Conceptualizing ‘roles’ in patient-engaging eHealth: an analytical overview of the literature

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Abstract. Two recent reviews have argued that little attention has yet been paid to how eHealth affects roles and responsibilities in healthcare. We present here an alternative review strategy by way of which we may elicit from the existing literature significant insights relating to roles in eHealth. We suggest that the apparent absence reflects an inadequate conceptualization of ‘role’. We conduct a cross-disciplinary literature synthesis to articulate the different ways in which role is conceptualized. Becoming more aware of assumptions and implications related to the concept of role may 1) lead to a renewed appreciation of the contribution of existing literature to help us understand the social and organizational implications of patient-engaging eHealth, and 2) serve as a theoretical contribution leading to increased reflectivity, and more rigorous use, when using the concept of role in relation to eHealth.

A deficit in the literature?

A recent systematic review of the literature on the implementation of eHealth systems (Mair et al., 2012) suggests that little attention has yet been given to the question of how eHealth systems affect roles and responsibilities in the provision of healthcare. Likewise another review of the literature, on how eHealth affects the relationship between patients and medical professionals (Dedding et al., 2011), argues that more attention should be paid to the redistribution of tasks and responsibility to patients.
Granted that the public promotion of eHealth systems to a large extent focus on exactly eHealth’s capacity to redistribute tasks and responsibility to patients, this suggested deficit in the literature is surprising. This type of claimed deficit in the literature is also surprising in another way: In the Science and Technology Studies (STS) literature the social and organizational implications of eHealth systems have been studied intensely for many years and here changes in roles and responsibilities do seem to have been a central concern in many studies (e.g. Langstrup, 2008; Oudshoorn, 2008; Mort et al., 2009; Danholt et al., 2013). Why do the well-known STS findings not find their way into the so-called ‘systematic reviews’? A possible explanation may be that exchanges between different fields of studies, most notably between the biomedical sciences and social science/humanities, can be limited, even when they aim at elucidating similar subjects. However, we wish to suggest that it may also be due to a lack of reflection on the very conceptualization of roles. In this paper we wish to explore and challenge the often taken-for-granted use of the concept of roles.

Articulating roles

What is the recent history of the concept of role? In the mid-twentieth century sociological theory, the concept of role was used to describe how patients and health professionals interact and how healthcare practices are organized (Parsons, 1951; Goffman, 1961). In this literature the concept of role implied some specific and explicit assumptions of the relation between agent and structure, the function of a role for the individual and for society and its (in)stability faced with contextual factors. Today and in the literature of interest to this study it seems that the concept of role (and the related ‘responsibility’) are often used less rigorously.

Reviewing the scientific literature on patient-engaging eHealth, we wish to articulate the different ways in which role is conceptualized; which explicit and implicit assumptions such conceptualizations entail; and which implications these conceptualizations have for what is found to be at stake in the digitalization of healthcare practices in different strands of the literature. We have the assumption that the way in which the concept of role is conceptualized, is not without consequences for which kinds of changes and challenges in healthcare that may be rendered visible.

Reviewing the literature

The cross-disciplinary literature synthesis presented is an alternative to the standardized systematic literature review. In line with other recent approaches
(Greenhalgh et al. 2009; Arksey & O’Malley 2005; Wadmann et al. 2013), we seek to synthesise a heterogeneous body of literature, while not reducing its complexity in dealing with a specific ‘shared’ phenomenon – in our case the conceptualization of role in relation to eHealth. Methodologically we are particularly inspired by Wadmann et al. (2013), who seek to identify the analytical perspectives used across different types of literature engaged in studying ‘performance based management’. Thereby we supplement our overview of the literature while concomitantly serving as a theoretical contribution that may increase reflexivity when using the concept of role in relation to eHealth.

The literature search was performed in two stages. In stage one, studies were sought in the following databases: PubMed, PsycINFO, CINAHL and Sociological Abstracts, using a combination of subject headings describing the technology (eHealth OR telemedicine) AND role. Criteria for inclusion were studies published in peer-reviewed journals between 2005 and 2015 in the English language.

By virtue of our knowledge from especially the field of STS, we found that the first stage search missed a range of seminal works from this field. A second literature search was performed using more overarching search terms since STS also address roles using a more generic vocabulary. Searching the same databases, we used a combination of subject headings describing the technology AND role (and added the following terms combined with OR: self care, self monitoring, patient participation, empowerment, agency, professional identity, division of labour). Because of a bigger search result in the second stage search, we made more rigorous inclusion criteria: studies about patient involving technologies (not passive technologies) where participation is invited (provided by the public health system).

Preliminary findings

Our findings are at this stage still preliminary, but so far we have formed and termed three analytical categories for how roles are conceptualized in the included studies:

Role as a structurally given position: In part of the literature (primarily in Medical journals) roles – i.e. a more empowered patient – are implicitly regarded as something provided to actors as a function of the new structure of healthcare put in place with eHealth.

Role as an individually held/experienced identity: Other parts of the literature (primarily within Sociology, Nursing and Psychology) adds an interpretive dimension to the notion of role, by looking towards the individual patient’s or
health professional’s own interpretations and experiences in order to understand the actual content of the role.

Role as the contingent position of an actor in a network of relations: Focus in this part of literature (primarily in Sociology, STS and Information Science journals) is the relationally defined agency of various human and non-human actors in the sociotechnical networks of eHealth. Roles are seen as relationally enacted and contingent on the specific configuration of practice.

Looking at the implications of these different conceptualizations, for what is found to be at stake in the digitalization of healthcare practices, we find indications that there is a relation between the form of conceptualization and the extent to which changes in healthcare are either found to be beneficial and desireable or to be potentially problematic and unstable.

By articulating these different ways of using the notion of role in the literature on patient-engaging eHealth, we hope to show that the effects on roles are addressed, however, often in a quite implicit manner and resting on quite different basic assumptions. We suggest that more analytically informed literature review approaches might provide better overviews of the literature when dealing with highly cross-disciplinary evidence, as is the case here. Also we may need to become more conscience of how we use the notion of role, not least if we want to elucidate the extensive social changes implied by patient-involving eHealth.

References