Bachelor's degree in Data Analytics, Mathematics, Computer Science, Information Management, Statistics, Economics, Accounting or related quantitative field; or
2. Professional Certification in Data Analytics and minimum three (3) years of work experience in data analytics
3. Strong technical skills using one or more statistical software packages, and/or programs such as SPSS, SAS, Epi-Info, STATA, R, MS Access, MS Excel

4.1: Other desirable skills:

1. Strong mathematical skills to help collect, measure, organize and analyze data
2. Knowledge of SQL and R programming language is an asset
3. Technical proficiency regarding database design development, data models, techniques for data mining, and segmentation is an asset
4. Knowledge of data visualization software (such as Tableau, Qlik, etc.)
5. Knowledge of how to create and apply accurate algorithms to datasets in order to find solutions
6. Effective communication skills to relay technical information to users and other personnel
7. Problem-solving skills
8. Accuracy and attention to detail
9. Adept at queries, writing reports, and making presentations
10. Team-working skills
11. Verbal and Written communication skills
12. Proven working experience in data analysis

5: Duration of the services

The Data Analyst will be contracted for 12 months, and possible extension, subject to satisfactory performance. Contract renewal will be subject to annual performance review with an intermediate performance evaluation every six months of services rendered.

The recruitment of the Data Analyst will be implemented according to the World Bank's Procurement Regulations.

6: Working Arrangements

Client's Responsibilities

The PIU of the MoHWEA will provide the Data Analyst with office space, office equipment including computers, access to printing and photocopying, communication tools and all necessary software required for discharge of duties.

Consultant's Responsibilities

- Declare any conflict of interest where such arise.
- Execute the duties and tasks with due diligence and efficiency and in accordance with the highest standards of professional competence, ethics and integrity.
- Execute the services in accordance with the Bank Guidelines, Financing Agreements, and Operations Manual for the Project and laws of Saint Lucia.