

APPLIED HEALTH INFORMATICS

Electronic Health Records (EHRs) & Health IT Systems

OpenMRS Fundamentals for New Users Practical Learning Module

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Memorial Sloan Kettering
Cancer Center



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Electronic Health Records (EHRs) & Health IT Systems

Week 1: OpenMRS Fundamentals for New Users Practical Learning Module

OpenMRS Practice: Required

Duration: 45–60 minutes

Practical Time: 30–45 minutes

OpenMRS Office Hour: Saturday June 13 2026 12pm EDT

Google meet link: [CAHI EHR & Health IT - OpenMRS fundamentals Office Hour](#)

Lesson Objectives

By the end of module, learners will be able to:

- ☐ Explain the purpose of OpenMRS
- ☐ Navigate the system
- ☐ Register a patient
- ☐ Find a patient
- ☐ Review a patient chart
- ☐ Relate EHR activities to healthcare workflows



Before We Touch the Software

Important Principle:

OpenMRS is not the subject of this course.

Healthcare information is the subject.

OpenMRS is simply the environment we will use to explore:

- ☐ Information flow
- ☐ Documentation
- ☐ Clinical workflows
- ☐ Continuity of care

Meet Mrs. Ade

Mrs. Ade is a 52-year-old woman from rural Osun State.

She presents to a primary healthcare facility after noticing a breast lump.

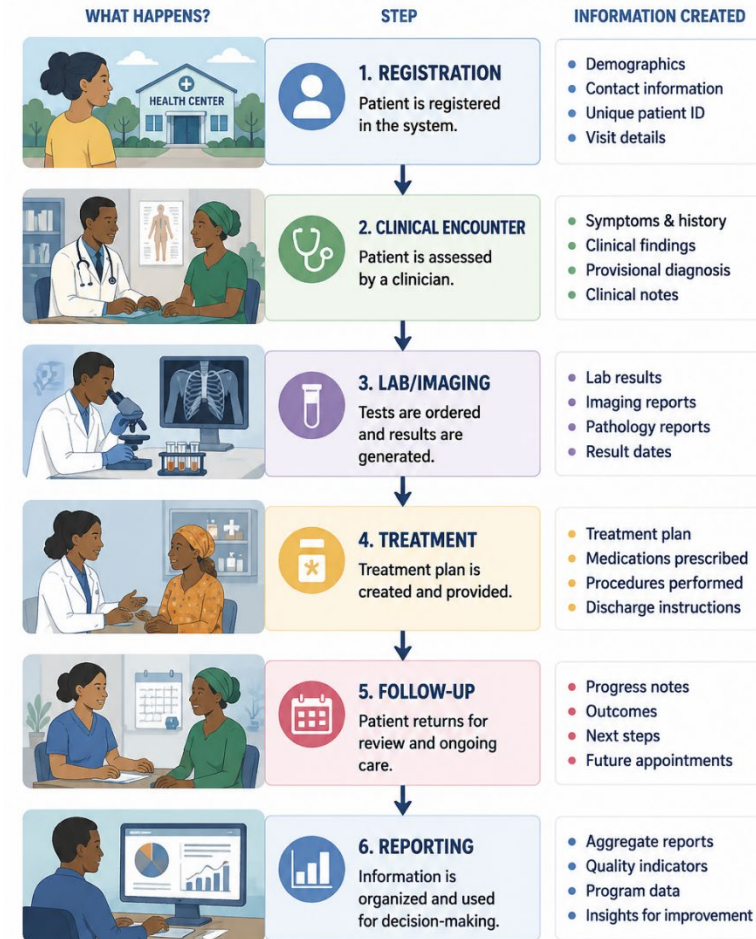
Before any care can occur:

She must become a patient record.

And then, we document her medical records

PATIENT JOURNEY & WORKFLOW THINKING

Information flows with the patient. Every step creates information that supports the next step.



EVERY STEP CREATES INFORMATION

Good information today leads to better care tomorrow.

Why OpenMRS

OpenMRS is:

- ☐ Open-source
- ☐ Used globally
- ☐ Widely deployed in LMICs
- ☐ Designed specifically for healthcare

Supports:

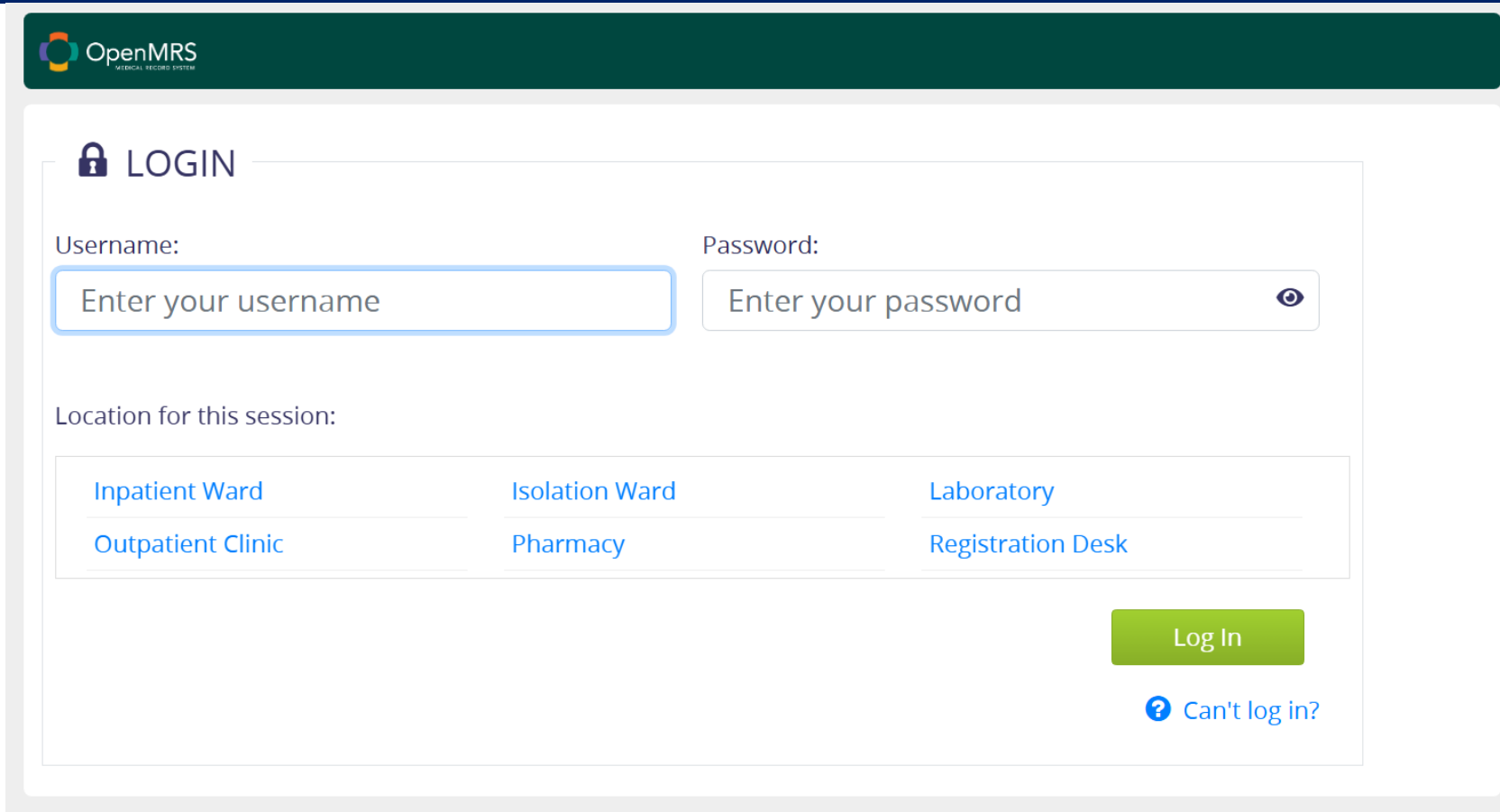
- ☐ Registration
- ☐ Documentation
- ☐ Encounters
- ☐ Reporting

OpenMRS at a Glance

Focus on Three Tasks

- ☐ Register Patient
- ☐ Find Patient
- ☐ Review Patient Record

Ignore everything else for now.



The screenshot shows the OpenMRS LOGIN page. At the top is a dark green header with the OpenMRS logo and text. Below the header is a white login form. The form has a title 'LOGIN' with a lock icon. It contains two input fields: 'Username:' with a placeholder 'Enter your username' and 'Password:' with a placeholder 'Enter your password' and an eye icon for toggling visibility. Below these is a section 'Location for this session:' with a grid of six buttons: 'Inpatient Ward', 'Outpatient Clinic', 'Isolation Ward', 'Pharmacy', 'Laboratory', and 'Registration Desk'. At the bottom right of the form is a green 'Log In' button and a link '? Can't log in?'.

OpenMRS
MEDICAL RECORD SYSTEM

 LOGIN

Username:

Password: 

Location for this session:

Inpatient Ward	Isolation Ward	Laboratory
Outpatient Clinic	Pharmacy	Registration Desk

[Log In](#)

[? Can't log in?](#)

Registration: Where Every Record Begins

Patient registration is the foundation of the EHR.

No registration means:

- ☐ No chart
- ☐ No encounter
- ☐ No diagnosis
- ☐ No reporting

Some of the information collected during registration

- ☐ Demographics: Name, Date of Birth, Sex, Address, Unique Identifier
- ☐ Financial information: Insurance payers,
- ☐ Patient consents: Release of information, DNR.

PRACTICE ACTIVITY 1

Mrs. Bisi Ade just turned 52 years on March 18 this year.

Follow the steps to in the practice workbook to register her in OpenMRS.

Why Accurate Registration Matters

Errors can lead to:

- ☐ Duplicate records
- ☐ Missing history
- ☐ Delayed care
- ☐ Patient safety issues

Informatics Insight

Poor data quality often begins at registration.



What Is In an Electronic Patient Chart

Think of the chart as: **The Patient's Story**

It contains:

- ☐ Demographics
- ☐ Visits
- ☐ Diagnoses
- ☐ Treatments
- ☐ Outcomes



What Is In an Electronic Patient Chart

Many healthcare organizations still use:

- ☐ Paper records
- ☐ Spreadsheets
- ☐ Hybrid systems

OpenMRS demonstrates how healthcare information can be organized and reused more effectively.

The goal is improvement, not perfection.

Thinking Like an Informaticist

Do not ask:

- ☐ "Which button do I click to get to patient information?"

Ask:

- ☐ What information is being captured?
- ☐ Who uses it?
- ☐ Why does it matter?
- ☐ What happens if it is missing?

Key Takeaways

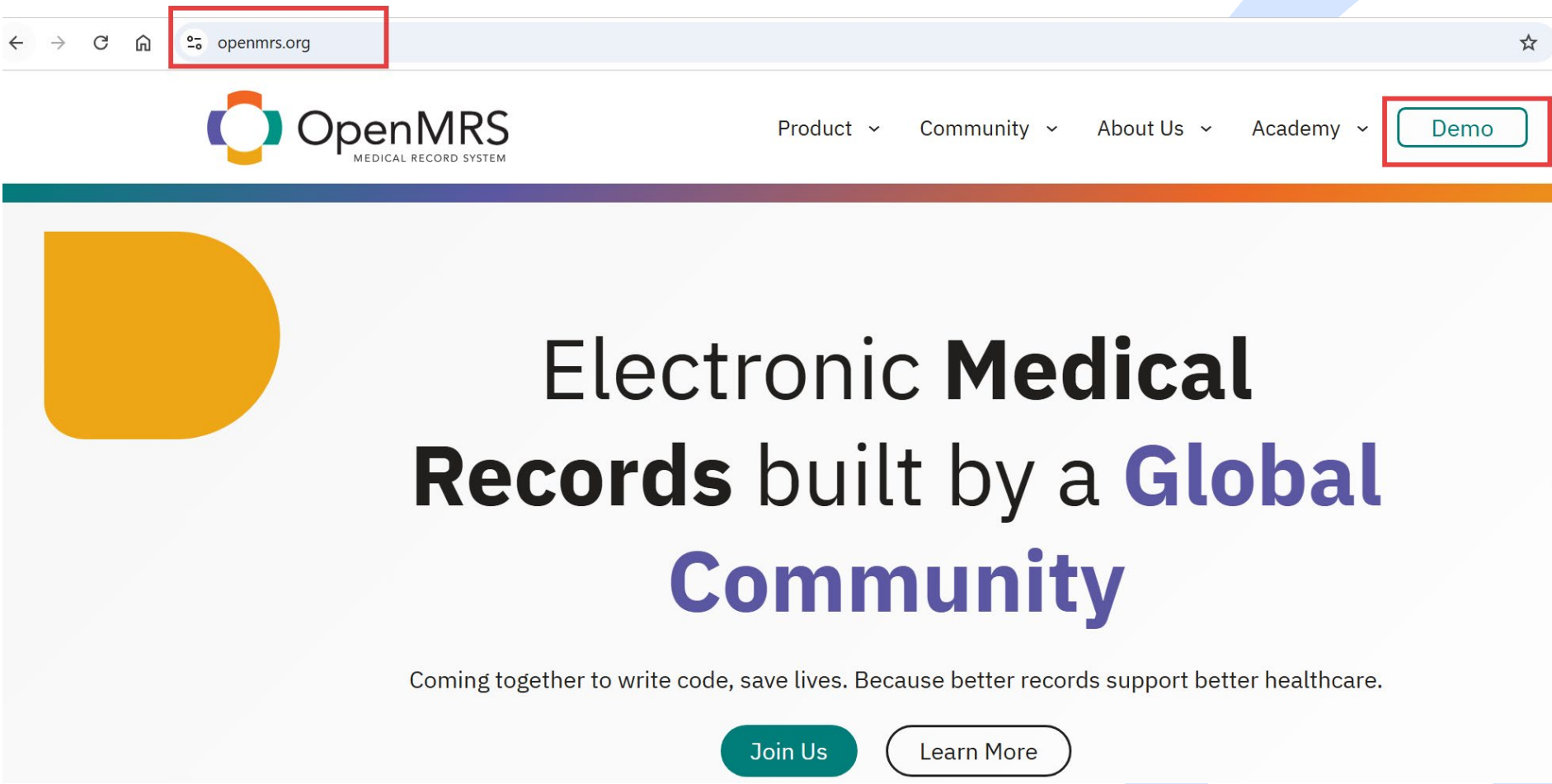
Remember:

- ☐ Healthcare is an information system.
- ☐ Registration creates the patient record.
- ☐ EHRs support continuity of care.
- ☐ Data quality begins at data entry.

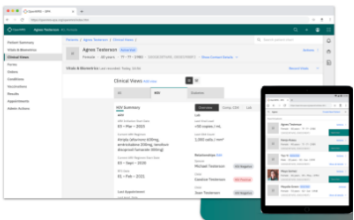
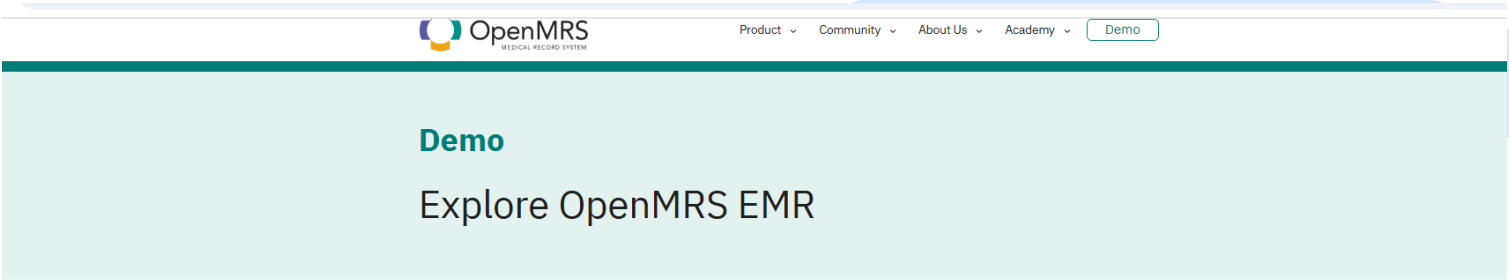
OpenMRS is a tool.

Informatics is about ensuring the right information reaches the right people at the right time.

In your browser, type in URL: <https://openmrs.org/>
Click on 'Demo' button



Scroll down to OpenMRS 2 (02)
Click on 'Explore OpenMRS 2



OpenMRS 3(03)

OpenMRS 03 is our next-generation EMR. We've completely redesigned the user experience, building a platform that's faster, more intuitive, and ready for the future of healthcare. Ready to explore?

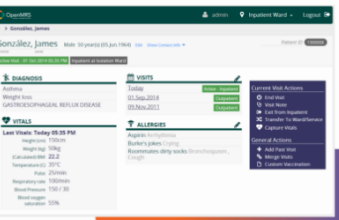
Demo Credentials:

Location: Any

Username: admin

Password: Admin123

[Explore OpenMRS 3](#)



OpenMRS 2(02)

Explore the **OpenMRS 2.x Reference Application**. This demo provides a complete, working installation, pre-loaded with a comprehensive set of anonymized patient data. It is the same version you can download and use. Log in to examine all of its core features.

Demo Credentials:

Location: Any

Username: admin

Password: Admin123

[Explore OpenMRS 2](#)

Enter credentials

Username: admin

Password: Admin123

Location: Registration Desk

Log In

OpenMRS
MEDICAL RECORD SYSTEM

 LOGIN

Username:

admin

Password:

Admin123

Location for this session:

Inpatient Ward

Outpatient Clinic

Isolation Ward

Pharmacy

Laboratory

Registration Desk

Log In

[? Can't log in?](#)

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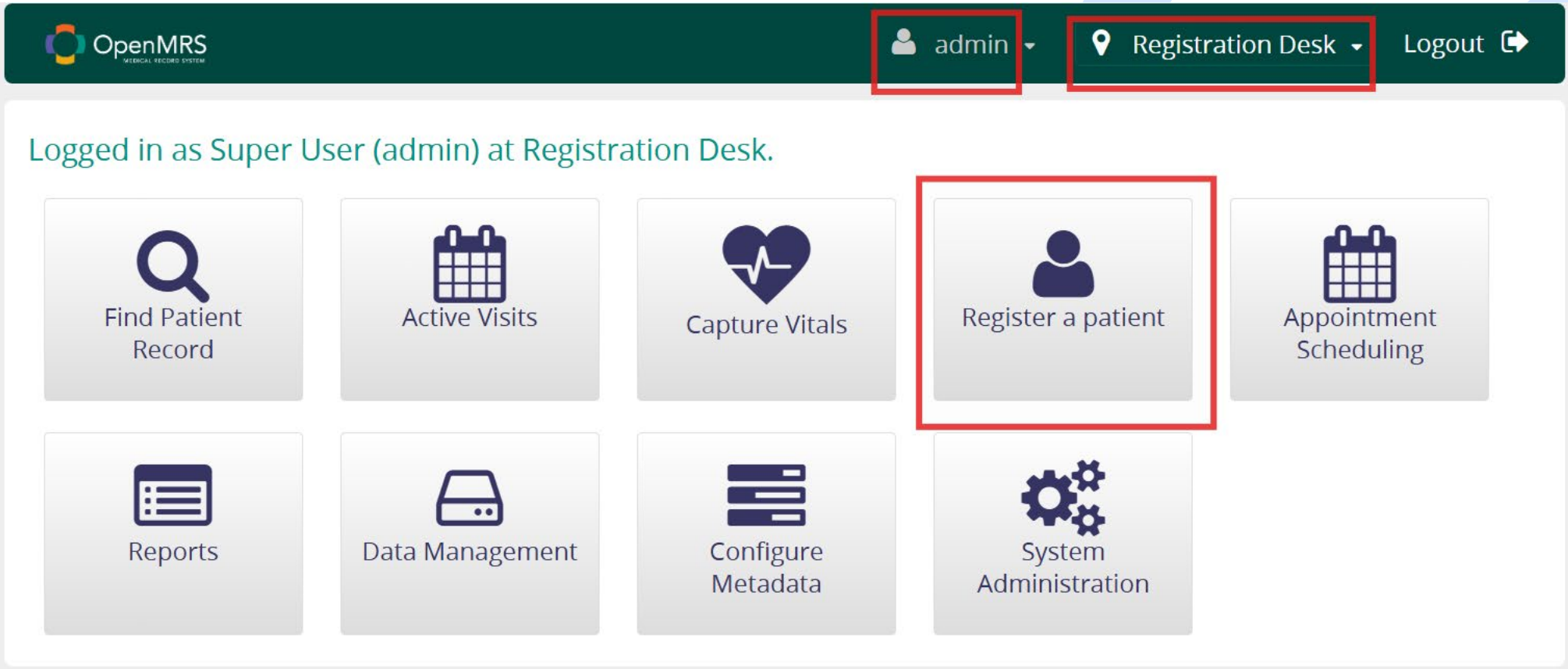
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Enter the Registration Desk Module

Confirm your account (**admin**) and log in location (**Registration Desk**)

From the OpenMRS home page, select **Register a Patient**

This opens the patient registration form.



Register Patient 1 - Mrs. Ade

Use continue button  to proceed

Given (First Name): Ade

Middle Name: Francisca

Family (Last) Name: Adebimpe

Gender: Female

Age: March 18 1974

Address: 123 Rotimi St,
Ife Osun State

Phone Number: 0901111010

Relationship: Sibling

Sibling Name: John Adebimpe

 OpenMRS
MEDICAL RECORD SYSTEM

 admin ▾

 Registration Desk ▾

Logout 

 > Register a patient

Register a patient

Demographics

Name

Gender

Birthdate

Contact Info

Address

Phone Number

Relationships

Relatives

Confirm

What's the patient's name?

Given (required)

Middle

Family Name (required)

☐ Unidentified Patient



Step-by-Step Registration

- ❑ Enter the patient's name.
- ❑ Select the patient's gender.
- ❑ Enter age or date of birth.
- ❑ Enter address or location.
- ❑ Enter phone number if required.
- ❑ Review all information carefully.
- ❑ Click **Confirm** or **Submit**.

OpenMRS should create a new patient record.

Write down or take note of the Patient ID, if shown.

Confirm Patient 1 Was Registered

- 1.Go back to the home page or patient search area.
- 2.Search for: **Adebimpe** or **Ade**
- 3.Confirm that the correct patient appears.
- 4.Open the patient chart.
- 5.Check that the demographic information is correct.

The screenshot shows the OpenMRS interface. At the top, there's a dark green header with the OpenMRS logo, a user dropdown for 'admin', a location dropdown for 'Registration Desk', and a 'Logout' link. Below the header, a breadcrumb trail shows 'Ade Fransica Adebimpe'. The main content area displays the patient's name 'Ade Fransica Adebimpe' in a red-bordered box, with sub-labels 'Given', 'Middle', and 'Family Name'. To the right of the name, it says 'Female 52 year(s) (18.Mar.1974)' with an 'Edit' link. Further right, the 'Patient ID' is '100HPW'. Below the name box is a 'Show Contact Info' dropdown. Underneath is a 'DIAGNOSES' section showing 'None in the last 730 days'. To the right of the diagnoses is a 'RECENT VISITS' section showing 'None'. At the bottom left is a 'LATEST OBSERVATIONS' section. At the bottom right is a 'FAMILY' section. On the far right, there's a 'General Actions' panel with 'Start Visit' and 'Add Past Visit' buttons.

Register Patient 2: Mr. Okafor

Use the following sample information:

- ☐ First Name: Chinedu
- ☐ Last Name: Okafor
- ☐ Sex: Male
- ☐ Age: 61
- ☐ Address: 40 Pound Road Aba, Abia
State
- ☐ Phone Number: Use any sample

Step-by-Step Registration

1. Return to **Register a Patient**.
2. Enter the patient's name.
3. Select the patient's sex.
4. Enter age or date of birth.
5. Enter address or location.
6. Enter phone number if required.
7. Review all information carefully.
8. Click **Confirm** or **Submit**.
9. Note the Patient ID, if shown.
10. Confirm that the patient was actually registered

Week 1 Applied Assignment - Screenshot Evidence + Reflection

Part A: Screenshot Submission: Submit **2 screenshots** showing:

- ☐ Mrs. Ade successfully registered
- ☐ Mr. Okafor successfully registered

The screenshot should clearly show:

- ☐ Patient name
- ☐ Patient ID (if available)
- ☐ Registration confirmation or patient chart
- ☐ Patient IDs if visible.

Part B: Reflection (100–150 words)

During registration, which data element do you believe is most important for uniquely identifying a patient in your setting? Explain why.



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END