

# THE DELTA EHR SYSTEM

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# WHAT'S THE PROBLEM

Public healthcare facilities exhibit numerous shortcomings ,such as long waiting times, due to ineffective management of patient records

## GCGO: Healthcare



**Why it  
Matters**

Public hospitals struggle to maintain accurate patient records, thereby hindering medical access for patients.

Patients experience delays in gaining access to healthcare services because they spend long hours waiting for their files



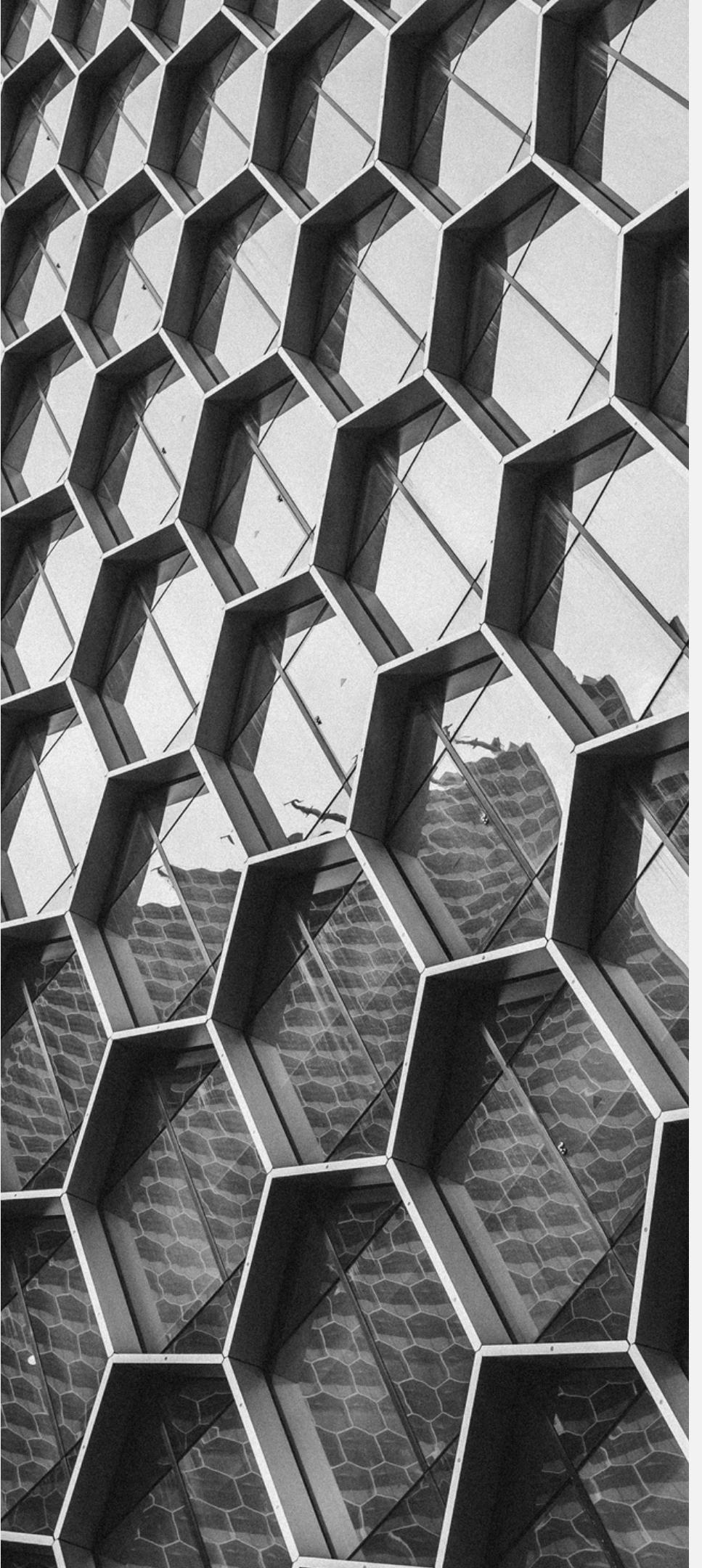
# PERSON AFFECTED

Meet Bulelwa Rayi

An Office Administrator at the  
Nelson Mandela Academic  
Hospital

She experiences challenges with:

- Misplacement of files
- The manual filing system
- Time spent looking for files

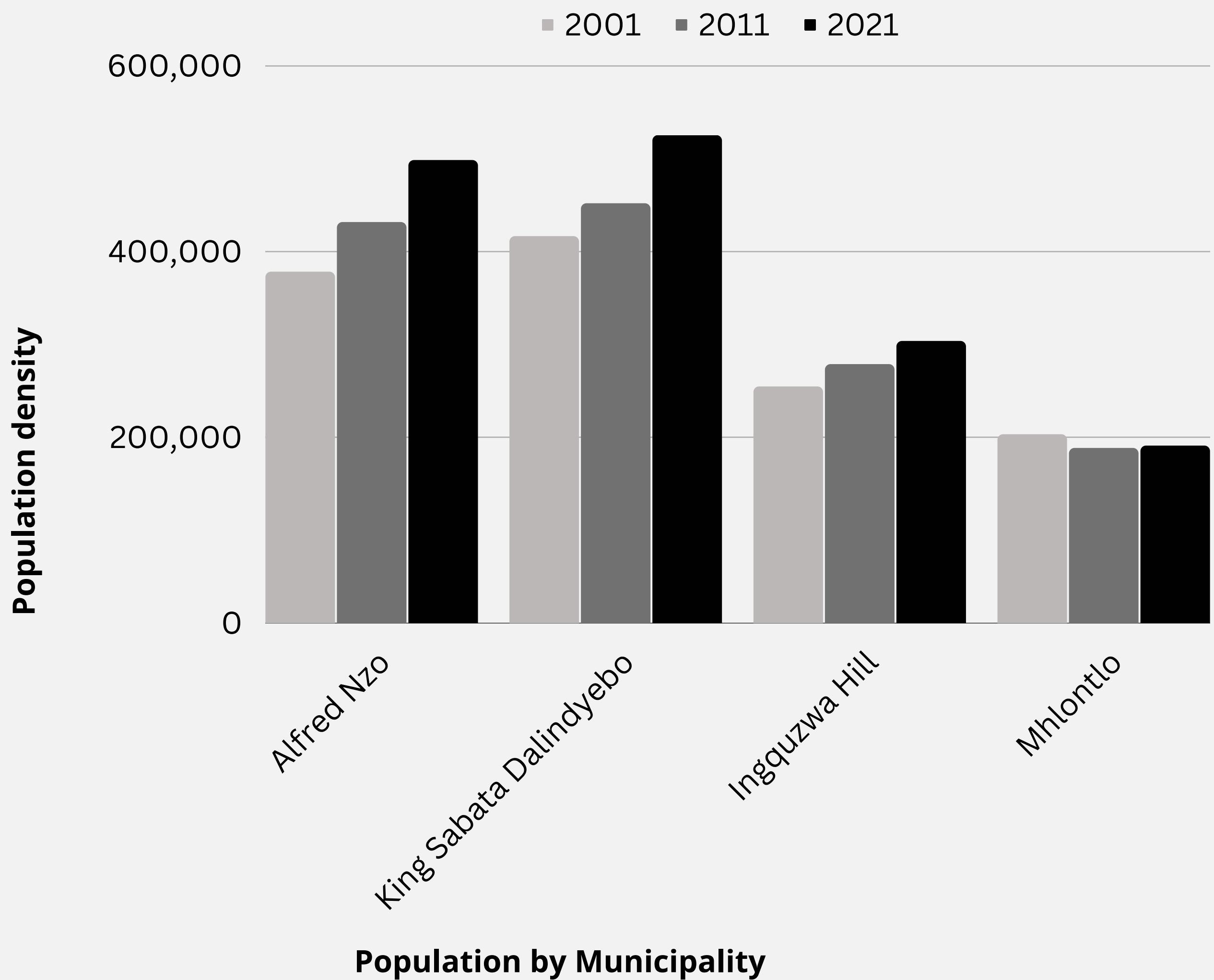


There is more paperwork associated with the public healthcare system as public professionals are never allowed to turn away a patient.

They often have daily schedules that are very busy and this can lead to overwork and burnout for some doctors, as the workload can become very stressful with many patients to see in the short timeframe of the day.

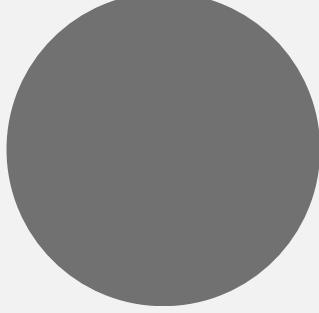
Source: [jonandjon.com](http://jonandjon.com)

# CHANGES IN POPULATION SERVED BY THE NELSON MANDELA HOSPITAL

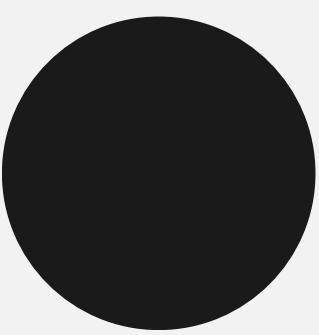


# A MAJOR CAUSE OF DELAYS IN PUBLIC HOSPITALS

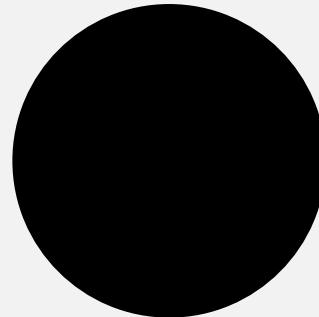
Paper medical records



Paper medical records mean you need a manual written process which is both time consuming and comes with a higher degree of error.



While paper based records can be easier to customize, it also means that the layout and format of information can be inconsistent from one record to the next



Paper records don't have built-in version histories and audit trails

# THE PROPOSED SOLUTION

1

The proposed solution is the implementation of an EHR system.

2

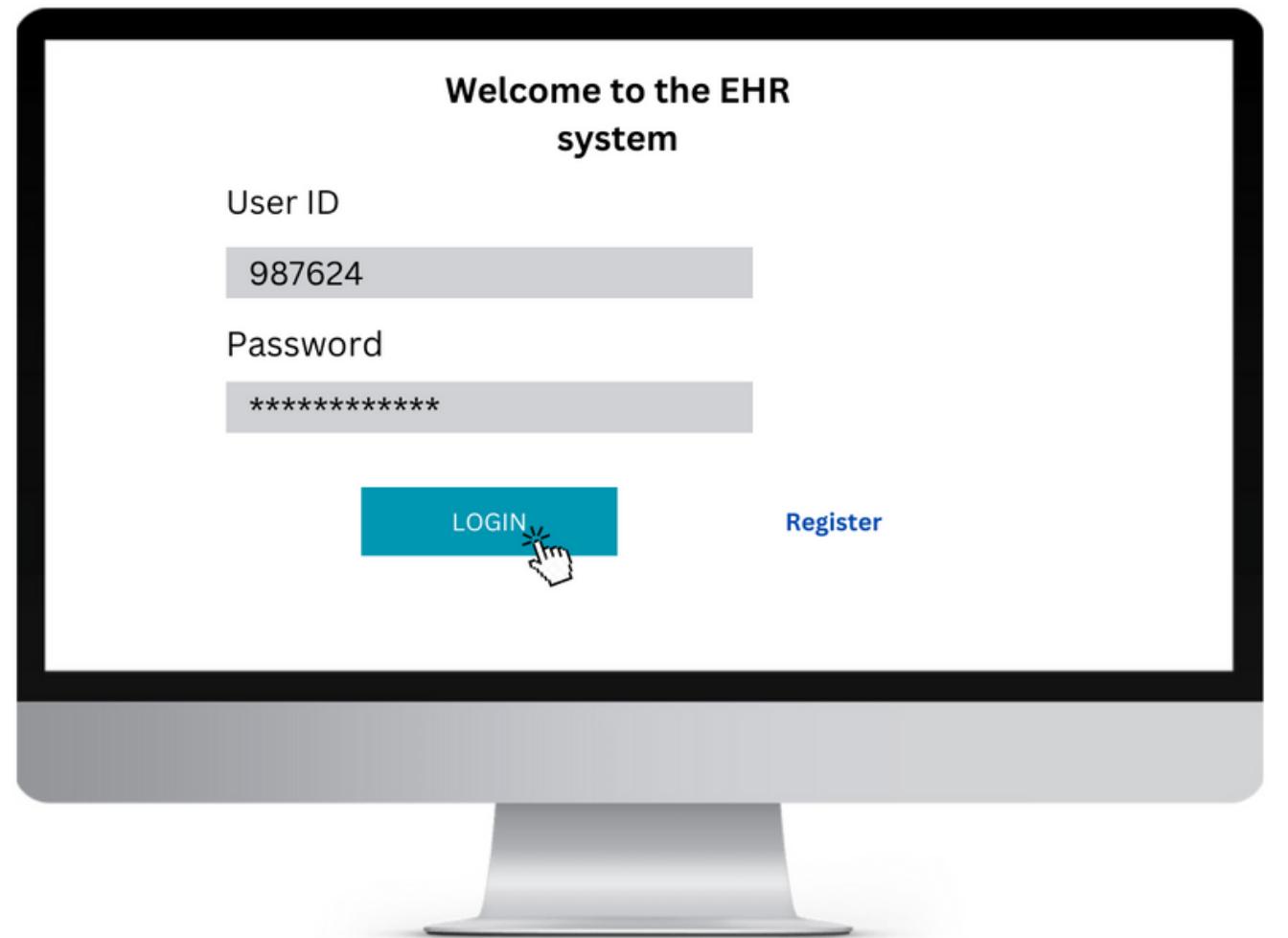
The system will automate processes, enable efficient check-ins, reduce wait times and provide real-time updates.

3

Digital patient records will improve accessibility, accuracy and the continuity of medical care.

Step1: You're required to identify yourself in order to gain access into the system.

Login  
or  
Register



Step 2: After logging in you gain access to the dashboard.  
To access patient records click on the "patients" tab.



WIREFRAME  
1 & 2

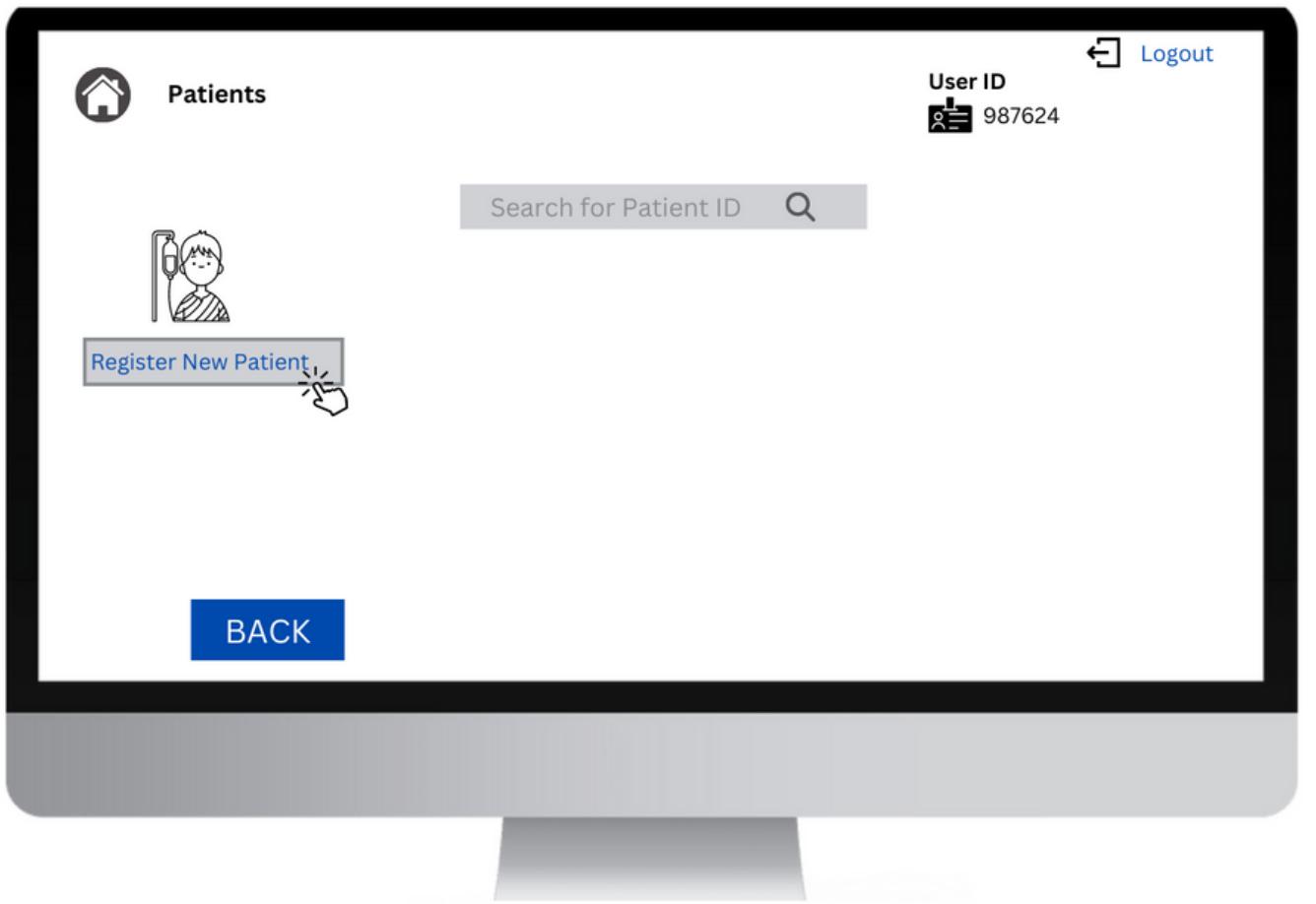
Step 3: After the patient tab has loaded you can search for patient using a patient name or file number. Click 'view' to access patient file.



Step 4: After accessing the patient file you can view and edit patient's personal information, billing info, medical records, appointments, medications etc.



# WIREFRAME 3 & 4

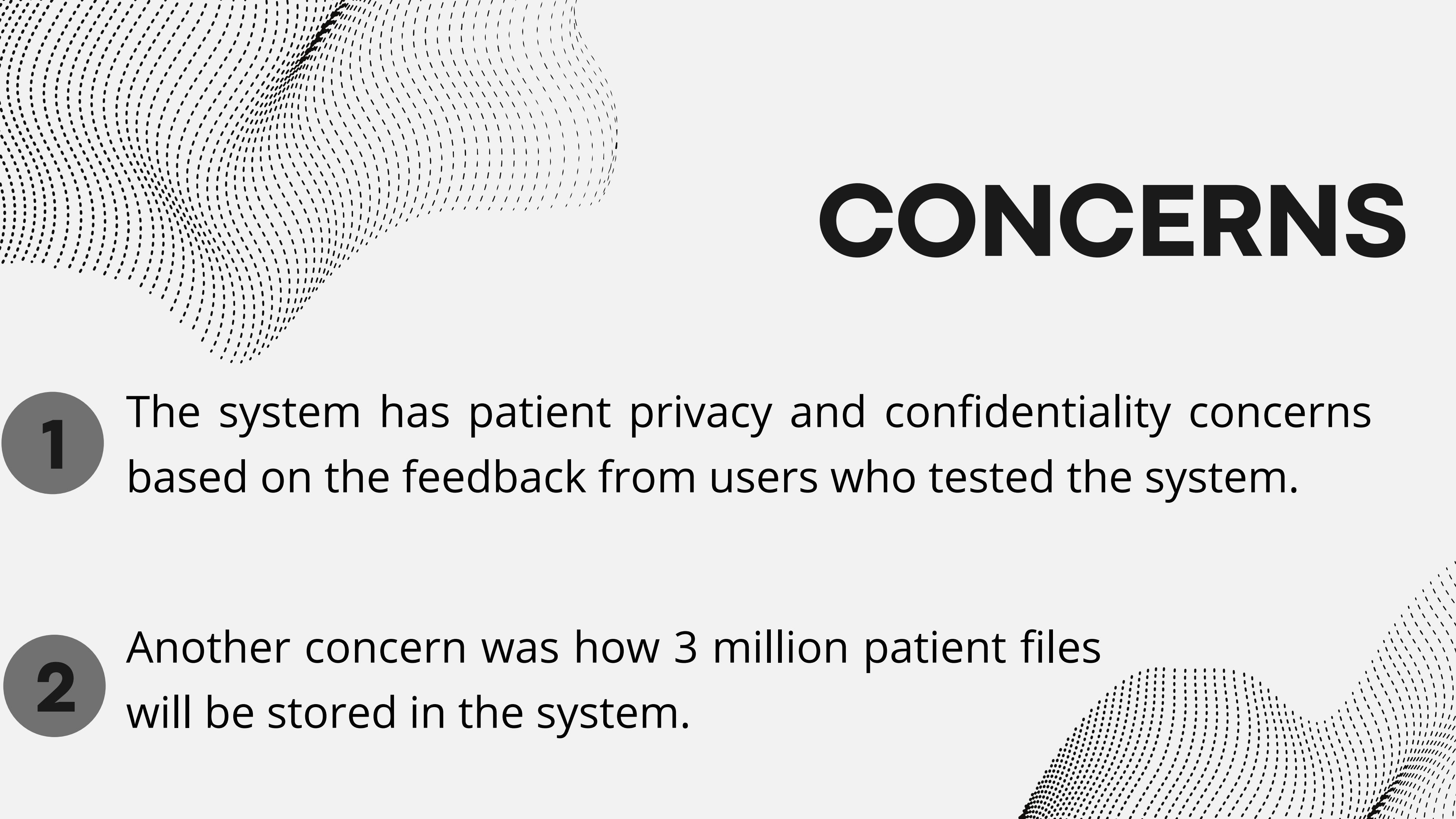


Step 5: To register a new patient, navigate back to the patient tab and click "register new patient".

This wireframe shows a 'Enter Patient Information' screen. At the top right is a 'Logout' button. The top left has a house icon and the word 'Patients'. On the right, it shows 'User ID 987624'. The main area is titled 'Enter Patient Information' and contains two sections: 'Personal information' and 'Medical Information', each with three input fields. A 'Create Patient File' button is located at the bottom right. Navigation buttons 'BACK' and 'NEXT' are at the bottom left and right respectively.

Step 6: Enter new patient information and click create patient file.

# WIREFRAME 5 & 6



# CONCERNS

1

The system has patient privacy and confidentiality concerns based on the feedback from users who tested the system.

2

Another concern was how 3 million patient files will be stored in the system.

# RECOMMENDATIONS

To protect patient privacy and confidentiality a password lock system is the recommended solution. Only doctors and nurses will have access to patient information.

The recommended solution for storage of 3 million files is the implementation of a server-less platform such as a cloud storage system.

# NEXT STEPS

**Access to funding will enable the next big steps in our project like:**

- 1** Proposing the EHR system to all hospitals, especially hospitals in rural settings.
- 2** Working closely with software developers to bring the vision to life.
- 3** Providing training for hospital staff to get them up to speed with the efficient running of the system.
- 4** Another key aspect is installing fibre to increase internet speed and ultimately the effective use of the software.

# THE WHY?

The hospital struggles to maintain accurate and accessible patient records hindering medical access for patients. Patients experience delays in gaining access to healthcare services because they spend long hours waiting for their patient files and consulting with doctors

## Importance 1

The EHR system will make an important difference because it will improve service delivery.

## Importance 2

Hospital management will make data driven decisions with impact.

## Importance 3

By embracing the EHR system, the hospital can enhance operational efficiency thus increasing patient satisfaction & ultimately improving the local community.