mobile care: scalable imaging and diagnosis for the developing world
moca is a customizable, remote medical diagnostics platform for health workers in developing nations. It is an end-to-end system that seamlessly connects health workers in the field to centralized medical experts.
a lack of trained physicians is one of the largest issues facing healthcare in the developing world.

patients often make long journeys to clinics, only to be referred to expensive and far away medical centers for a diagnosis.

paper based medical records further contribute to inefficiencies.
system architecture
Doctor creates custom procedure on OpenMRS

Moca downloads and stores procedure for nurse to use

Nurse collects and uploads data

Doctor grabs case from queue and reviews it

Moca informs nurse of diagnosis result

Web interface screenshots courtesy of OpenMRS. Used with permission.
features

• user customizable medical decision trees and forms
• image and audio file support
• integration with medical record system standard
• workflow management for efficient utilization of remote medical experts
• data transfer optimized for poor coverage areas
• open source platform
OpenMRS Integration

• Free and open source electronic medical records system
• Designed for use in developing countries
• Lead by Regenstrief Institute and Partners In Health
• Active deployments in several African and Latin American countries
demo
November 2008: initial local presentation
January – March 2009: planned travel to Philippines for prelim work and assessments
May 2009: pilot study deployed in Capiz: ophthalmology + dermatology deployment

Centers for E-health + Telemedicine:
Universiti Sains Malaysia (Malaysia)
Institut dela Francophonie pour Medicine Tropicale (Laos)
University of the Philippines Manila (Philippines)
University of Gadjah Mada (Indonesia)
Ciputra University (Indonesia)
Hanoi Medical University (Vietnam)
pilot study costs are fully covered through support from the WHO and the Filipino Department of Health

startup cost: $1200 (server) + $200-$400 per phone

running cost: $0 - $100 per phone, month
open source software platform means low cost of deployment, no proprietary data formats, re-use of code and sharing of expertise
mocamobile.org

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