

## Technical Proposal

### Understanding of the Assignment

We understand the importance of the Avante Saúde project, particularly in the context of Health Information Systems (HIS) in Mozambique. The success of this project is crucial for improving the efficiency of health service delivery and data-driven decision-making for diseases such as HIV, TB, and other emerging diseases. The objective is to develop and optimize the Electronic Patient Tracking System (EPTS), enhancing its centralization, user interface, and Master Patient Index, while also integrating the MozART national data repository.

### Competitive Advantages

1. **Experience in Health and Emergency Management Systems:** The proposed consultant has extensive experience in developing management systems, currently being responsible for the development of a health application for Emergency Service Protocols. This expertise translates into a deep understanding of the specific challenges and needs of digital health solutions in the Mozambican context.
2. **Specialized Database Design and Development:** The consultant was also responsible for designing the database for the *Cultuare* app, an application that guides users on how to provide first aid for various diseases. This solution, along with other applications, is managed by the Associação Empoderando Moçambique, demonstrating the consultant's ability to create effective and sustainable solutions for the health sector.
3. **Technical Expertise in Centralized HIS and Interoperability:** The consultant has vast experience in developing centralized and interoperable systems, applying standards like FHIR to ensure that the EPTS and MozART operate synchronously and efficiently. This eliminates data duplication and enables seamless information exchange between systems.

4. **Sustainable Training and Capacity Building:** In addition to developing the necessary tools, the consultant will train other developers in OpenMRS and new development technologies, ensuring knowledge transfer and preparing the local team for future system maintenance and expansion.

## **Proposed Methodology**

The applied methodology will follow an agile approach, divided into three main phases:

### **1. Diagnosis and Planning Phase (November - December 2024)**

- Meetings with stakeholders to gather detailed requirements.
- Assessment of the current state of EPTS and MozART, identifying improvements.
- Definition of the technical architecture necessary for the centralization and interoperability of EPTS.
- Development of a phased implementation plan with incremental deliverables.
- Planning an integration and training strategy for developers, ensuring knowledge transfer.

### **2. Development and Implementation Phase (January - June 2025)**

- Development of tools for EPTS centralization and interoperability.
- Improvements in the user interface and Master Patient Index.
- Development of solutions for incremental updates to MozART.
- Implementation of data deduplication solutions and enhancements to the EPTS user interface.
- Development of interoperability tools and integration with MozART.
- Conduct field trips to provinces for data collection and on-site technical support.

### **3. Testing, Training, and Final Delivery Phase (July - September 2025)**

- Full testing in controlled environments.
- Rigorous testing of the functionality and performance of the developed systems.
- Workshops for local developers, training them on new tools.
- Final delivery of all tools, technical documentation, and a closing report.

## Work Plan

- **November 2024:** Initial meetings with MOH and project team to align goals.
- **December 2024:** Needs assessment and architecture mapping.
- **January to June 2025:** Solution development and ongoing support.
- **July to August 2025:** System testing and developer training.
- **September 2025:** Project finalization and handover.

## Financial Proposal

**Financial Strategy:** The financial proposal below maximizes the value offered to C-Saúde, ensuring efficient and transparent execution with a competitive financial margin:

Description	Qty.	Unit Cost (US\$)	Total Cost (US\$)
Consultant Fees (1,760 hours/220 days)	220 days	450.00	99,000.00
Provincial Travel (2 trips, 5 days each)	2 trips	3,500.00	7,000.00
Per diem (5 days/trip)	10 days	150.00	1,500.00
Accommodation (5 days/trip)	10 days	200.00	2,000.00
Airfare	2 trips	1,500.00	3,000.00
Other administrative costs	-	-	1,500.00
Technical reserve for unforeseen adjustments	-	-	2,500.00
<b>Total</b>			<b>119,500.00</b>