

## TERMS OF REFERENCE

### IT Programmer to aid in the development of the Electronic Medical Records at the Georgetown Public Hospital Corporation (GPHC), Guyana

15 May 2021 to 15 December 2021

#### 1. Background

Health information is key to improve health outcomes, identify health needs, plan health interventions and to monitor progress in achieving of health goals. PAHO/WHO is working in collaboration with the Georgetown Public Hospital Corporation (GPHC) in the implementation of a pilot of an Electronic Medical Records system. The aim is to optimize the quality and efficiency of health care delivery.

The GPHC has recently decided to implement an open-source electronic medical records software that although it is license free and ready to use, requires its adaptation to the needs and specific context of this hospital. There is currently no professional programmer at the GPHC that can work full time on software development for the implementation of the electronic medical records. As a result, there is a need for more robust human resources for the development and strengthening of this system.

An IT Programmer will perform systems and applications analysis, design and program solutions to automation and produce information requirements. The IT Programmer will be required to provide decisions to adapt the Electronic Medical Records application, both hardware and software to the needs of the GPHC. The individual should be able to interpret and evaluate client needs and prioritizing user requirements through the delivery of presentations, user documentation and a working end product. All decisions must be in accordance with the policies of the GPHC. Decisions should be made with respect to the support demands unless senior level intervention is required.

#### 2. Purpose

To strengthen and further develop the Georgetown Public Hospital Corporation (GPHC) Electronic Medical Records software through the support of an IT Programmer.

#### 3. Objective

To improve data and information management at the Georgetown Public Hospital Corporation:

- 3.1 To improve, monitor and evaluate the provision health services to individual patients.
- 3.2 To support evidenced based decision making in the planning and operations of the of the Georgetown Public Hospital Corporation.

#### 4. Assignment

- 4.1 Develop modules of the GPHC Electronic Medical Records as defined in a schedule of work to be prepared at the beginning of the contract.
- 4.2 Configure the Bahmni system for use in the Medical Department of GPHC
- 4.3 Prepare a user training program and implement it.
- 4.4 Provide support to users of the system.
- 4.5 Document all aspects of the development process.
- 4.6 Brief all relevant stakeholders on a regular basis to fully implement the EMR software.
- 4.7 Develop quarterly reports and a final report to demonstrate technical executions.
- 4.8 Perform other duties related to Software Development and Analysis as required.

## 5. Duration of Assignment

The duration of the contract is 7 months at a consultancy rate of GUY \$ 188,322 (Band A) per month. The assignment will commence on May 15, 2021 and will end on December 14, 2021 with the submission of a final report.

## 6. Deliverables

1. Comprehensive Workplan
2. User Manuals
3. Standard Operating Procedures
4. Test Summary Report
5. Features Update Document

The Test Summary Report records testing done on each module and to reference if there are any problems during implementation. It will help to determine if a problem is system, user, or environment specific.

Features Update Document keeps track of what has already been completed, what is in progress and if there is anything of note to report in terms of hiccups or delays. Can possibly be replaced by the quarterly and final reports.

## 7. Payment Schedule

Payments will be released based on the recommendation of the Project Manager, Daniel Albrecht, Advisor, Health Systems and Services, and approval of the PAHO/WHO Representative for Guyana, in accordance with the satisfactory completion of specific deliverables and in tandem with the stages of implementation outlined in these terms of reference.

Payments	Dates	Amount GUY \$	Products
1.	15 June 2021	209,240	Submission of a comprehensive Workplan
2.	15 July 2021	209,240	Submission of requirements for the creation of software modules to be prepared
3.	15 August 2021	209,240	Submission of draft user manuals
4.	15 September 2021	209,240	Submission of draft Standard Operating Procedures
5.	15 October 2021	209,240	Submission of training report
6.	15 November 2021	209,240	Submission of Updated Documents
7.	10 December 2021	209,240	Submission of Final user manuals, SOPs, and final report on implementation.
	<b>Total</b>	<b>1,464,680</b>	

## **8. Qualifications and Experience of eligible candidates**

1. Three years post qualification experience directly related to the range of activities specified in this document including software development and web development.
2. Experience in Python and/or Java.
3. Experience in React and/or Angular is an asset.
4. Experience in SQL, with MySQL and/or PostgreSQL is an asset.
5. A minimum of a bachelor's degree in Computer Science or Software Engineering from an accredited university.

## **9. Language**

A very good knowledge of written and spoken English.

## **10. Project Manager**

Daniel Albrecht, Advisor, Health Systems and Services