

NATIONAL HEALTH INFORMATION EXCHANGE (HIE) FRAMEWORK

Team-2318 Trailbraizers

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PROBLEM STATEMENT:

Addressing Lack of Generalized Health Records in Healthcare.

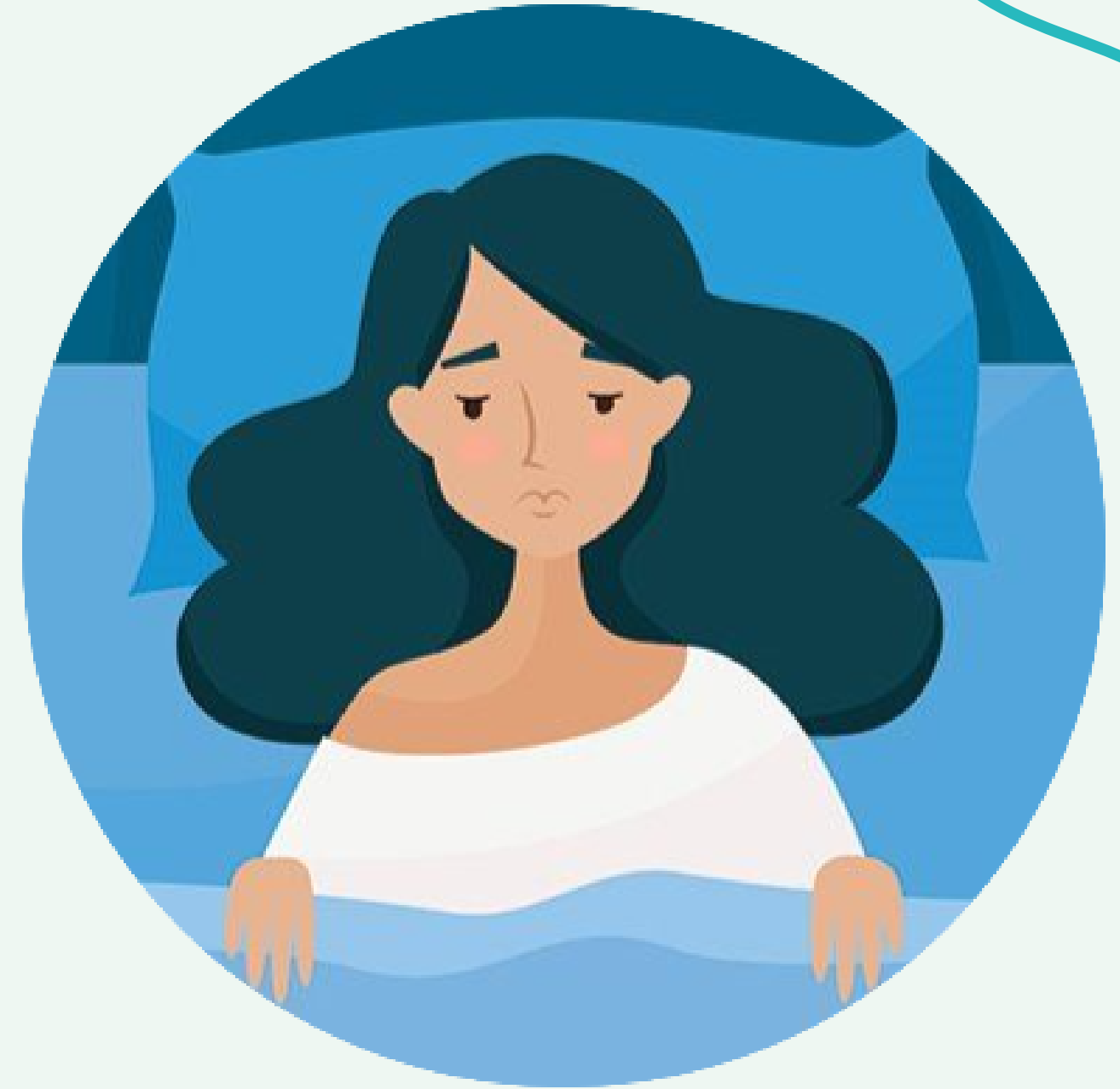
GCGO: HealthCare



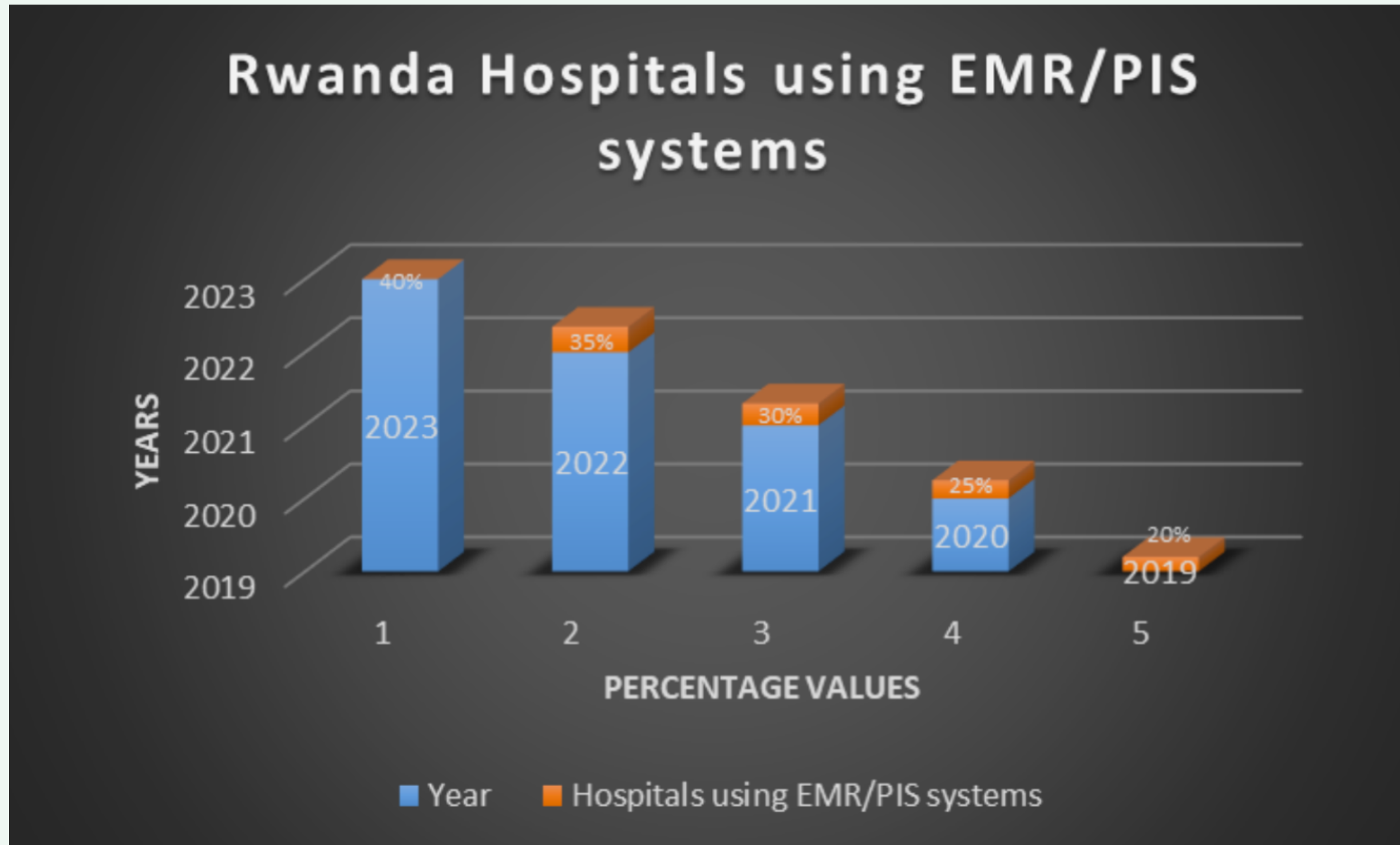
Why It Matters: Fragmented medical records hinder access to complete health information, leading to difficulties in making informed decisions about care and tracking progress over time.

User Persona: Sarah Mukamanzi

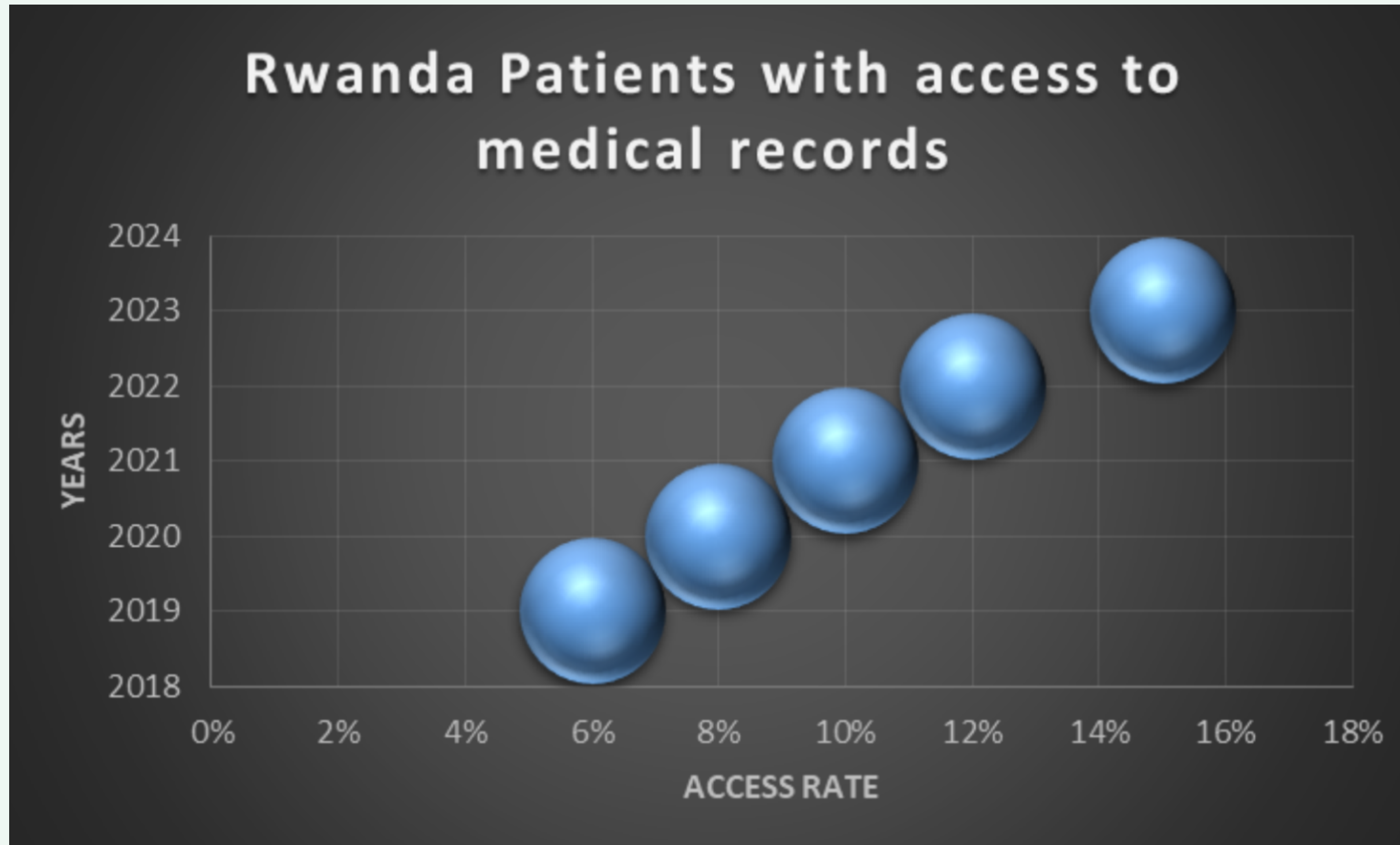
- **How It Impacts her:** Sarah, as a stay-at-home mom with chronic illness, struggles with accessing her complete medical history and making informed decisions for her health treatment. Sarah needs to be informed about her medical history to make informed decisions about her care, and she also lacks the ability to track her progress over time, hindering the identification of potential problems.



Rwanda Hospitals Using EMR/PIS systems



Rwanda Patients With Access to Medical Records



DATA VISUALISATION ANALYSIS

- **Data visualization 1:** The chart shows that the adoption of EMR/PIS systems in Rwanda has been increasing steadily over the past 5 years. In 2019, only 20% of hospitals in Rwanda were using EMR/PIS systems, but this number has increased to 40% in 2023.
- **Data visualization 2:** The chart shows the number of patients with access to their medical records through these systems has also increased from 6% in 2019 to 15% in 2023.



PROBLEM SOLUTION

OUR SOLUTION DESCRIPTION

- A combined solution for patient health record sharing involves implementing a National HIE Framework, which establishes standardized data sharing among healthcare providers nationwide.

WHY SOLUTION?

- this framework includes data standards, privacy policies, and governance mechanisms. It improves care coordination, patient safety, and patient control over health information.

EFFECTIVENESS LIKELIHOOD

- Majority of healthcare providers are willing to embrace technological solutions, Rwandan government is encouraging investors to support digital solutions. Furthermore, our system is simple to be used by patients.

MAIN WIREFRAME INTERFACES

USER REGISTRATION

User Registration

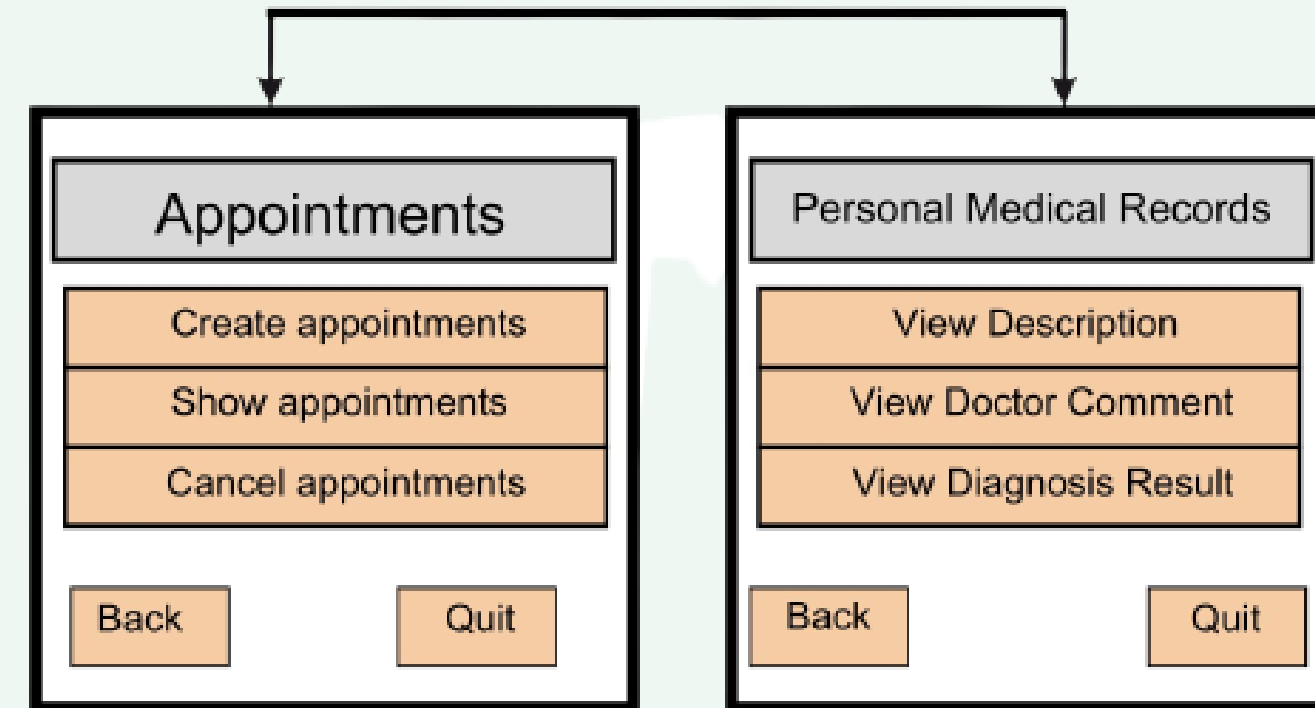
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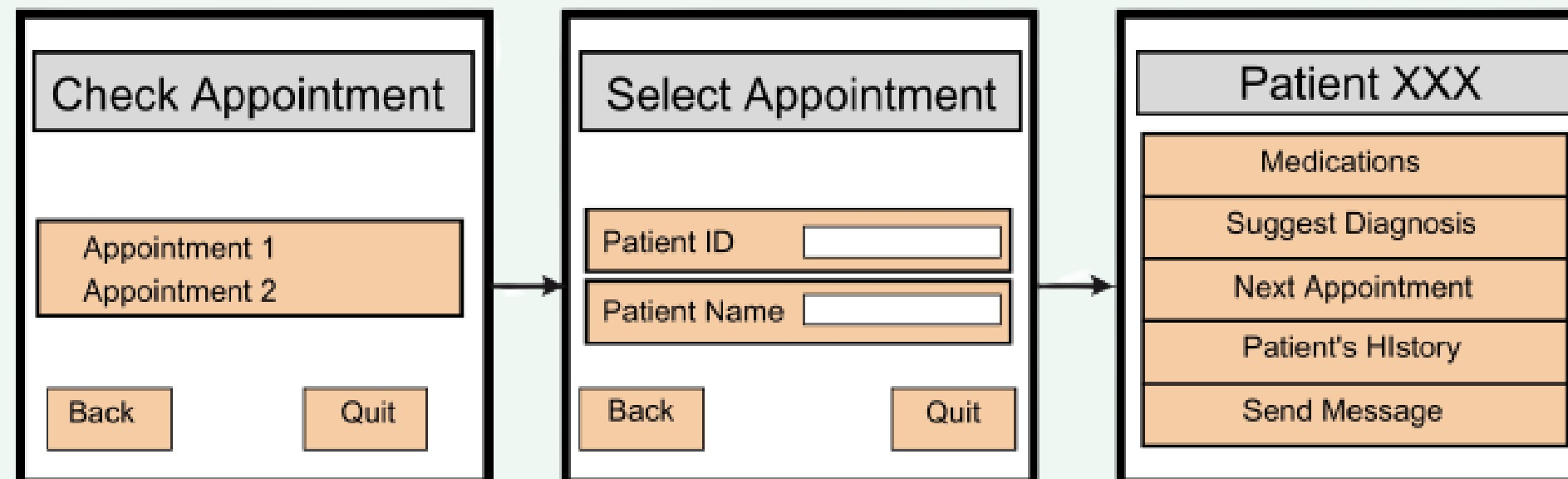
Password:

Cancel Ok

PATIENT INTERFACE



DOCTOR'S INTERFACE



USER PAIN POINTS

- Our users are frustrated with the fragmented nature of their medical records, making it challenging to access complete health information and make informed decisions about their care.
- Our users face the risk of inaccurate or incomplete medical records, leading to potential delays or denials in receiving appropriate care.



RECOMMENDATIONS

FROM INTERVIEW

- **Enhance User Interface (UI) and User Experience (UX):** Refine the UI/UX of the solution to ensure intuitive navigation, clear information display, visually appealing design, and responsiveness to adapt multiple devices. Incorporate user-centered design principles to optimize user satisfaction and engagement.



FUTURE PLANS WITH FUNDING

If given funding to continue working on our solution, we have ambitious plans to further enhance and scale our impact:

**Research And
Development**

**Expand Adoption and
Integration**

**Collaborations and
Partnerships**

REVISIT OUR WHY

Our WHY is to address the fragmented nature of medical records, empower patients, and improve healthcare outcomes such as:

Enable seamless access to complete and accurate health information.

Enhance communication & collaboration among healthcare providers.

Improve patient satisfaction, engagement.

Ultimately, our solution seeks to contribute to a more efficient, patient-centric healthcare system that prioritizes holistic care and improved health outcomes.

