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Improving Health Systems with the Power of Open Source

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Dr. Alvin Marcelo

Alvin Marcelo believes in the power of health information technology to improve health outcomes. But in the Philippines, where he lives, “no single software can serve all the needs of everyone in the health sector,” he says, and there are numerous applications in use. How can he make it easier for these applications to work together and be more effective?

Dr. Marcelo is associate professor of surgery and medical informatics at the University of the Philippines Manila, and former director of the [National Telehealth Center](#). He’s working on a plan to use a set of free, open source applications to produce aggregated information that can help health-sector leaders address gaps and take steps to improve health outcomes.

“Free and open source software doesn’t fix all the problems but makes their solutions possible.”

For example, statistics on disease prevalence at the district level (from the [DHIS 2](#) software) could be integrated with data showing the skill mix of health workers for the same district (from [CapacityPlus’s iHRIS Manage](#) software), which could then inform decisions about where certain health workers should be posted.

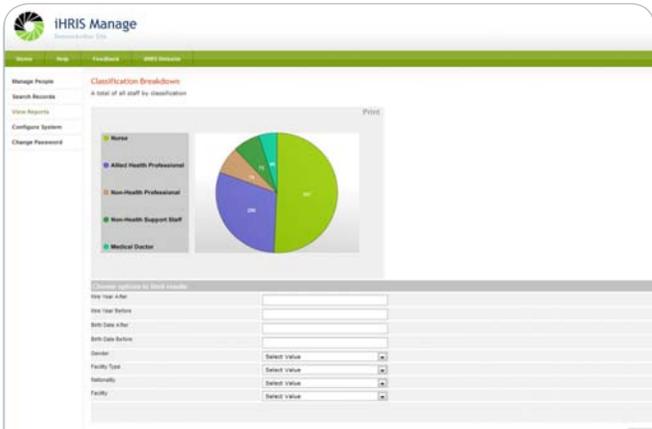
Sharing information, removing barriers

With open source software, users are encouraged to modify the source code to suit their context. By contrast, proprietary software uses source code that cannot be easily changed, making the product less flexible and more difficult to link with other products.

“The advantages are obvious,” Dr. Marcelo asserts. Free and open source software, sometimes referred to as FOSS, “doesn’t fix all the problems but makes their solutions possible. The beauty with FOSS applications like [iHRIS](#) and [OpenMRS](#),” he enthuses, “is that it’s so easy and [allows you to] confidently answer yes to queries on interoperability.” He poetically sums up his view: “Once code is shared, the ice is broken and collaboration and partnerships gush out to overwhelm the frigid health information system.”



A health worker provides free advice and medical consultations in the Philippines (Photo by Requel Legaspi, Courtesy of Photoshare)



Sample health workforce report from iHRIS Manage

iHRIS is CapacityPlus’s suite of free, open source software that provides health-sector leaders with information to track, manage, and plan the health workforce.

Building capacity to use open source health applications

“Building capacity for health information management is so important,” says Dr. Marcelo. He manages the Master’s of Science in Health Informatics program at the University. “My goal is to offer scholarships to employees of the Ministry so that they [can] master applications related to their work – iHRIS for human resources for health officers, [OpenERP](#) for logistics officers, and OpenMRS for health workers.”

His vision is “to build competent, ethical health informatics personnel who can manage health information systems for different types of health offices.” One master’s degree student has already served as a beta-tester for CapacityPlus’s [iHRIS Administrator](#) eLearning course, hosted on the [HRH Global Resource Center](#).



Gliza Maraon tests the iHRIS Administrator eLearning course

Working together

“I wish the FOSS for health community would come together and have a summit,” notes Dr. Marcelo. “There are a lot of opportunities for working together, avoiding unnecessary overlaps, and filling in existing gaps. It is also incumbent upon [this community] to raise the bar, so to speak. We, more than anyone, are set up for interoperability. Let’s show the world how it’s done.”

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