Deploying OpenMRS in Rwanda

Yaw Anokwa
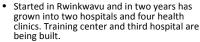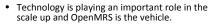http://cs.washington.edu/homes/yanokwa

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Scaling up a healthcare system

- Began in 2005 as first Partners in Health project in Africa. Partners: Clinton and Gates Foundations and TED.
- Scale up PIH model of health nationwide with services including HIV/TB, family planning, malnutrition, community health workers, housing, employment, schooling.
- Started in Rwinkwavu and in two years has grown into two hospitals and four health clinics. Training center and third hospital are being built.
- Technology is playing an important role in the scale up and OpenMRS is the vehicle.

What is OpenMRS?

- OpenMRS is an application which enables design of a scalable and customized medical records system with no programming skills.
- Framework on which medical informatics effort in developing countries can be built.

http://openmrs.org

Who are the key players?

- Developers: PIH, Regenstrief, and others
- Funders: WHO, CDC, Rockefeller, PEPFAR, IRDC, NIH, Google, SA-MRC, MVP
- Deployments: Kenya, Rwanda, Lesotho, South Africa, Zimbabwe, Mozambique, Uganda, Malawi, Tanzania, Haiti, Peru
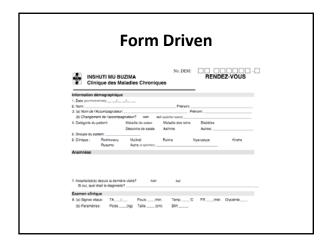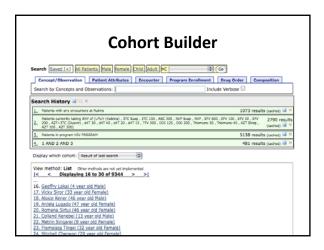

How is it put together?

- OpenMRS is built in Java. The core application works through a web browser.
- Tomcat is used as the application server. The database is currently in MySQL. Hibernate is used as an interface layer to the database. Also use Spring, Dojo, DWR, BIRT, etc.
- The system creates XML schemas for form design. Form design data entry is currently done in Microsoft Infopath.
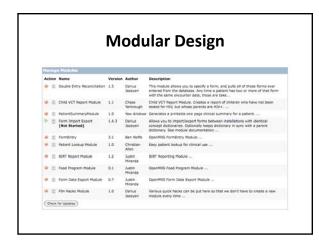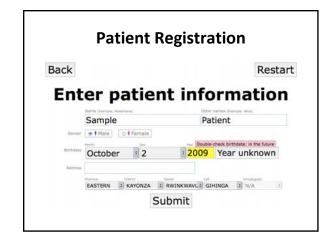

Concept Dictionary

Form Driven

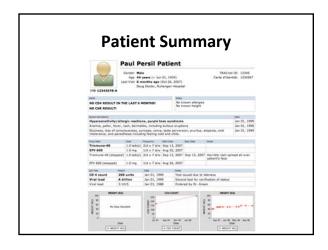## Cohort Builder

Modular Design

Patient Registration

Patient Summary

How can I help?

- Improve user interface and interactivity
- Improve report/form design and generation
- Improve decision support tools
- Improve data synchronization tools
- Improve programmability and documentation
- Help train local developers in Africa
- Build modules for community healthcare workers, food supplementation, pharmacy, and clinicians

Relevant Links

- Change – http://change.cs.washington.edu
- OpenMRS – http://openmrs.org
- Partners in Health – http://pih.org
- OpenROSA – http://openrosa.org
- GATHER – http://gatherdata.org