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The Practice in Health Information Systems Training

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Abstract

The health information system implementation is mostly seen as technical project and little research is done evaluating outcomes of organisational learning. There seems to be a gap between teaching new function management and systematically evaluate information system implementation and its effect in healthcare practice. Modern technology like Health Information Systems with computers and new application are implemented. However the training uses traditional educational methods and upholds old-fashioned ways of learning. The pervasiveness of new educational technology has not yet emerged in health information system training

Keywords:

health information system, training, education

Introduction

In Central Finland Health Care district implementation of electronic patient record took place during September 2005 to May 2006. The Health Care district employs approximately 2600 officials: consisting of 282 doctors, 1489 members of nursing personnel, 919 persons in other positions like secretaries and assistants. In this hospital there are approximately 2100 end-users for patient record consisting of doctors, nurses, other healthcare professionals and administrative personnel. Arrangements for implementation included in-house training for users' minimum 3-4 hours. This means 2100 *3 hours that is 6300 hours, which is 777 working days spent in training sessions. For time being there is some knowledge about the influence of training in usage of patient information system.

Training of health information systems

The current awareness in systematic reviews and evidence-informed education within policy and research circles is a part of a general progress towards establishing policies and professional practice on the basis of sound evidence of efficiency. The best practice concept covers those processes, practices or systems, identified in public and private organisations that execute exceptionally well, which are widely recognised as improving an organisation's performance and efficiency in specific areas. Systematic reviews on education can help to collate a range of research types so as to investigate what works and what does not, how things work or why they do not; or to study existing practices, trends, needs or promising areas for development. [1, 2, 3]

Based on a review when instructing health information system previous computer skills or competence were neither explicitly defined nor measured. Even tough in several studies the participants presumably had computer know-how because the system itself presented advanced technology. The learning environment was in most cases the participant's own work surroundings. The knowledge or know-how attained from the training, or the educational impact on information system usage were seldom explored or measured. The review revealed that competence in any level of health informatics contributes to the learning process. The learning environment was seldom created for the educational purpose only. The system training was mainly a part of an introduction course to a new function or changes in the organisation. Teaching methods were interestingly often traditional, including written material and lectures. The innovations in virtual learning are nonetheless proliferating. Different teaching methods were widely used and pedagogical approaches varied from behaviouristic to cognitive and constructive approaches. [1]

Challenges in educational practice

Health information system teaching and learning is going to influence attitudes and future working practices. [4] The health system is expanding its use of information technology to complete evermore demanding tasks within health system. To manage these changes, staff education, personnel attitudes and the management of changes knowledge is required. [5] As main goal for implementing health information system is to manage information so that everyone has right of entry to the information they require to do their jobs effectively and make available better, more competent care.[4] Many healthcare professionals realise they need skills in finding and using information, and in assessing information systems. Yet today's health professionals generally have no formal training in health informatics. [6,7]

It is challenging to asses the impact of training and education on clinical utilisation of health information systems. Objectives for implementation consists of knowing how well do the system work. Then new function management should improve patient care.[1] The goals for training reveal did the training succeed and how clinical utilisation of information system is going on. Evaluation needs to be done in two dimensions taking into consideration both individual and organisational level of learning. Modern technology like Health Information Systems with computers and new application are implemented. However the implementation training uses traditional educational methods, classrooms and supports old-fashioned ways of learning.

The pervasiveness of new educational technology has not yet emerged in health information system training.[1, 6, 7] Learning spaces need to sustain multiple ways of learning. Learning designs should be created around people and learning principles. Learning is more important than the use of technology only, but technology can impede learning. New technology can progress and assist learning in various ways. [8, 9] Best practices in education rise from research, consensus models and benchmarking. Good practice has contact and collaboration, using active learning strategies and respects diverse talent and ways of learning.[2, 10] Within in health care deployment of pedagogies that support high-context, multidimensional, emergent approach and uses asynchronous tools should be apparent.

Discussion

Health information system implementation has effects in learning, both individual and organisational level. Prior to training one should assess competence of trainees. Evaluation of new function management and system usage, training achievements and assessment should be carried out systematically. Publishing findings profits information that is basic for creating Best practice.

The health information system implementation is often seen as technical project and some research is done evaluating outcomes of organisational learning. Hence, there seems to be a gap between teaching new function management and systematically evaluate information system implementation and its effect in healthcare practice.[1]

Learning is enhanced when it is more like a team effort that a private competition. Good learning, like excellent employment, is collaborative and social, not competitive and remote. Functioning with others repeatedly increases contribution in learning. Reflecting, sharing one's own ideas and responding to others' reactions creates meaningful interaction and deepens process oriented learning activity within health care.[9]

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