MEDINFO 2017: Precision Healthcare through Informatics A.V. Gundlapalli et al. (Eds.)

© 2017 International Medical Informatics Association (IMIA) and IOS Press.

 $This\ article\ is\ published\ online\ with\ Open\ Access\ by\ IOS\ Press\ and\ distributed\ under\ the\ terms$ 

of the Creative Commons Attribution Non-Commercial License 4.0 (CC BY-NC 4.0).

doi:10.3233/978-1-61499-830-3-1213

# Cultural Problems Associated with the Implementation of eHealth

Mandirola Brieux H-F.<sup>a,d</sup>, Benitez S.<sup>a</sup>, Otero C.<sup>a</sup>, Luna D.<sup>a</sup>, Masud J.H.B.<sup>b</sup> Marcelo A.<sup>c</sup>, Househ M.<sup>f</sup>, Hullin C.<sup>h</sup>, Villalba C.<sup>g</sup>, Indarte S.<sup>e</sup>, Guillen S.<sup>d</sup>, Otero P.<sup>a</sup>, Campos F.<sup>a,d</sup>, Baum A.<sup>a</sup>, Gonzalez Bernaldo de Quirós F.<sup>a</sup>

<sup>a</sup> Hospital Italiano (HIBA), Buenos Aires, Argentina
 <sup>b</sup> Public Health Informatics Foundation (PHIF), Bangladesh
 <sup>c</sup> University of the Philippines, Manila, Philippines
 <sup>d</sup> HL7, Argentina
 <sup>e</sup> UEIIDISS, Montevideo, Uruguay

f King Saud Bin Abdulaziz University for Health Sciences, College of Public Health and Health Informatics, Ministry of National
Guard Health Affairs, Riyadh, Kingdom of Saudi Arabia

g Facultad Politécnica, Universidad Nacional de Asunción, Paraguay

h UC Pontificia Universidad Católica de Chile, Santiago de Chile, Chile

#### Abstract

A major hurdle in eHealth implementation is that it is difficult to put into practice. In this study, the primary aim was to identify the main barrier associated with implementing eHealth. This study surveyed IMIA members from May to November 2015. From the results, it is clear that medical professionals were recording most of their data by hand. This paper culture is a paradigm that is difficult to break. Cultural factors are the primary barrier in eHealth implementation.

### Keywords:

Computer systems; Telemedicine; Medical Informatics

## Introduction

Working without paper is not an easy goal because barriers are not solely technological and technology is more accessible. Rather, workflow processes require rethinking and breaking also with aspects of the culture of using paper. [1] eHealth refers to the application of information and communication technologies (ICT) across the whole range of functions that affect health. [2]

### Methods

In order to collect data about cultural problems associated with the implementation of eHealth, we conducted a survey. Inclusion criteria for participants included medical informatics experts who are members of IMIA working group forums. The survey was distributed by e-mail using Survey Monkey. The survey included questions that asked about the topics below.

Do you think that it is important:

- A. To break the culture of paper first?
- B. To keep in mind local languages and terms used in each region or country?
- C. To study first the idiosyncrasies of each place and to adapt technology?

## Results

A total of 111 responses were received (response rate 92%), where, 27 came from South America, 24 from North America,

27 from Europe, 3 from Africa and 30 from Asia. Responses were excluded if the participant did not answer >2 questions.

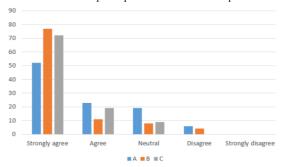


Figure 1 - Responses to survey questions

# Conclusion

Cultural barriers are one of the most important barriers in implementing eHealth, [1-2] a finding supported by this study.

### References

- N.M. Lorenzi, R.T. Riley. Managing Change. J Am Med Inform Assoc. 7 (2000) 2:116–24.
- [2] Digital Agenda for Europe European Commission. Digital Agenda for Europe. Available from: http://ec.europa.eu/digital-agenda/ Last accessed 23 November 2015.

#### Address for correspondence

Dr. Humberto F. Mandirola Brieux hmandirola@gmail.com