# Online Journal of Public Health Informatics

High-quality research and innovation in the field of public health informatics Volume 11 (2019), Issue 3 ISSN 1947-2579 Editor in Chief: Edward K. Mensah, PhD, MPhil

Contents

## Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

## **Abstract**

This commentary explores how established citizen science models can inform and support meaningful engagement of the public in health research in Australia. In particular, with the growth in participatory health research approaches and increasing consumer participation in contributing to this research through digital technologies, there are gaps in our understanding of best practice in health and biomedical citizen science research to address these paradigm shifts. Notable gaps are how we might more clearly define the parameters of such research and which citizen science models might best support digitally-enabled participation falling within these. Further work in this area is expected to lead to how established citizen science methods may help improve the quality of and the translation of public engagement in health research.

(Online J Public Health Inform 2019;11(3):e10358) doi:10.5210/ojphi.v11i3.10358

###Reviewer names will be inserted here### published 19.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2019;11(3):e10358

URL:

doi:10.5210/ojphi.v11i3.10358

PMID:31993110



# Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

### **Abstract**

Objectives Information and communication technology (ICT) tools are increasingly important for clinical care, research, data management, international collaborations, and dissemination. Many technologies would be particularly useful for healthcare workers in resource-limited settings; however, these individuals are the least likely to utilize ICT tools, in part because they lack knowledge and skills necessary to use them. Our program aimed to train researchers in low-resource settings on using ICT tools. Methods We conducted a tiered, blended learning program for researchers in Kenya on three areas of ICT: geographic information systems, data management, and communication tools. Tiers included didactic online courses for 100-300 students for each topic, skills workshops for 30 students, and mentored projects for 10. Concurrently, a training of trainers course comprised of an online course and a skills workshop to ensure sustainable ongoing training. Results Course ratings were high, particularly when participants engaged in hands-on skill building activities. Teaching that incorporated local examples was most valuable. Discussion boards were sometimes distracting, depending on multiple factors. Mentored projects were most useful when there were clear expectations, pre-existing projects or data, and clear timelines. Discussion Training in the use of ICT tools is essential to improve their use among researchers in low-income settings. However, very few training courses have been described. Our students demonstrated acquisition of new skills and felt these skills to be valuable in their workplaces. Conclusions Further and ongoing training in ICT skills should be considered in other low-resource settings, and could use our program as a foundational model.

(Online J Public Health Inform 2019;11(3):e10323) doi:10.5210/ojphi.v11i3.10323

###Reviewer names will be inserted here### published 19.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2019;11(3):e10323

URL:

doi:10.5210/ojphi.v11i3.10323

PMID:31976035



## Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

### **Abstract**

Introduction The transmission of test results by laboratories and their receipt by health facilities are common tasks in the processing of medical information. Managing the flow of information generated by these tasks remains a challenge for these centers. We describe a new system that will allow electronic management adapted to the transmission of results. Materials and methods The information system implemented is a client-server system including three main components: the server installed in the laboratory, the client distributed in the AntiTuberculosis Center (ATC) and the communication channel represented by a Virtual Network. The exchange protocol is based on the HL7 standard, in particular by using messages of type ORU\_R01. Results During the two months of implementation of this electronic result transmission system between the National Tuberculosis Reference Center in Abidjan and the ATC in Adzopé, which is about 110 kilometers away, twenty laboratory results were transmitted as soon as they left the laboratory, unlike the time is taken previously, which was about 1 month. The minimalist interface and ease of use of the system have allowed it to be adopted by users. Discussion The use of the HL7 protocol for electronic notifications has proven its effectiveness in making transmissions of results instantaneous. Our system developed specifically addresses the problems related to the transmission of its results; reduction of transmission time, loss of paper supports, transport costs for remote sites. This system is at this level of development a proprietary system by its type of coding. The use of a code system such as LOINC would allow full interoperability between different Information Systems.

(Online J Public Health Inform 2019;11(3):e10255) doi:10.5210/ojphi.v11i3.10255

###Reviewer names will be inserted here### published 19.

Please cite as:

Roles of Health Literacy in Relation to Social Determinants of Health and Recommendations for Informatics-Based Interventions: Systematic Review

Online J Public Health Inform 2019;11(3):e10255

URL:

doi:10.5210/ojphi.v11i3.10255

PMID:31976034



Publisher: JMIR Publications 130 Queens Quay East. Toronto, ON, M5A 3Y5 Phone: (+1) 416-583-2040

Email: <a href="mailto:support@jmir.org">support@jmir.org</a>



