

Participatory Design for Off-the-Shelf Health Information Technology

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Abstract

Healthcare organizations are increasingly relying on vendor-supplied health information technology (HIT). There is a need for improved methods of user participation for the procurement, deployment and ongoing development of such systems. Participatory Design (PD) is a sociotechnical design approach where users are active participants in the stages of planning, implementation and evaluation, but PD can be challenging and traditionally PD has been used in the implementation of local, small-scale systems. This workshop will: provide the opportunity for participants to learn from each other's experiences of being involved in, and involving users in, HIT implementation; elaborate the challenges of involving users in HIT implementation; understand how these issues play out in different settings, e.g., primary care and secondary care; provide an understanding of PD and how it could be applied in vendor-supplied HIT implementation; and explore how existing methods of PD can be adapted to better suit vendor-supplied HIT implementation. The workshop will combine: presentations that draw on the speakers' experiences of using PD methods; small group activities that give participants experience of planning and using some PD methods; and discussions that explore who to involve, finding the time for users to participate, and measuring success.

Introduction

Participatory Design (PD) is a sociotechnical design approach where users are active participants in the stages of planning, implementation and evaluation. Its use in the implementation of health information technology (HIT) has been motivated by acknowledgement that greater user involvement leads to more effective systems. There is variation in the methods that are used in PD and users should be involved in the selection of methods to be used for any particular project. Methods include: observational fieldwork; focus groups; and design rationale or scenario-based design. PD can be challenging and issues include encouraging users to participate, finding methods that enable a greater number of users to participate, and ensuring that a range of voices are heard, not just the more enthusiastic users.

Traditionally PD has been used in the implementation of locally developed, small-scale systems. However, healthcare organizations are increasingly relying on vendor-supplied HIT. This means that organizations are often purchasing systems where the flexibility to adapt systems to local work practices is limited. In such situations there is a need to ensure that users participate in the procurement, deployment and ongoing development of such systems. Without adequate participation, there is likely to be a mismatch between the technology and the work practice of the users, with the result that users may, both individually and as a group, develop 'work arounds' which can lead to a variety of unintended consequences. Alternatively, the system may fail, not because of a technical problem but because the intended users refuse to use it.

Workshop structure

There is therefore a need for improved methods of participation for the implementation of vendor-supplied HIT. This workshop will draw on experiences of carrying out PD across a variety of different systems and contexts to discuss how approaches can be best applied to vendor-supplied HIT. Workshop activities will give participants experience of planning and undertaking some of the methods of PD. These activities will be undertaken in small groups to facilitate concentrated discussion and to assist participants in getting to know each other. Participants will undertake a scenario-based design exercise where, through discussion and drawing rich pictures, they will critically reflect on their work and consider the implications of their work practice for the deployment of HIT and vice versa. In a second activity, participants will be given details of a new HIT system and the context in which it is to be deployed and asked to design a PD strategy. Each group will be given the same details and in the feedback sessions we will discuss the advantages and disadvantages of the proposed methods. Through this activity, issues of who to involve, how to find the time for users to participate, and how to measure success will be explored.