HOME   ABOUT   LOG IN   ACCOUNT   SEARCH   ARCHIVE   ANNOUNCEMENTS   SUBMIT

Home > Medicine 2.0: Social Media, Mobile Apps, and Internet/Web 2.0 in Health, Medicine and Biomedical Research > Medicine 2.0'11 (Stanford University, USA) > Practice > Van Gemert-pijnen

Medicine 2.0®

A Wiki for Collaborative Development in eHealth

Lisette Van Gemert-pijnen*, *University of Twente, Enschede, Netherlands*

Hans C. Ossebaard*, *RIVM (National Institute for Public Health and the Environment), Bilthoven, Netherlands*

Nicol Nijland*, *University of Twente, Enschede, Netherlands*

If you are the presenter of this abstract (or if you cite this abstract in a talk or on a poster), please show the QR code in your slide or poster (QR code contains this URL).

Track: Practice

Presentation Topic: Science 2.0/Collaborative Science

Presentation Type: Oral presentation

Submission Type: Panel Presentation

Building: LKSC Conference Center Stanford

Room: Paul Berg Auditorium

Date: 2011-09-17 03:15 PM – 04:00 PM

Last modified: 2011-08-15

Abstract

eHealth technologies may contribute to solve some serious challenges to global health and health care. As of yet the impact of eHealth technologies on healthcare practice is rather small compared to investments and professional expectation. In our research we have identified five major clusters of causes: a) inadequate research methods, b) lack of knowledge about the process of technological innovation, c) a skewed medical expert-driven approach to eHealth technologies, and d) the use of inapplicable old world theories on human behavior. These causes often lead to the development of high tech solutions that are nevertheless unsuitable for use in a complex health care environment or in patients' social situations. Moreover, expert-driven technologies tend to focus on ill management rather than on patients' wellbeing in real life thereby neglecting the primary goals of care. This accounts for ceiling effects and drop-out rates among users that eventually reduce the impact of eHealth technologies on a range of possible health outcomes. We have constructed an evidence-based holistic framework to develop technologies in order to improve the measurable impact. It accounts for most observed lacuna and deficiencies and comprises human centered, context sensitive and practical principles that are both effective and useful for all stakeholders. These principles are: multidisciplinary in action, development as co-creation, the social nature of technology, integration of development, implementation and evaluation. The framework is published as an on line eHealth wiki in order to share knowledge and information on how to improve the impact of eHealth technologies in a collaborative effort of researchers, developers, policymakers, and healthcare professionals. In the panel presentation we will elaborate on the framework and for the first time publicly demonstrate the possibilities of the wiki to contribute to better outcomes in eHealth. We will show three cases in which the framework (eHealth wiki) has been applied, and we will show the benefits of the holistic approach as catalyst to innovate healthcare.
Methods
A narrative literature review on current eHealth frameworks for development, implementation and evaluation was carried out. The evaluation criteria for the review are the theoretical backgrounds of the frameworks, the focus of the frameworks, the visions on participatory development, the theoretical foundations and conditions for developing technologies that are desired, applicable and feasible. Using techniques from business modeling and concepts from human centered design we have selected effective principles that form the components of the framework, which is a framework-in-progress by definition. Finally we have tested the framework against three research cases.
Results
The framework is published as an open eHealth wiki with accompanying methods and instruments in order to share knowledge and information on how to improve the impact of eHealth technologies in a collaborative effort of researchers, developers and healthcare professionals. This academic enterprise allows for permanent improvement of the framework while testing it against a wide array of cases in research and care. Technology

is no stand-alone device, but a catalyst for innovations, a new way of thinking on how to support healthcare via technology in a Digital Society. Better adherence to safe behavior via co-creation. Better implementation via stakeholders' involvement /investment. Staff, patients can manage IT; participation=motivation. eHealth wiki, instruments to judge the perceived value of eHealth interventions (overall impact). eHealth-education-roadmap (students & caregivers, developers). Due to the holistic approach and cyclic nature of the framework it can be evaluated by its own working principles for creating a fit between human, organization and technology via a participatory development process, value-creation via business modeling, and the social and persuasive nature of technology. The 'summative' evaluation is aimed at a multi-level measurement of the impact on health conditions, care organization and adherence to eHealth technology. The observed situation, casu quo obstacles for technological innovations in a system under pressure, is not specific to the area of health and health care. The framework is in principle translatable to other social engineering areas like improving performance in education or innovation management in e-governance.

Conclusions

The central theme of the panel discussion will be if the adoption of the framework by the international research community could lead to improved impact of eHealth technologies. The first issue is the extent of flexibility of the framework: will it work in diverse settings? What are the challenges in other fields using wiki's (semantic-wiki) for collaborative development of guidelines for medical practice, sharing knowledge of best-practices (research-wiki), disruptive wiki's (ebuss-wiki) to create innovative structures for healthcare based on business modeling. The second issue is how to inspire the collaborative use of the wiki and transplant it to a variety of research areas in eHealth.

We also recommend

A Holistic Framework to Improve the Uptake and Impact of eHealth Technologies
Julia EWC van Gemert-Pijnen et al., J Med Internet Res, 2011

WikiBuild: A New Application to Support Patient and Health Care Professional Involvement in the Development of Patient Support Tools
Patrick Michel Archambault, J Med Internet Res, 2011

Why business modeling is crucial in the development of eHealth technologies.
Maarten van Limburg et al., J Med Internet Res, 2011

Frameworks, Models, and Theories Used in Electronic Health Research and Development to Support Self-Management of Cardiovascular Diseases Through Remote Monitoring Technologies: Protocol for a Metaethnography Review
Roberto Rafael Cruz-Martínez et al., JMIR Res Protoc, 2019

An eHealth Capabilities Framework for Graduates and Health Professionals: Mixed-Methods Study
Melissa Brunner et al., J Med Internet Res, 2018

WED 063 Eslicarbazepine acetate switch from carbamazepine or oxcarbazepine
Peltola Jukka et al., J Neurol Neurosurg Psychiatry, 2018

Meeting Expected to Host More Than 25,000 Pharmacists
By staff, US Pharmacist, 2019

Trauma-Informed Social Policy: A Conceptual Framework for Policy Analysis and Advocacy
Elizabeth A. Bowen et al., Am J Public Health, 2016

SECO 20/20 partners with eight organizations at annual conference
Healio

Advancing Social Work Education for Health Impact
Teri Browne et al., Am J Public Health, 2017

Powered by TREND MD