

# Deploying An Electronic Medical Record System in Rural Rwanda

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In 2005, the Rwandan Ministry of Health asked Partners in Health to help build a national health care system. A small town named Rwinkwavu was chosen as the home of one of the first comprehensive health care systems in Africa.

To help manage patient records and lab results in the district hospital, an electronic system was needed. OpenMRS, an open-source medical record application, chosen as the solution.

During a six month stay in Rwinkwavu, human-computer interaction methodologies were applied to problems encountered deploying OpenMRS. Below are images summarizing that work.

Living in rural Rwanda



Observing clinical care



Managing data entry process



Installing infrastructure at clinics



Generating patient summaries

**Paul Persil Patient** Back Print

Gender: **Male** TRACnet ID: 12345  
 Age: **44 years** (~ Jun 01, 1934) Carte d'identité: 1234567  
 Last Visit: **1 week ago** (Aug 14, 2008) Drug Doctor: Rwinkwavu Hospital

IMB ID: 12345678-A

Drug Order	Dose	Frequency	Start Date	Stop Date	Notes
<b>ACT-2TC</b>	1.0 tab(s)	2/d x 7 d/w	Sep 13, 2007		
<b>DAT</b>	150 mg	1/d x 7 d/w	Aug 02, 2007		
<b>Thromine-40 (stopped)</b>	1.0 tab(s)	2/d x 7 d/w	Sep 03, 2007	Sep 13, 2007	Unexplained facial rash
<b>EPY 400 (stopped)</b>	1.0 mg	1/d x 7 d/w	Aug 02, 2007	Sep 13, 2007	

Last Visit: **1 week ago** (Aug 14, 2008) Ordered by: Dr. Doctor

CD4: **512** Aug 15, 2008

CD4: **259** Aug 01, 2008

Graphs:

- HEIGHT (CM)**: Line graph showing height over time, fluctuating between 140 and 170 cm.
- WEIGHT (KG)**: Line graph showing weight over time, fluctuating between 50 and 70 kg.
- CD4 COUNT**: Line graph showing CD4 count over time, fluctuating between 200 and 400.

Building a one click installer

**OpenMRS** Log in / create account Search... Search

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**OpenMRS Appliance** Article | Discussion | Edit | History

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**Welcome** [edit]

The OpenMRS appliance is a **virtual appliance** (also known as a virtual machine or VM). A virtual appliance is a fully pre-installed and pre-configured application and operating system environment. This is a great way for you to try out OpenMRS without installing all the OpenMRS requirements (Java, Tomcat, MySQL, etc.) and configuring them to work on your computer.

With a virtual appliance, all you have to do is download it, unzip it, and double click it to run. Uninstalling is even easier, just delete the virtual appliance folder.

**Requirements** [edit]

You will need 384 MB of RAM and 1 GB of hard disk space free to install and use this appliance. You will also need the 7z file archiver to unzip the appliance and a virtual machine player to run it. Use the links below to get these components.

- Windows: [7-Zip](#) and [VirtualBox](#)
- Macintosh: [iZotope](#) and [VirtualBox](#)
- Ubuntu: [7-Zip](#) and [VMware Player](#)
- Mac OS X: [7-Zip](#) and [VirtualBox](#)

Instead of [VirtualBox](#), you can also try [VirtualBox](#). It is free, open source and runs on Windows, Mac and Linux.

Find out more at <http://change.cs.washington.edu>