Digital Health Literacy: Beyond IT Skills

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Abstract. This panel will discuss what digital literacy (or e-Literacy) means in the context of health care work, its importance and how it might be attained. The panel topic is of particular importance for the conference's main theme of improved care through informatics. The discussion is informed by our studies of implementation and use of different information systems (such as e-prescribing, electronic transmission of prescriptions, and electronic health records) in healthcare organisations. Our starting point is the need to move beyond narrowly conceived IT skills and 'key-stroke' training and address a wider set of literacies, incorporating skills, capabilities, understandings and sense making activities. We are interested in how healthcare professionals (HCPs) work mediated by digital technologies and performed by individuals, in co-operation and collaboration with others and within wider institutional and inter-institutional contexts, might be facilitated by different approaches to e-Literacy. We discuss how the process of acquiring and sustaining digital health literacy can be conceptualised and facilitated. We ask questions such as what are the implications of these conceptualisations of digital health literacy for HCPs education, for training and for other activities during information system implementation and adoption? We also ask how can digital health literacy be sustained as a competency of the organisation as well as the individual?

Keywords. Digital health literacy, e-Literacy, education, health information systems

Introduction of the topic

Digital technologies in healthcare are promoted as enabling better (and cheaper) healthcare. However, research indicates that the predicted benefits of those technologies often do not materialise upon their implementation [1, 2]. This may be, at least partly, linked to the lack of education, training and on-going support for healthcare professionals (HCPs) as users of such technologies [3]. As different studies note, (some) HCPs are concerned about their ability to use IT competently and effectively and identify a need to be better educated and supported [4]. Yet, as Hilberts

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and Gray conclude [5] "there is surprisingly little evidence about what works and doesn't work with regard to the ehealth education, training and professional development infrastructure that may critically influence implementation" [p124]. Research into implementation of digital technologies indicates that a-contextual training 'on the system' is not sufficient or even welcome by HCPs [6].

We wish to discuss the need for a better understanding of health digital literacy within the context of HCPs' work (mediated by digital technologies and performed by individuals, in co-operation and collaboration with others, and within wider institutional and inter-institutional contexts) and in the context of sustained organisational competencies. Most studies related to health digital literacy are concerned with patients or citizens using web-based health sites [7,8], relatively few are concerned with professional competencies or organisational arrangements. In the panel discussion we will draw on available studies as well as on wider literature on e-Literacy, healthcare work, information systems and health informatics to develop conceptualisations of digital literacy for HCPs, for organisations, and to outline implications for education and activities during information system implementation and adoption.

The panel debate and Focus of Speakers

The authors of this paper will be the panellists (Tony Cornford will chair); we also expect to include a further panellist from Scandinavia with relevant research experience. The chair will make a short introduction, then the panellists will draw on findings from studies on IS implementation and use in healthcare to discuss how HCPs use of IS may be hindered or enabled by attitudes, competencies and literacies.

The panellist **Ela Klecun** will propose different dimensions of digital health literacy drawing on work in health care as well as in other areas including in contexts of social and digital exclusion.

Valentina Lichtner will focus on how HCPs can be assisted in developing and sustaining their own digital health literacy. This presentation will draw on observational research in a number of health care settings and emphasise the situated nature of any mastery of these technologies-in-use.

Tony Cornford will argue for digital literacy as a core competency of the organisation – a collective and dynamic endeavour, rather than a personal skill set. This position draws on the growing literature on competencies as strategic drivers and as a powerful way to understand how digital innovation may be sustained.

The audience will be invited to participate with their own experience, contribute with questions and comments. They will also vote on a number of substantive issues and positions. In this way we will assess understanding and opinion among the audience at the start and at the end of the session and thus attempt to identify changes among the audience.

Online Support

The event will be accompanied by an online blog space and a conference poster, where participants will be able to post their comments, experiences and ideas on digital health literacy. We hope that debate will continue online after the closing of the conference session.

Acknowledgements

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