



CALL TO PITCH

Kumasi Cancer Laboratory Network: Development of an Interoperability Solution for Laboratory Management

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Overview

[City Cancer Challenge Foundation](#) (C/Can) supports cities around the world to improve access to equitable, quality cancer care, through a city-based partnership initiative that aims to transform the way stakeholders from the public and private sectors collectively design, plan, and implement cancer solutions.

In Kumasi, as part of the city engagement process, C/Can is supporting city stakeholders to build a network of private and public laboratories to optimise capacity within the network, allow for faster turnaround times for diagnostics and ultimately enhance patient outcomes, with a long term vision of supporting oncology related research. In this context, C/Can is looking for a technology solution provider to partner with the pathology laboratory network.

Therefore, C/Can invites qualified technology solution providers to respond to this Call to Pitch (“the Call”) for the development of an interoperability solution (the “Project”) that will facilitate communication and exchange of data between existing information management systems of public and private laboratories within the network*, the cancer registry in Kumasi and other relevant stakeholders.

Objectives

The primary objective of the Call is to identify and prequalify experienced technology solution providers that have the capability to develop and implement the interoperability solution between laboratories in scope.

The technology solution provider should provide a solution that integrates existing health management information systems with the long term objective of standardising processes across the laboratory network and improving efficiency.

Other outcomes include reducing paper reporting and manual processes for laboratories within the network as well as tracking performance indicators such as turn-around times (TAT) for test results, test workload volumes and number of repeat sample tests across the laboratories.

Scope

The technology solution provider will partner with the pathology laboratory network to deploy an interoperability solution that is agile and adaptable to the unique needs of the laboratories.

High level activities to be performed by the technology solution provider will include:

- Conduct a site assessment of the laboratories to validate the existing technology and system requirements

- Design a suitable solution to integrate interoperability features across the network
- Develop the interoperability solution which will enable exchange of data between the laboratories and a Laboratory Information Management System (LIMS) feature
- Conduct pilot testing of the interoperability solution across selected laboratories within Kumasi, Ghana
- Analyse pilot data and prepare progress reports
- Align on roll-out plans along different stages/ laboratories
- Deploy the interoperability solution and support maintenance

Eligibility

- Technology solution provider should demonstrate partnering commitment and/or experience in working with networks in low- and middle-income countries
- Partner should demonstrate capacity or experience in deploying health/laboratory management solutions
- Partner should have experience in implementing similar projects for public or private organisations in low- and middle-income countries (desired)

The following categories of technology solution providers are eligible to participate in this Call:

- African tech companies with health-tech experience, specifically laboratory systems design, set-up and networking experience
- Tech companies with Pan-African coverage and health-tech experience, specifically around laboratory systems design, set-up and networking – especially in Anglophone West Africa
- Tech start-ups with strong health-tech experience, specifically around laboratory systems design, set-up and networking – preferably in Africa

Expected Functionality

While conceptualising the network, at this stage the interoperability solution is envisioned to be an enterprise management solution for laboratories that will at least:

- Be a cloud based solution to collect and manage laboratory test data, quality control data, inventory data and training resources within the laboratory network
- Link individual patient or sample data through a universal identifier for epidemiological and oncology purposes

- Capture and store data in a central database accessible by all laboratories within the network
- Allow for profiling, admission and exit of laboratories within the network
- Integrate with existing health management information systems
- Have a GUI interface where the laboratories can manually input data
- Back up data offline and synchronise with the central database when there is internet connectivity

Other core functionalities of the solution should include:

- **Workflow management** – To define key laboratory activities, standard operating procedures, approval processes and routing lab test requests among laboratories
- **Sample management** – To assign sample ID on arrival, manage sample storage and define sample access rights
- **Inventory management** – To assign inventory ID on arrival, label barcodes and monitor inventory levels. Special consideration should be given to modules that incorporate blood bank inventory reporting
- **Billing management and revenue sharing** – To process payment, generate invoices and report expenses
- **Instrument management** – To integrate instruments, reduce transcript errors and ease calibration
- **Data warehouse** – To store, extract and manage data for analysis, reporting and quality review purposes
- **Information sharing** – To share information among laboratories

Please note that this list is not exhaustive and additional functionalities may be included at the Request for Proposal stage

Expression of Interest

The Call to Pitch response should contain information on the following:

- a) Legal name and registration/ practice jurisdiction of technology solution provider (where the provider is a consortium, please indicate names of all consortium members, clearly indicating the Consortium Lead)
- b) Corporate profile including scope of services offered
- c) Partnering commitment and ambition
- d) Track record and experience of the technology solution provider in similar assignments including list of key clients served (where client confidentiality is a restriction, please provide a no-name profile of the client)

e) Any other relevant information (limited to 25 pages)

The response should be submitted in English to Mr Fred Kwame Awittor at awittor@citycancerchallenge.org no later than February 10, 2022 at 5:00pm (GMT).