

Request for Quotation 2023-004 HIV HIS IT vendor

To develop solutions and tools for collecting treatment data from (1) social insurance system, (2) from some hospitals, AND/OR (3) a provincial level treatment data system (if available) to HIV Info 4.0.

I. Summary of Deadlines

Release of request for Quotation	January 18, 2023
Fact-finding questions received by	February 01, 2023
Response to fact-finding questions	February 03, 2023
Proposals due	February 06, 2023
Password to open proposal files	February 07, 2023
Conclusion of process	February 10, 2023

Note that PATH reserves the right to modify this schedule as needed. All parties will be notified of any changes simultaneously by email.

II. PATH Statement of Business

PATH is a global organization that works to accelerate health equity by bringing together public institutions, businesses, social enterprises, and investors to solve the world’s most pressing health challenges, PATH supports the Vietnam Administration for HIV/AIDS Control (VAAC) and Vietnam’s Ministry of Health (MOH) to develop and deploy the HIV Info 4.0 health information system.

Learn more at www.path.org.

III. Background and Purpose of the RFQ

The Vietnam context:

In Vietnam, there are about 12,000 commune health stations, approximately 700 district hospitals, over 400 provincial hospitals, and 40 national hospitals. Out of these health facilities, 99.5% use a hospital information system. Following the MOH and health insurance regulations, all these health facilities must transfer treatment data to the health insurance system for management, assessment, and payment for medical services. The structure of transferring treatment data is identified in the Vietnam Decision 4210 QĐ-BYT dated September 20, 2017- *providing for output data standards and formats used in management, assessment, and payment for medical services covered by the health insurance fund.*

Currently, all health facilities connect with an [online health insurance portal](#) and periodically transfer treatment data (i.e., 4210 data) in two ways:

1. Export Extensible Markup Language (XML) files from the hospital management systems with 4210 structure and import the data to the health insurance systems.
2. Connect the hospital information systems with the health insurance systems' application programming interface (API) and transfer data using the 4210 structure.

Purpose of the RFQ: PATH seeks to obtain price and availability information on the services needed for this project as in the Scope of Work and Deliverables.

IV. Scope of Work and Deliverables

A. **Location of work:** Viet Nam

B. **Scope of work and deliverables:**

The selected IT vendor will be required to complete the specific tasks and to complete the deliverables stated in the below Scope of Work (SOW).

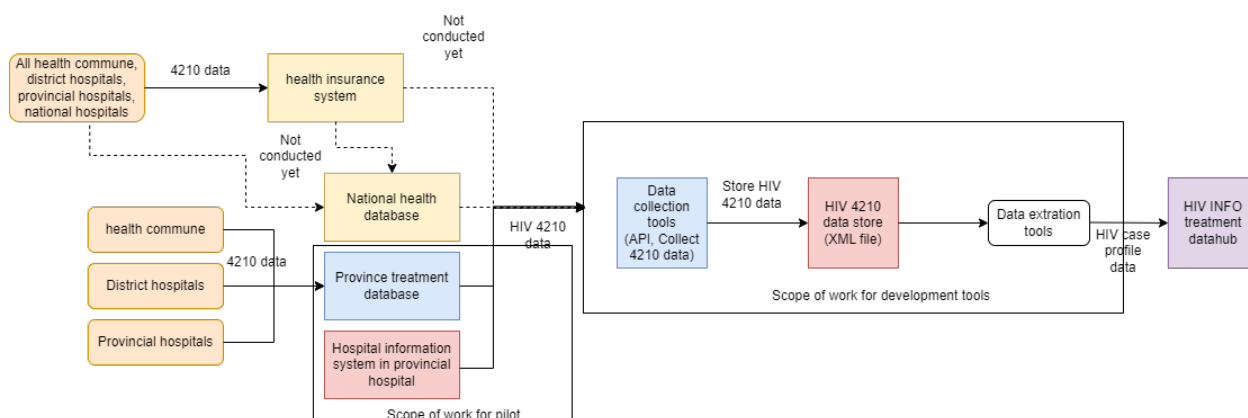
Objectives and tasks

The main objective of this work is to support PATH to develop tools which are ready to collect HIV patient treatment data from hospitals, provincial 4210 databases, and data shared by the Vietnam Social Security (VSS) and transfer it to the HIV Info data hub which was developed in fiscal year 2022. The tools have to be ready to collect HIV patient treatment data from three sources: the social insurance system, hospital information systems, or the treatment data system at the provincial level. After development, the vendor will pilot the tools to get 4210 data from HIV treatment databases in one province or two hospitals and show the tools' capabilities to connect with the Health Insurance Department or national population databases once the systems are ready to share data with VAAC.

Initial objectives:

1. Develop tools to facilitate data exchange between data source systems (e.g., hospitals, provincial 4210 databases, and VSS database), mapping to the [case report questionnaire](#), and extracting to the HIV Info data hub developed in fiscal year 2022.
2. Deploy and implement the above tools in pilot locations in a province and two hospitals. Prior to implementation, the vendor must complete a system security assessment.

Diagram for implementation of scope of work



The IT vendor will conduct the following tasks and activities:

Task 1: Research current status and develop business requirements and system design analysis documents to collect HIV patient treatment data

The IT vendor will research the current status and policies for sharing treatment data from the social insurance system, two hospital information systems, and one provincial treatment data systems. The vendor will then propose solutions for collecting HIV patient treatment data.

- a) The IT vendor will review and assess the current status for interoperability treatment data in Vietnam, specifically from the health insurance system, health database system at national level, and the provincial treatment database system and hospital information systems.
- b) Develop business requirements and solutions to help collect HIV patient treatment data based on Vietnam’s current 4210 data standards (i.e., Decision 4210 QĐ-BYT dated September 20, 2017- *providing for output data standards and formats used in management, assessment, and payment for medical services covered by the health insurance fund*) and the updated 4210 revisions, provided by PATH, and data structure which is suitable and approved by PATH. The business requirements must be generic enough to be applied in different provincial treatment data systems and hospital information systems with minimal configuration or modifications.
- c) Map the data structure for collected treatment data to the case profile questionnaire and resources in the HIV Info data hub. The case profile and HIV Info data hub resources were developed based on HAPI FHIR with FHIR 4.
- d) Develop system architecture and analysis.

Task 2. Develop HIV data exchange and management tools

Based on the solutions proposed in objective 1, the IT vendor will develop the HIV data exchange and management tools. The tools must be generic to be applied in different provincial treatment data systems and hospital information systems with minimal configuration or modifications.

- a) Treatment data extraction tool: Extract and transfer HIV data from data sources (i.e., insurance information system, hospital information system, and other 4210 data treatment store) to the HIV 4210 data store. The tool will be capable of connecting with the data source systems’ .XML files and API, so the data source systems can transfer treatment data directly to the API.
- b) HIV 4210 data store: Store treatment data collected from the treatment data sources with the functionality to check, filter, and report the data collection progress.
- c) Case surveillance data extraction tool: Extract data based on case profiles from the HIV 4210 data store to the HIV Info data hub developed in fiscal year 2022. The data extraction process will reuse deduplication tools which are already deployed in HIV INFO data hub.

Task 3: User (IT vendor and PATH team) testing before implementation

Before the implementation phase, the technical team (i.e., PATH and the IT vendor) will test and review the system’s functionalities with users including VAAC:

- a) The IT vendor will develop test cases which will be approved by PATH and VAAC.
- b) The IT vendor will conduct tests on the system and record and fix any issues that arise during the testing period.
- c) The centralized system must be fully installed and deployed on a server infrastructure managed by VAAC.

Task 4: Implementation in a selected location

- a) The IT vendor will collaborate with PATH to conduct a security assessment based on requirements from PATH.
- b) The IT vendor will collaborate with VAAC and PATH to select pilot locations for implementation. The pilot locations can be one of the following: (1) one provincial treatment data store (priority in Thai Nguyen), or (2) two hospitals implementing the hospital information systems (priority in Ho Chi Minh City).
- c) The system must be validated by PATH before pilot implementation.

Responsibilities**Context and purpose**

The IT vendor will work with the VAAC and PATH to understand the business requirements and functionalities which will inform the system development. PATH technical staffs are based in and outside of Vietnam and will collaboratively and iteratively participate in system development.

The IT vendor should engage in frequent (e.g., weekly) technical meetings with the project stakeholders (e.g., VAAC, PATH) and end-users to receive feedback and respond to users’ inquiries with the flexibility to meet across time zones when required.

System transition

- Prepare to hand over the system to PATH and VAAC for ongoing management and use including training on system operation, maintenance and troubleshooting, user and system documentation, and system source code. The handover of the system to PATH and VAAC have to be conducted before September 15, 2023.
- Deliverables must be packaged and sent to PATH through zipped files, Docker, or GitHub. The IT vendor will hand over all source codes and documents to PATH—including but not limited to user/administrator manuals, system analysis and design documents, and API documents. The API documents must be written using a standard format such as OpenAPI.

- The IT vendor must deploy source codes to the testing environment for the PATH technical teams to review and verify.
- The IT vendor must prepare a plan and methodology for the expansion of the system moving from the pilot phase to nation-wide.
- The approval and final payment will only be made when all major bugs are fixed, source codes, and documents are reviewed and confirmed as satisfactory by PATH.

Deliverables

#	Deliverables	Requirements	Related task	Deadline
1	Research current status and business requirements and System analysis and design			
1.1	Current status report	Detailed report on the current statuses and policies for transferring treatment data from the social insurance system, hospital information systems, and treatment data systems. Report should also include an assessment on how to collect data from these data sources.	Task 1	March 31, 2023
1.2	Business requirements specifications	Report on the proposed solution for collecting HIV treatment data. Solution must be aligned to the 4210 standard and include a data structure.	Task 1	April 10, 2023
1.3	Data mapping report	Data mapping report between the proposed data collection solution, outlined in Objective 1.2, and the HIV Info data hub case profile and resources. Data mapping must align with the FHIR 4 standard.	Task 1	April 15, 2023
1.4	System analysis and design document	Detailed report on the implementation plan and solution for collecting HIV treatment data and transferring it to the HIV Info data hub.	Task 1	April 15, 2023
2	Develop HIV data management tools			
2.1	Development of the treatment data exchange tools, HIV 4210 data store and CS data extraction tools	Data exchange platform is ready to exchange data with data sources (i.e., insurance information system, hospital information system, or data treatment store) to the HIV 4210 data store. A software tool for storing treatment data from data sources into the data store. Develop the function to check, filter, and report data collection progress in the data store. Extraction of data from the data store to the HIV Info data hub (HAP FHIR 4)	Task 2	June 15, 2023
			Task 2	June 15, 2023
			Task 2	June 15, 2023

2.2	Conduct testing (including test cases, test results, and recorded errors)	Documented test cases, test results, and record of errors and fixes.	Task 3	June 31, 2023
3	Implementation in a pilot location			
3.1	Implementation report on the pilot developed for selected locations.	Conduct the collection of treatment data to the HIV 4210 data store and transfer the data into the HIV Info data hub with consideration of record matching.	Task 4	July 30, 2023
3.2	Report on data checking and resolved errors.	Conduct data checks and fix any errors found during implementation.	Task 4	Aug 25, 2023
4	Project handover			
4.1	Document handover process	Documentation of all activities and deliverables during the contracted time, including, but not limited to: 1. Assessment report 2. Business requirement specifications 3. Data mapping documentation 4. System analysis and design 5. User guide 6. Implementation plan and report, including configuration of the system. 7. Other documents Documents must be written in English except the user manuals, which can be written in Vietnamese.		Sep 15, 2023
5.2	Source code handover	Final version of source code is handed over to PATH. The IT vendor must build the system, using the source code, on a server indicated by PATH.		Sep 15, 2023

C. Implementation period: The vendor is expected to complete the scope of work in the duration of from February 2023 to September 29 2023.

The vendor shall submit a development plan with clear timeline and activities to ensure the progress and due date.

Payment term: The implementation of the scope of work is contingent upon donor funding. Vendor shall propose a payment schedule with clear payment terms and conditions for PATH's consideration. The payment schedule shall be in accordance with the deliverable submission.

Payment is contingent upon PATH's acceptance of the services conforming to the Scope of Work and PATH's timely receipt and approval of deliverables as set forth in the contract.

V. Costs

Provide itemized costs for the total scope of this project, based on the scope of work and deliverables outlined in Section IV. The final scope of work may be subject to negotiation; however, bidder selection will be made against the original scope of work. Bids should include itemized costs for key elements of the scope of work, as follows:

- Estimated total level of effort and associated costs.
- Itemization of all other costs, e.g., service tax, etc.
- Estimated schedule of other anticipated expenses (e.g., delivery costs, additional resources, outside resources, etc.).

VI. Overall Qualifications

Provide information on your overall qualifications (If the information is available in your website, please provide the link), including:

- Profile of relevant corporate qualifications.
- Profile of relevant experience and examples of related work. (Company profile should be attached.)
- Number of years in business. (Business Registration Certificate shall be attached.)

Preference/Advantages

- Experienced with HIV/AIDS program and reporting requirements.
- Experienced with 4210 standard and FHIR standards.
- Basic understanding of the health insurance information system, hospital information system, and data treatment store.
- Experienced working with non-government organizations/government institutions in health.
- Experience with iterative or agile development methods.
- Experience working closely with the business owner to solve problems and guide the direction of development.
- Competent in communicating in English.

VII. Proposal Evaluation Criteria

The following is a list of significant criteria against which proposals will be assessed. The criteria are listed in order of priority; however, they are not weighted.

- A. Technical appropriateness of services
- B. Appropriate implementation plan
- C. Experience in the related areas
- D. Costs (as detailed in Section V).

Note: PATH reserves the right to include additional criteria.

VIII. Instructions for Responding

A. PATH contacts:

Procurement Contact: Ngo Tuan Anh
Senior Project Financial Analysis & Administrative Manager
ango@path.org

Technical/Program Contact: Pham Thanh Dat
HIS Advisor
dpham@path.org

B. Proposals due:

Completed proposals should be submitted by email to the contacts listed above no later than February 6, 2023. The subject line of the email should be: “**Name of vendor**”_RFP 2023-004 HIV HIS IT vendor.

The proposal files shall be protected to open with a password.

The password to open proposal files shall be submitted to apham@path.org by COB of February 7, 2023.

C. Conclusion of process

Successful applicant will be notified of PATH’s decision by **February 10, 2023**. Final award is subject to the terms and conditions included in this solicitation, as well as successful final negotiations of all applicable terms and conditions affecting this work.

IX. Terms and Conditions of the Solicitation

A. Notice of non-binding solicitation

PATH reserves the right to reject any and all bids received in response to this solicitation, and is in no way bound to accept any proposal.

B. Confidentiality

All information provided by PATH as part of this solicitation must be treated as confidential. In the event that any information is inappropriately released, PATH will seek appropriate remedies as allowed.

Proposals, discussions, and all information received in response to this solicitation will be held as strictly confidential, except as otherwise noted.

C. Communication

All communications regarding this solicitation shall be directed to appropriate parties at PATH indicated in Section VIII. A. Contacting third parties involved in the project, the review panel, or any other party may be considered a conflict of interest and could result in disqualification of the proposal.

D. Acceptance

Acceptance of a proposal does not imply acceptance of its terms and conditions. PATH reserves the option to negotiate on the final terms and conditions. We additionally reserve the right to negotiate the substance of the finalists’ proposals, as well as the option of accepting partial components of a proposal if appropriate.

E. Right to final negotiations

PATH reserves the option to negotiate on the final costs and final scope of work, and also reserves the option to limit or include third parties at PATH’s sole and full discretion in such negotiations.

F. Third-party limitations

PATH does not represent, warrant, or act as an agent for any third party as a result of this solicitation. This solicitation does not authorize any third party to bind or commit PATH in any way without our express written consent.

G. Proposal Validity

Proposals submitted under this request shall be valid for 90 days from the date the proposal is due. The validity period shall be stated in the proposal submitted to PATH.