Health Informatics Building Blocks (HIBBs) For Distance Learning in Low Resource Settings

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Abstract and Objective

The Health Informatics Building Blocks (HIBBs) project seeks to facilitate the acquisition of informatics and associated management skills by health care workers and leaders in local communities and health systems in low resource settings to improve their ability to use eHealth solutions (e.g., electronic health record systems) to strengthen clinical care and public health services. The HIBBs project, funded by the Rockefeller Foundation and managed by the American Medical Informatics Association, is initially focusing its efforts in Sub-Saharan Africa (SSA). A hallmark of the project is to develop ongoing collaboration with organizations in SSA that are providing clinical, research, and/or health informatics training to ensure the application of a locally-based, community-focused approach to the development and dissemination of HIBBs.

Keywords:

Informatics training, Low resource settings

Introduction

A HIBB is a focused training module (e.g., lecture, video, curriculum, syllabus, and/or e-learning tool) designed to advance eHealth knowledge and skills for individuals in low resource environments who are tasked with planning, implementing, and managing health-related information and communication systems and their infrastructure; making policy decisions about these systems; and using the systems to provide health care and public health services. This innovative approach emphasizes the rapid, efficient acquisition of *practical*, directly-applicable informatics knowledge and skills, rather than the provision of education leading to a degree in informatics. Projects that could benefit from HIBBs include electronic health record (EHR) implementations and public health reporting systems.

HIBBs are adaptable; can be used individually or combined by local groups to meet training needs; and available using an open coursework model. Examples of content areas include medical terminology; standards, communication, and connectivity; basic medical records principles and practices; use of computers; patient identification; data collection, recording, and reporting; and database creation and management. Another innovative aspect of the HIBB program is its inclusion of modules on management and leadership skills since these skills are key to successful introduction of eHealth systems. HIBBs will be available in several formats as local technologies permit. For example, HIBBs may be presented as voice-over Powerpoint presentations and may include supporting materials such as discussion questions or practice exercises. For areas lacking electricity or bandwidth to support electronic delivery options, printed materials will be available.

Methods

Emphasis in the current year of the HIBBs project is on demonstrating "proof of concept" by developing prototype HIBBs. These prototypes will be available for review at Medinfo 2010 during a networking session sponsored by AMIA. Following Medinfo, we will conduct pilot tests of the HIBBs at sites in SSA; develop the infrastructure needed to collect and disseminate a range of HIBBs; and foster a network of local partners to lead future development and maintenance of HIBBs. Initial partnership-building efforts will focus on existing informatics training programs in SSA e.g., sites implementing open source medical record systems.

Conclusion

The HIBBs project seeks to strengthen e-Health capacity in low resource settings by developing informatics training modules that can be used effectively in these environments and by fostering a network of individuals and organizations to share knowledge about and experiences with informatics training. The creation of new partnerships and strengthening of existing ones, with and among organizations in SSA that need or can provide informatics training content, is critical to HIBBs project success.