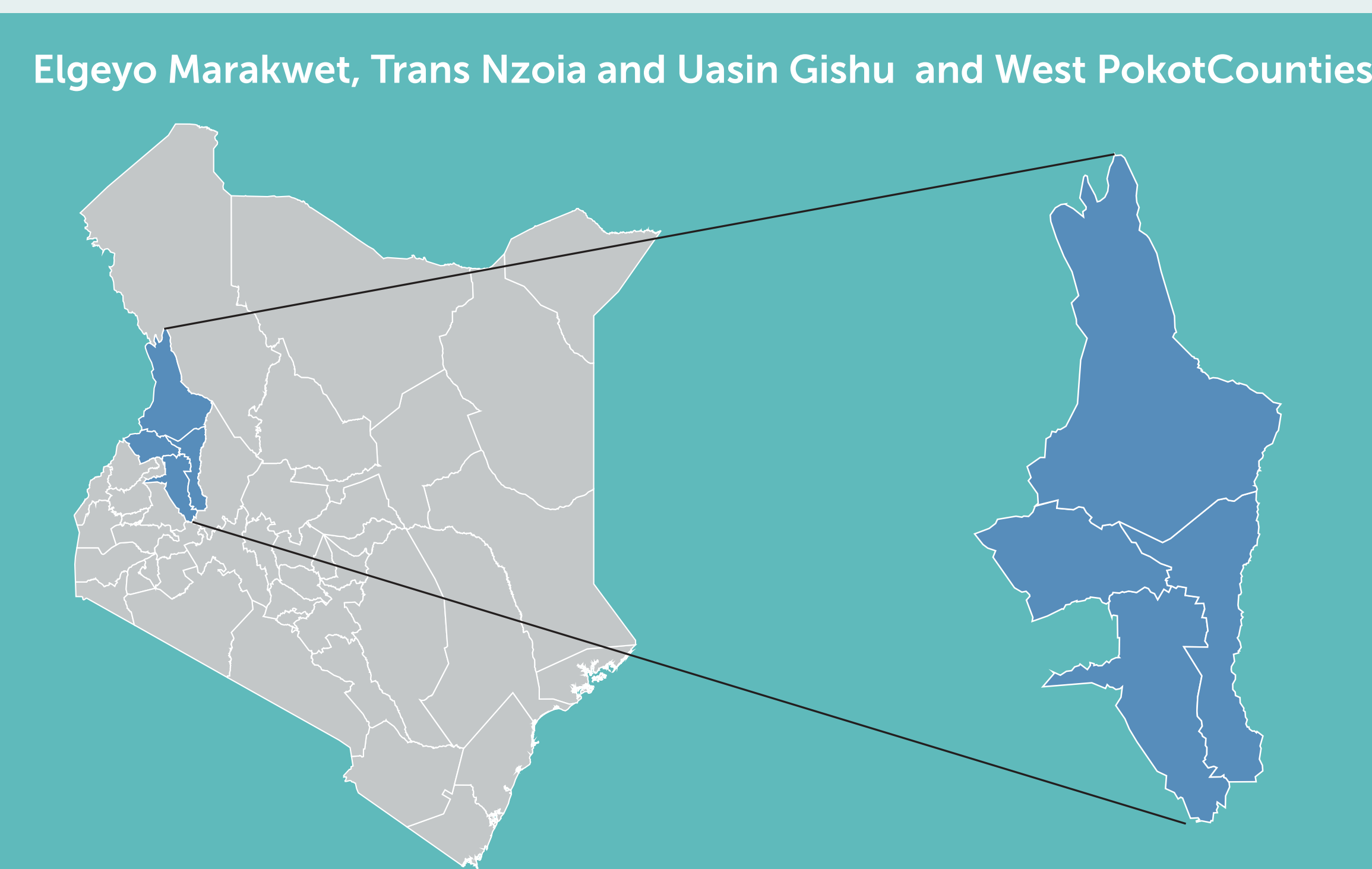
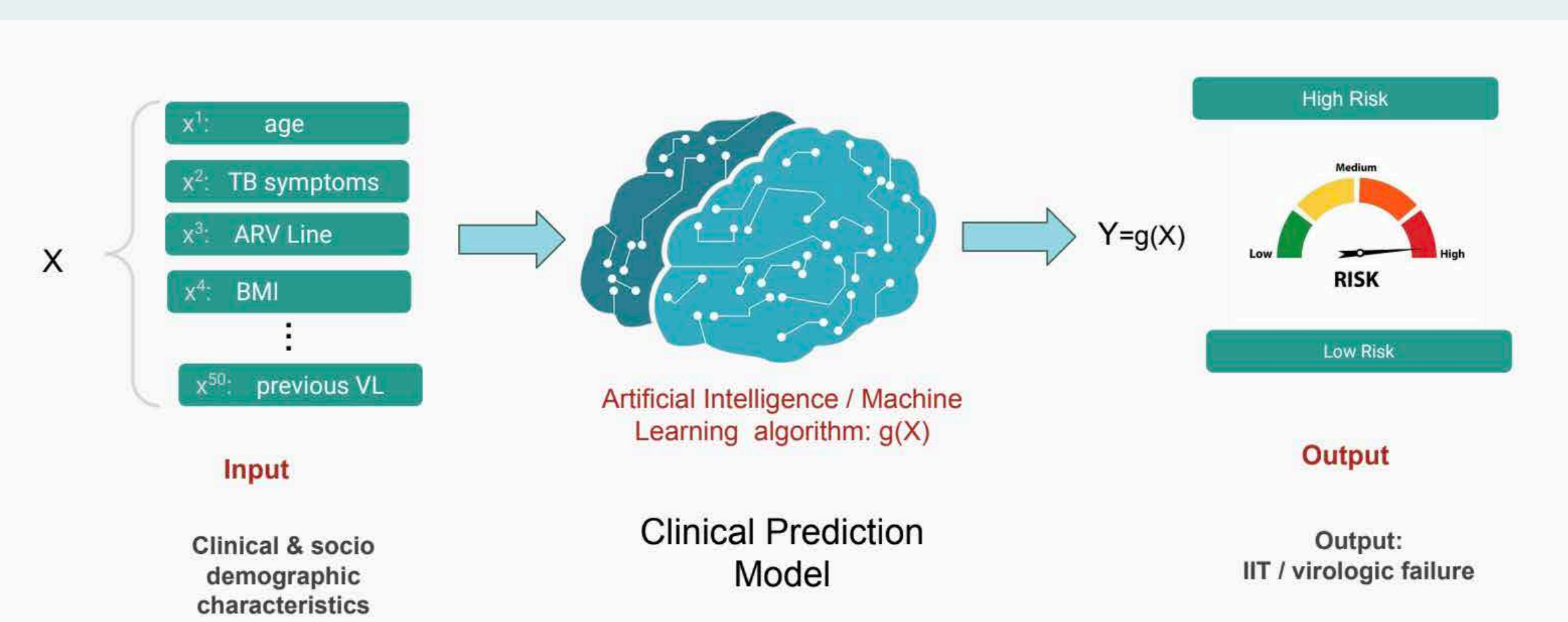
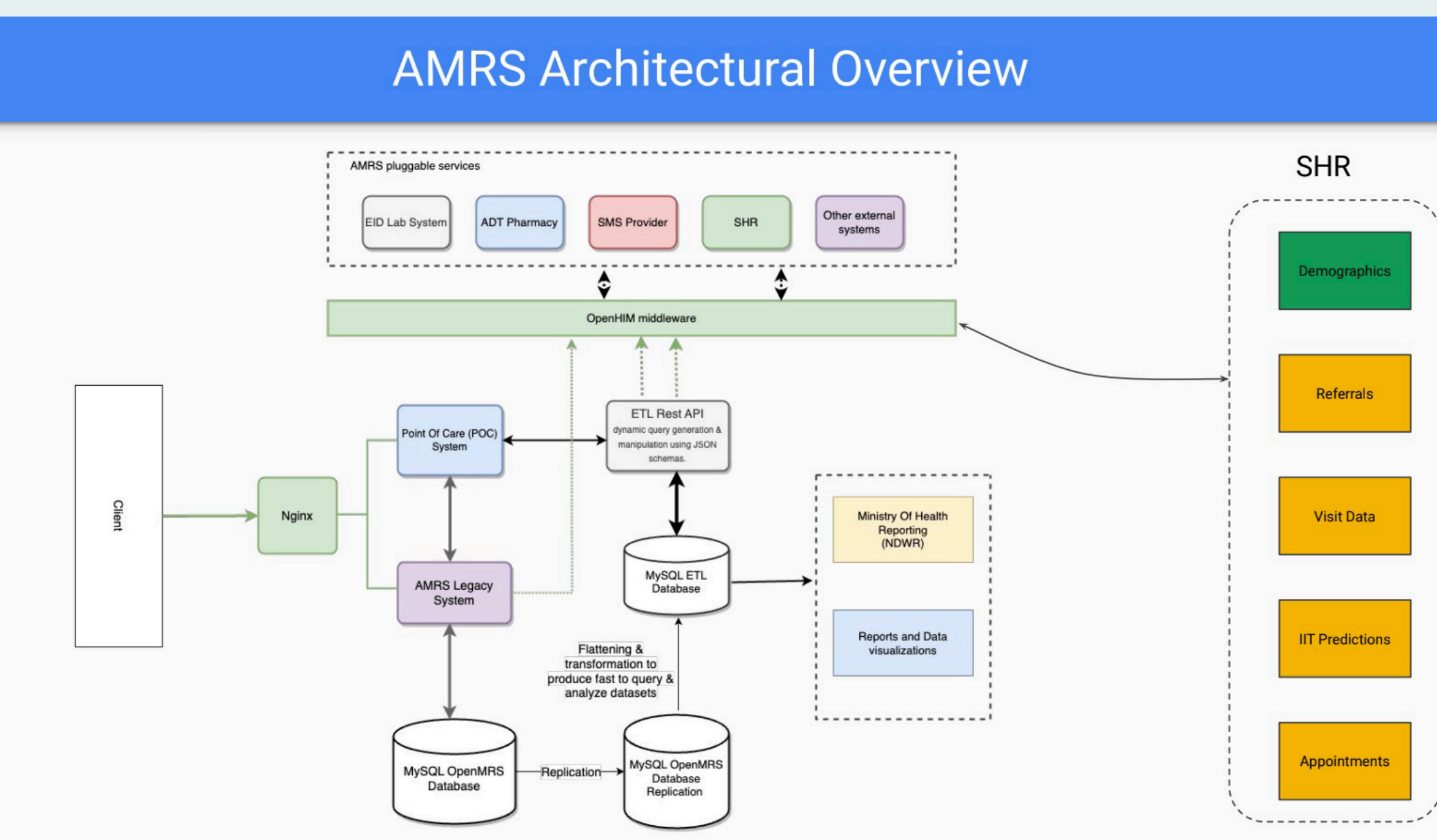


## Where We Serve



## Focus Area

It's been two decades of evolution of AMPATH Medical Records (AMRS), an OpenMRS-powered customized, centralized, Point of Care System. From MS Access Database to the birth of OpenMRS and the subsequent development of AMRS POC reflects a need for a more robust and scalable solution to manage the increasing volume of data in HIV care, with a focus on using and fostering a community of developers for ongoing improvements and support.



## Decades of Progress: The Evolution of AMPATH Medical Records (AMRS) in Global Health

### EXHIBITOR

**RUGUT KIBET ENOCK**

Director ICT & Software Engineering  
- USAID AMPATH Uzima

### COLLABORATORS

**Prof. Sylvester Kimaiyo**

Chief of Party USAID AMPATH Uzima

**Christopher Komen**

Director Monitoring & Evaluation

**Dr. Douglas Gaitho**

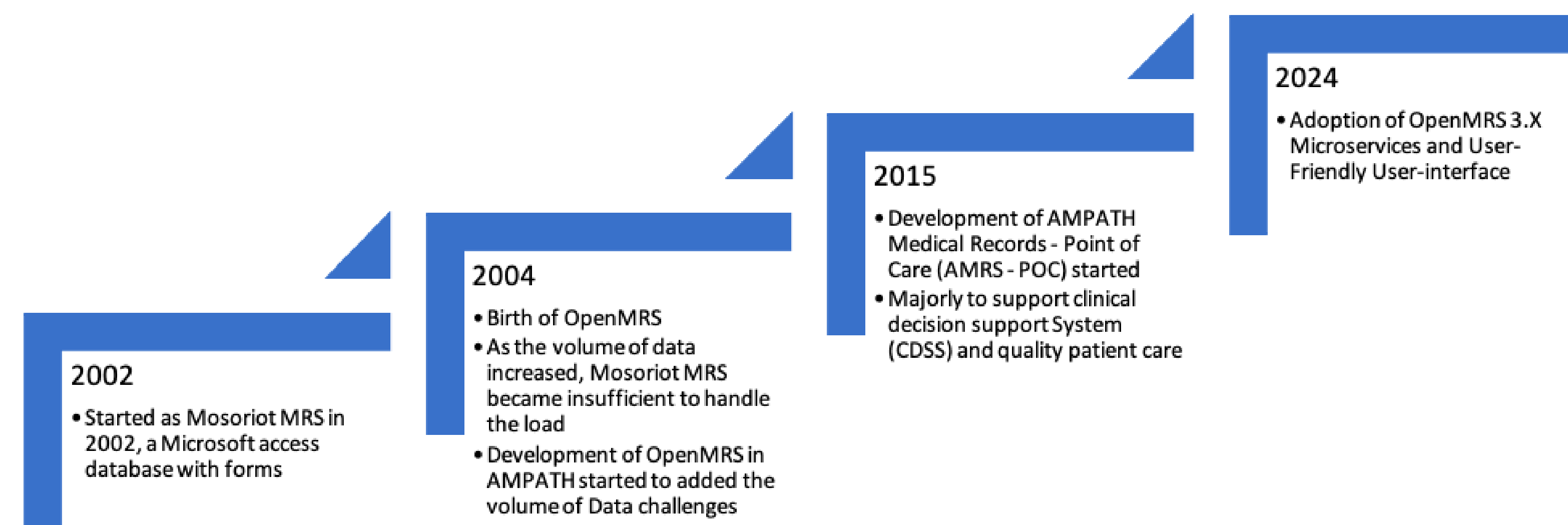
Chief Technical Officer

**Evelyn Too**

Program Officer

**Alfred Mutai** - Software Developer

**Faith Kamau** - Software Developer



*The Evolution of AMPATH Medical Records (AMRS)*

## KEY OBJECTIVES

- To provide a chronological account of the development and evolution of AMPATH Medical Records (AMRS - POC) over the decades highlighting key milestones and challenges.
- To explore the technological innovations and advancements that have been integrated into AMRS.
- To discuss the challenges faced during the evolution of AMRS- POC, such as technological barriers, data security concerns, or cultural considerations.
- To provide insights into the plans and directions for AMRS – POC including upcoming technological enhancements, expansion of services, or potential collaborations that will further advance the impact of AMPATH in global health

## KEY ACHIEVEMENTS

The evolution of AMRS has yielded significant achievements, showcasing advancements in healthcare data management:

- Centralized Deployment:** AMRS has successfully implemented a centralized deployment model, streamlining the administration and accessibility of healthcare data across different locations or facilities. This centralized approach likely enhances efficiency and coordination in managing patient information.
- Point of Care System:** The introduction of a Point of Care (POC) system signifies a shift towards immediate and on-site patient data management. This allows healthcare providers to access and update critical information in real-time, potentially improving the quality and timeliness of patient care.

### CONTACT INFORMATION

Rugut Enock | [erugut@ampath.or.ke](mailto:erugut@ampath.or.ke)



**USAID AMPATH Uzima**

## KEY ACHIEVEMENTS

- Paperless System:** AMRS has transitioned to a paperless system, reducing reliance on traditional paper-based records. This move not only contributes to environmental sustainability but also enhances the overall efficiency of data storage, retrieval, and analysis.
- Clinical Decision Support System:** The incorporation of a Clinical Decision Support System (CDSS) suggests that AMRS now offers tools and insights to aid healthcare professionals in making informed decisions. This could include alerts, reminders, and data-driven recommendations, contributing to better patient outcomes.
- Interoperability:** The achievement of interoperability ensures that AMRS can seamlessly exchange information and collaborate with different systems and components, fostering a more integrated and connected healthcare ecosystem.
- Machine Learning and AI:** The integration of Machine Learning (ML) and Artificial Intelligence (AI) within AMRS demonstrates a commitment to leveraging advanced technologies for healthcare optimization. ML and AI applications likely enhance data analysis, predictive modeling, and personalized patient care, marking a significant step towards cutting-edge healthcare solutions.

## Vision for the Future

The future vision for the AMRS program outlines ambitious goals for further advancement:

- Integration of Machine Learning and AI:** The program envisions leveraging Machine Learning and Artificial Intelligence for predictive analytics and clinical decision support within AMRS. This integration aims to enhance the system's capabilities in foreseeing trends, improving diagnostics, and providing advanced decision-making support for healthcare professionals.
- Hospital-Wide Implementation of AMRS POC:** The vision includes upscaling the AMRS Point of Care (POC) system to be employed hospital-wide. This expansion extends beyond patient care to incorporate functionalities such as billing and pharmacy prescriptions.
- Alignment with OpenMRS 3.X:** The plan involves upgrading the current version of AMRS POC to align with the community version of OpenMRS 3.X. This ensures that the AMRS platform stays current with the latest community developments, fostering compatibility, and benefiting from the advancements in the OpenMRS community.
- Resource Expansion:** Recognizing the need for additional resources, both in terms of human capital and likely technological infrastructure, is a crucial aspect of the program's vision. This indicates an awareness of the importance of sufficient resources to successfully implement and sustain the envisioned enhancements.

## Challenges

The evolution of the AMRS system has encountered several challenges that warrant attention:

- Tech-Stack Upgrades:** While the AMRS system is highly scalable, the need for system upgrades to newer versions of the tech-stack, such as 2.X and 3.X, poses a challenge due to the resource-intensive nature of these upgrades. This highlights the ongoing demand for substantial resources to keep the system up-to-date with the latest technologies.
- Infrastructure Funding:** The program requires increased funding to enhance infrastructure, particularly in areas related to network capabilities, data storage, and server processing speed. This funding is crucial for maintaining optimal system performance and replacing outdated infrastructure, underscoring the importance of financial support for sustained functionality.
- Data Dictionary Variability:** The existence of varied data dictionaries has resulted in different implementations of OpenMRS instances, exemplified by instances like KenyaEMR and AMRS POC. This diversity may lead to interoperability issues and complicate data management processes, emphasizing the need for standardized data dictionaries to ensure consistency and compatibility across implementations.