

REQUEST FOR QUOTATION

Solicitation Title:	Maintain PQM dashboard and HCM data-lake
RFQ Release Date:	ASAP
Questions Due Date:	12 PM on 09 Feb 2023
Submit Questions to:	bduc@fhi360.org with a copy to tthu@fhi360.org
Proposal Due Date:	12 PM on 15 Feb 2023 (Vietnam time)
Submit Proposal to:	ProcurementVietnam@fhi360.org
Anticipated Contract Period:	February 2023 – September 2023

Background

FHI 360 is a non-profit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. Our staff includes experts in health, education, nutrition, environment, economic development, civil society, gender, youth, research, and technology; creating a unique mix of capabilities to address today's interrelated development challenges. FHI 360 serves more than 60 countries, all 50 U.S. states and all U.S. territories.

The **Meeting Targets and Maintaining Epidemic Control (EpiC)** is a five-year, global project funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development (USAID). **EpiC Vietnam's goal is to deliver efficient, affordable, results-based technical assistance and direct services** while closing remaining gaps in Vietnam's efforts to meet HIV epidemic control targets, address the COVID-19 pandemic, and combat trafficking in persons.

We are seeking for a qualified vendor to (1) maintain and possible upgrade a current HIV/AIDS Program Quality Monitoring dashboard (hereinafter referred to as "PQM dashboard"); (2) maintain and possible upgrade a current provincial Data-lake and (3) maintain a current Subcontract Monitoring dashboard (hereinafter referred to as "SCD").

The PQM Dashboard supports users to identify trends for HIV indicators in real-time for Vietnam provincial centers for disease control (CDC) in Dong Nai, Tien Giang, Tay Ninh, and Ho Chi Minh City. The dashboard measures 21 indicators across six categories including testing, pre-exposure prophylaxis (PrEP), ART treatment, drug supply, social health insurance, and service quality. PQM dashboard used for monitoring and evaluation of the HIV program in the provinces.

The Data-lake was built with the goal of being a centralized database to collect input data sources of the province and aggregate information for the HIV/AIDS PQM dashboard at the Ho Chi Minh CDCs. Data-lake is an integral part of PQM's overall model in provinces and data from Data-lake will be synchronized into PQM's database to be used for monitoring and evaluation of the HIV program in the provinces.

The Subcontract Monitoring Dashboard is a project-based platform to help USAID and IPs to monitor and manage performance of CBOs/Social Enterprise in case finding and payment to CBOs and SE.

In addition, PQM dashboard, HCM data-lake and SCD have a System Administration Module to provide



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functions that allow management of system users, decentralization of rights to each user, and functions of managing shared categories of the system.

PQM dashboard operates on the internet and is currently deployed in Ho Chi Minh, Dong Nai, Tien Giang and Tay Ninh; and data-lake is deployed in Ho Chi Minh. SCD operates on the internet and is currently deployed in SEs/CBO in Dong Nai, Tien Giang, Tay Ninh, Ho Chi Minh and Ha Noi.

Technical Specifications

Technical specifications:

- Software frameworks

Option	Requirement	Note
Native	<ul style="list-style-type: none"> - .Net core runtime version 3.1 and .Net 5 - MongoDB Community version 4.0 or higher - MS SQL Server Express version - Open HIM Stack - NodeJS 12 (or higher) - Nginx (if server is <u>linux</u>) or IIS (if server is window) 	<p>PQM Stack include:</p> <ul style="list-style-type: none"> - API Gateway - PQM Service (Web API) - PQM Admin (Web Application) - User Management Service (Web API) <p>Build step (on each module):</p> <ul style="list-style-type: none"> - Change app settings - Build deployment package - Run deployment package on server
Docker	<ul style="list-style-type: none"> - Docker community version - Requirement from Native can be <u>install</u> with docker 	<p>PQM Stack include:</p> <ul style="list-style-type: none"> - API Gateway - PQM Service (Web API) - PQM Admin (Web Application) - User Management Service (Web API) <p>Build step (on each module):</p> <ul style="list-style-type: none"> - Change app settings - Build deployment image - Deploy image
Kubernetes	<ul style="list-style-type: none"> - Kubernetes on server cluster - Requirement from Native can be <u>install</u> with <u>kubernetes</u> 	<p>PQM Stack include:</p> <ul style="list-style-type: none"> - API Gateway - PQM Service (Web API) - PQM Admin (Web Application) - User Management Service (Web API) <p>Build step (on each module):</p> <ul style="list-style-type: none"> - Change app settings - Build deployment image - Push image to docker hub (private or cloud) - Deploy with deployment file in project

- System Infrastructure:

No.	OS	vCPU (core)	vRAM (Gb)	Storage (Gb - SSD)
1	Ubuntu 20.04.5 LTS	4	8	200
2	Ubuntu 20.04.5 LTS	4	8	200
3	Ubuntu 20.04.5 LTS	4	8	200

Internet bandwidth: 300 Mbps

Functional specifications:

1. PQM dashboard

- Manage and maintain APIs by OpenHIM. These APIs are listed below:
 - HIV testing API set used for receiving data from KP-eLog and sending data to DataHub/Data-lake,
 - ARV treatment API used for receiving data from ARV Portal and sending data to DataHub/Data-lake,
 - Main indicators API set used for receiving data from DataHub/Data-lake and forwarding data to PQM dashboard,
 - Service quality indicators API set used for sending data to PQM dashboard.
- Provide 21 indicators across six categories including testing, pre-exposure prophylaxis (PrEP), ART treatment, drug supply, social health insurance, and service quality in accordance with common standards/definitions
- Control which and how the data can be shared outside of the system
- Adjust the PQM dashboard's user interface following comments and guidance from provinces and project

2. Ho Chi Minh data-lake

- Import data and develop the import functions for the followings to data-lake:
 - HIV testing and counseling data
 - HIV confirmatory testing data
 - HIV viral load data
 - PrEP treatment data
 - ARV treatment data
 - Annually supply plan of ARV drugs
 - Statistics of ARV prescriptions by social health insurance
- Develop the Import function for Service Quality Indicators (SQI); finalize and implement related indicators' formulas
- Finalize and implement the algorithm to filter and remove duplicated records (guidance provided by HCDC) and Testing indicators 's formulas
- Adjust PQM system based on stakeholder's feedbacks
- Generate monthly reporting indicators and divide into groups: testing, treatment, PrEP, health insurance, drugs and service quality.
- Submit aggregated data to PQM server via API connection.

3. Revise and maintain the following APIs for HCM's Data Lake/PQM

- KP-eLog: HIV testing and counseling data
- eClinica: HIV viral load data, ARV treatment data, Statistics of ARV prescriptions by social health insurance
- HMED: PrEP treatment data, annually supply plan of ARV drugs

4. Subcontract monitoring Dashboard (SCD)

- Maintain and update the current system including Import data from Excel file. The files are classified as follows:
 - Individual client data
 - Or aggregated data

- Enter data directly to SCD system
 - View and export the report, dashboard of appropriate CBO/Project/Province
 - Monitor and update the report
 - Manage the creation of new CBO/Project/Province
5. General functional
- Grant account and manage user role and permissions to appropriate user groups and management levels (e.g. site level, provincial level, central level) and/or geographical administrative unit.
 - Manage the list of facilities in the system. Facilities include testing and counseling, HIV confirmatory testing, PrEP, ARV treatment and provincial CDCs.
 - Manage other related categories, such as: package, age group, sex group, KP group...
 - Secure, decentralize and assign roles for data access

Eligible providers will be tasked with:

- Provide on-site support to work with USAID EpiC and HCDC to understand HCDC requirements and expectations and to ensure adequate data collection during the development and implementation.
- Ensure stable operation of maintain PQM dashboard, Ho Chi Minh data-lake and SC dashboard (already built)
- Enhance software performance when needed.
- Master the current system design and source code for further revision and upgradation
- 24/7 Technical support for users.
- Work with 3rd party to maintain data connection with DataHub/Data Lake.
- Upgrade and adjust software as required by the Project, Provinces.
- Back-up database regularly and timely, conduct necessary server maintenance
- Reinstall and restore the system when there are crashes and errors.

The proposed solution must also meet the following requirements:

- Experience in health information system development, programming, and administration for at least three years.
- Experience in HIV program over the past two years with understanding about basic indicators of HIV/AIDS program
- Experience of working with health staff at sites, districts and provincial levels
- Technical support 24/7
- Cost-effective
- High security
- Can adapt and configure to the user's needs

Timetable and Address for Submission

Quotes are due no later than **12 PM on 15 February 2023**. The required documentation listed below must be e-mailed to ProcurementVietnam@fhi360.org. Please include "EpiC PQM, data-lake and SCD" in the subject line.

Any questions or requests for clarification can be submitted in writing to bduc@fhi360.org with a copy to tthu@fhi360.org by **12PM on 09 February 2023**. No telephone inquiries will be answered.

Required Documentation

The quote must include the following items:



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- A brief description of the developer including how the software aligns with the specifications outlined above.
- Documentation of legal registration.
- A detailed price offer (including VAT if applicable) in Vietnam Dong (VND) or USD.

Evaluation Criteria:

Quotations will be evaluated and ranked by a committee according to the price quotation information provided and the adherence to technical specifications. EpiC may request additional clarification on technical specs for shortlisted vendors. Short listed vendor needs to go through our IT clearance procedure before starting the contract.

FHI 360 Disclaimers

- FHI 360 may perform a background check on any selected vendor.
- FHI 360 may cancel the solicitation and not award.
- FHI 360 may reject any or all responses received.
- Issuance of the solicitation does not constitute an award commitment by FHI 360.
- FHI 360 reserves the right to disqualify any offer based on failure of the offeror to follow solicitation instructions.
- FHI 360 will not compensate any offeror for responding to solicitation.
- FHI 360 reserves the right to issue award based on initial evaluation of offers without further discussion.
- FHI 360 may choose to award only part of the activities in the solicitation, or issue multiple awards based on the solicitation activities.
- FHI 360 has the right to issue amendments to the RFQ at any time.