

rural health unit, the hospital or, more importantly, the lives of the patients.

### Building a Solid Structure

Creating a body that will lead the effort in consolidating all aspects of health information is one of the objectives of the Philippine National Health Information Infrastructure (PNHII). The PNHII is a public-private initiative aimed at establishing effective, efficient and semantically consistent information systems. These approaches support the areas of public health,

## UNRELIABLE HEALTH INFORMATION SYSTEMS LEAD TO DECISION MAKING THAT IS, AT BEST, GUESSWORK AND OWING LITTLE BASIS ON EVIDENCE.

clinical medicine and bioinformatics. It is intended that this initiative will allow health information to become a reliable tool for the development of the country.

The PNHII comprise: capability building, network infrastructure and standards and interoperability.

□ **Capability building.** The PNHII will form a corps of leaders and architects of the infrastructure in the area of health information management. These leaders will comprise the technical working groups tasked with analyzing, designing and implementing the other components of the PNHII. The Master of Science in Health Informatics of UP Manila will serve as the backbone for this capability-building program. But other training programs for other stakeholders of the health system will also be offered. These include the current offerings of the UP Medical Informatics Unit, such as the Introduction to Health Information Systems for Barangay Health Workers and Health Center Staff. Competencies in electronic health data collection, consolidation and analysis will be developed among these experts.

□ **Network infrastructure.** The infrastructure itself will serve as the scaffolding that will hold all the other components of the PNHII together. This is the collection of hardware devices, software and communication protocols that allow health data to flow from one part of the health system to another. For this component, the hard sciences of engineering and computer science will play important roles in the research and development side. Telecommunications companies are expected to take interest in the development of this component of the PNHII.

□ **Standards and Interoperability.** A major part of the PNHII will be invested on stakeholder meetings for standards. To ensure interoperability, standards designed to maintain semantic consistency must be accepted and disseminated. Such standards ensure that messages that traverse through the infrastructure retain their meaning regardless of the information system from which they originate or where they should eventually reside.

□ **Test beds and applications.** Research and development (R&D)

activities will be critical in the first few years of the infrastructure. Conducted by the PNHII architects over the infrastructure while employing agreed standards, R&D must demonstrate how the PNHII is able to integrate the disparate stakeholders of the health system, both public and private. It will be in actual implementation where the four components of the PNHII converge and show how they relate to each other operationally. Parallel to the R&D of the PNHII architects will be the work of other teams. These projects, though outside of the PNHII, will likewise be registered and monitored based on set benchmarks. Those that comply with the standards are identified as such while those that do not follow criteria are guided by the PNHII towards compliance.

### Taking that Critical Step

Many say that with information comes great power, especially in the area of health where the lack of it often results in dire consequences. The Philippine National Health Information Infrastructure is an important effort to make health information useful for analysis and decision-making. In the end, every Filipino must have equitable access to healthcare regardless of economic status. A reliable national health information system is the first step towards this goal. ☑

#### About the Author:

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