Global Health Informatics – Challenges and Possibilities

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Abstract In our globalized world more projects are done across countries. Especially collaborations between European countries and countries with low resources and infrastructures, like most of the Sub-Saharan African countries, are especially interesting and important for both continents. All partner countries can learn from each other and new technologies can jointly be piloted and evaluated in their different settings. During the workshop existing projects and partnerships in the field of global health informatics shall be presented and discussed by the audience. The aim of this workshop is to come up with new project ideas, identify their potentials and challenges and find partners for joint funding proposals. Additionally, the group will decide whether to start a new EFMI working group or to enhace their efforts in the existing national and international working groups.

Keywords. Global Health Informatics, low-resource settings, Electronic Health Records, Telemedicine, Mobile Health

Introduction of the topic

International networks and increasing global diseases lead to cooperation between countries and continents within the field of health and medicine. Especially in medicine, the exchange of information and new methods is crucial. Equitable access to health care as a pathway to achieving health targets is a function of an efficient health system that delivers high quality services [1, 2]. This requires information on which to base policy and management decisions. One goal of health informatics (HI) is to enhance the utilization of medical data for improving health outcomes by using HI applications in all areas of medical services. Collaborative projects are needed to learn from each other and use best practices wherever possible in order to save scarce resources. In this workshop we especially want to focus on collaborative HI projects between European countries and low-income countries, e.g. Sub-Saharan Africa. Therefore our intended audience are researchers and postgraduates being active in projects with and in the mentioned countries.

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1. Aim of the discussion

The project group "Global Health Informatics" from the German Association for Medical Informatics, Biometry and Epidemiology (GMDS) which was founded in 2013 is facilitating this workshop to enhance their sphere of action [3].

The aim of this workshop is to connect European researchers being active in the area of global health informatics and to discuss and consequently decide whether to start a new EFMI working group in this field. Each participant in this workshop is therefore asked to present themselves and their interests and current projects respectively and be actively involved in the discussions of the presented topics. Through this potential partners for EU project funding schemes (e.g. Horizon 2020) can be identified.

2. Contribution from each speaker

Different speakers from the corresponding GMDS and IMIA working group will briefly present the following topics in order to enhance discussions either with the full audience or split up in two to three groups (depending on the size of the audience):

1. Medical Informatics Education
   An example from the Ethiopian and the German curriculum on HI programs will be given to discuss future topics that will be needed to be integrated into the educational programs (e.g. mobile health applications).
2. Electronic Medical Records (EMR) in low-resource settings
   Success criteria for EMR implementations in low-resource settings are presented and existing open-source solutions are discussed to promote general implementation and evaluation frameworks for different settings.
3. Telemedicine
   Many projects are done in the field of telemedicine or telehealth. A recent Deloitte study on tele-consulting or so-called eVisits said that the US expects a high rise in need of those kind of services, many African countries have already piloted teleconsulting applications [4]. Exemplary we want to present one and discuss lessons learned and the future prospects.
4. Experiences from country cooperations
   Existing cooperative projects between Germany-Cameroon as well as Germany-Ethiopia will be presented. This involves joint work on HI curriculum and research projects in the area of EMRs. The lessons learned of the collaborative work and future plans shall be discussed.
5. WHO e-health strategy toolkit and national strategies
   For policy makers national e-health strategies are important and a group of African countries recently met to adapt the WHO toolkit for e-health strategy development to their special needs. Research projects are best to be aligned with national strategies and therefore we would like to present an exemplary e-health strategy and facilitate a discussion on experiences with national strategies and research respectively.

3. Expected results

The main result of this workshop is to gather all researchers interested in topics concerning global health informatics and get to know each other. At the end of the workshop, after a group discussion, a decision whether to setup an EFMI working group, join the existing IMIA working group or just work together on a project basis, is expected.

Additionally to this a list of specific project ideas, their challenges and potentials are expected.

Possible European funding schemes shall be identified and interests of project partners shall be expressed to work on potential collaborations.

4. References

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