

User Training of Patient Information System-Longitudinal Study in Central Finland

Tuula Kuusela, Kaisa Lemmetty and Eija Häyrinen

MediKes Information Management, Central Finland Health Care District, Finland

Abstract and Objective

Health care professionals require versatile user training when adopting information systems. The first study was completed in November 2006 (n=290) and the second in June 2009 (n=420). The respondents were generally satisfied with the classroom teaching. Almost half of them had practised the use of information systems after the teaching in the training environment. The second study reveals training independently at work was in particular appreciated. Good learning results were obtained when practising with personal guidance after classroom training.

Keywords:

Health services, Information systems, Computer user training (MeSH)

Introduction

Implementing an information system always changes work processes and routines. Endorsing employees' attitudes can be done with information, training and also by involving employees in planning and in the implementation. [1,2] Employees' involvement is crucial for the implementation at all stages, especially regarding training sessions and learning results. Proper training and support are an essential part of a health information system implementation process [2, 3], and sufficient learning is essential for professional expertise. Training opportunities indicate that the organisation supports the implementation and development. [2,4]

This paper presents results of two studies that took place in the Central Finland Health Care district after the implementation of a patient information system. The purpose of the studies were to describe the professional competence in information systems of the users in health care after the training sessions.

The target group of the study consisted of the employees to implement electronic patient record systems in the Central Finland hospital district (n=290 and n=420). The first questionnaire was completed in November 2006 and the second one in June 2009.

Results

The results reveal that computer skills as well as patient information system skills were altered. In the second study (n=420) the respondents considered that they had average

skills (mean 6.8, SD 1,6) to be much lower than in first study. In this study over 54 % percent of respondents had working experience more than 15 years and their average age was high. General computer skills decreased from 8.6 in the age group of 25–34 years to 7.2 in the age group of 55–65 years. The youngest employees considered their computer skills better than the older ones. These results remain in both studies.

After the user training, almost half of respondents (48%) changed their negative attitude towards the information system to positive. A need to extend training content was initiated in both studies; especially this was emphasized among young employees. End user support was customised to meet the requests in working units. Specific written guides were made following the workflow and clinical processes. Guides' seemed to act as feasible support after the teaching sessions.

Discussion

In the first study the results revealed that computer skills in relation to work tasks were estimated better in the group with work experience between 6 and 15 years. The second study does not support this finding. There results suggest that the young employees are confident not only with computing but also using patient information system. Majority (71% and 86%) responded them having good skills in using patient information system to work tasks. A need to develop patient information system training was stressed in both studies.

Most important subject is to relate the patient information system training to work tasks. Training independently at work is essential as well as providing full user support in clinics.

References

- [1] Koivunen M, Välimäki M, Koskinen A, Staggers N, Katajisto J. The impact of individual factors on healthcare staff's computer use in psychiatric hospitals. *J Clin Nurs.* 2009 Apr;18(8):1141-50.
- [2] Häyrinen K, Saranto K. Successful health information system implementation. In: Khosrow-Pour M, ed. *Encyclopedia of Information Science and Technology.* Volume I–V, pp. 2678–2683. Hershey: Idea Group Reference, 2005.

- [3] Saranto K, & Hovenga, EJ. Information literacy – what is it about?; Literature review of the concept and the context. *Int J Medical Informatics*, 2004, 73(6), 503–513.
- [4] Lemmetty K, Kuusela T, Saranto K, Ensio A. Education and training of health information systems – a literature review. In: Park, H-A, Murray, P, Delaney, C, eds. *Proceedings of NI2006. 9th International Congress on Nursing Informatics*, Seoul, Korea, June 2006, pp. 176–180. Amsterdam: IOS Press, 2006.

Address for correspondence

tuula.kuusela@medikes.fi
<http://www.medikes.fi>