

Promoting Interoperable Health Records System and Measurement Device in Ghana

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Proposal Status: Out of Scope

EXECUTIVE SUMMARY

Technology has facilitated connectivity in today's world. However, the swift transfer of information in the health system appears impeded especially in developing countries. Integrated Healthcare through Evidence and Recording for Developing Countries (IHEARDC) has initiated a project seeking to improve healthcare in developing countries by providing an all-in-one interoperable Electronic Health Record System (EHRS) for evidence based treatment, continuity of care and the prevention of medical mistakes.

IHEARDC in collaboration with other stakeholder plans to donate all necessary equipment and services at no cost to clinics and hospitals in developing countries. Ghana, Uganda, Nigeria, and Guatemala have been chosen as prospective beneficiaries to start up this initiative. This project involves an all-in-one device that is also battery operated and takes vital sign measurements such as Blood Pressure, Blood Glucose, Temperature, Pulse and Oxygen in Blood (SPO2), Heart rhythm, Airflow, Muscle responds, Air capacity of the lungs, Cholesterol and Galvanic Skin Response.

The device together with the software system is interoperable, meets international standards (HL7 CDA, ICD 10CM, SNOMED CT, LOINC, Rx NORM) and its deployment, integration, and usage is expected to Improve patient care; Support efficient provider decision making; Reduce paper-based record keeping; Reduce medical errors and Improve patient safety; Improve information availability and accessibility; Improve perceptions, attitudes and practices towards electronic health record keeping and data management and also Enhance continuity of care.

CONSORTIUM TEAM

IHEARDC understands and is totally committed to seeking collaborations with other institutions and individuals for the success of this initiative. Currently, IHEARDC is supported by a community of health professionals, IT, technical and educational institutions working closely to promote the cause of the organization. A strong partnership and continuous commitment have been sought with:

- Valley View University, Ghana- They bring on board skilled IT professionals who will assist in training system users in a “Train a Trainers” strategy for successful implementation of the initiative. The services of students in the School of Health and Nursing will also facilitate digitalization of paper-based records.
- North American Ghanaian Physician and Surgeon Foundation -The commitment of these skilled professionals to providing second medical opinions will contribute to improved diagnostics and reduced medical errors. Their involvement in this initiative will help in producing valuable outcomes.
- Global Health Promotion and Education Institute - This organization focuses on preventive education and their role in educating and generating awareness will strengthen the educational aspect of this project.
- Adventist Health Services Ghana and Ghana Police Hospital - These institutions will serve as the starting point for the implementation of the all-in-one EHRS and measurement device project. They will provide IHEARDC with health centers and professionals who will utilize this system.

PROJECT DESCRIPTION

Introduction

Paper based medical records have proven unreliable over the past decades. Patient care would be made easier if healthcare data can be shared and managed electronically especially in developing countries. Several attempts have been made to introduce electronic healthcare systems in developing countries like Ghana. The Ghana Health Service recently relaunched an eHealth system meant to reduce paper based record keeping

in the government sector. However, such government initiatives have over the years been unsustainable. Ghana is also the target country for the initial implementation of this project. IHEARDC's electronic system envisions a broader interoperable health data management system which comprises a centralized system for demographic data collection, vital signs measurement, cloud storage and an inter-intra information sharing technology and telemedicine.

The overall goal of the project is to improve health records management and healthcare delivery in targeted medical facilities by 2020 in Ghana.

Objectives

- Increase the adoption of electronic health record keeping and vital data collection in targeted facilities by 30%.
- Improve the capacity of staff in handling electronic record system and its adoption among locals by 2020
- Increase intra and inter collaboration and linkages between professionals and facilities in patient care management by 50%.

Expected Outcomes

- Reduced paper-based record keeping
- Increased access to essential equipment in targeted facilities.
- Improved information availability
- Increased electronic health management skills among staff in participating health facilities
- Improved skills, attitudes and practices towards electronic health record keeping and data management
- Enhanced continuity of care
- Efficient service provider decision making
- Reduced medical mistakes

Activities

- Production of equipment and supply of software
- Development of new functionalities and maintenance of the system.
- Procurement and installation of auxiliary equipment eg. desktop computers, tablets, multifunction printers etc.
- Deployment of equipment and software for the digitalization of existing patient records
- Training of service providers in electronic system usage and utilization.
- Community of Practice workshops to review the effectiveness and efficacy of the system.

Outputs

- 200 ERHS devices deployed in targeted facilities.
- 500 healthcare providers trained which includes; doctors, nurses, pharmacist, technicians, IT staff, record officers.
- 10 community of practice teams established.
- 10 review meeting organized.
- 40 health facilities equipped with essential auxiliary supplies like Desktop Computers, Tablets, Solar system, all-in-one printers.

Funds acquired through this platform will be invested in the following areas during the project implementation;

- Procurement and deployment of the all-in-one device
- Training of service providers and device users
- Procurement and installation of auxiliary hardware
- Organization of review meetings and
- Travel and administrative cost

Please find attached For more information please visit

www.iheardc.org