

Emergency Department Information System Education and Training for Clinicians: Lessons Learned

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Objective

Of all the potential barriers to a successful Electronic Health Record (EHR) adoption, the importance of training is often underestimated, potentially jeopardizing the implementation¹. Following best practices recommendations, we designed and implemented a comprehensive EHR training framework. The aim of this poster is to describe our experience with such a framework in the implementation of our home-grown Emergency Department Information System (EDIS), report lessons learned and provide recommendations for other institutions facing EHR adoptions in Chile and Latin America.

Keywords:

Training; Emergency Department Information System; Education; Organizational Implementation.

Methods

Clinica Alemana de Santiago (CAS) is a 424 bed private hospital. The Emergency department (ED) receives 228,781 consults per year and has utilized a commercial EDIS since 2008. We designed and conducted the comprehensive training strategy in preparation for the deployment of a completely new home-grown EHR. We designed a three-stage framework based on **education** (3 hours online course with theoretical material, short demo videos, and a test), **training** (45 min. 1-1 sessions where the clinician follows user stories, recording milestones completion and receiving directions if required) and **on-site support** (continuous 24/7 crew of technical and clinical experts serving as a personalized support and bug reporting system, for three months since the rollout).

Fourty five days prior to the rollout, we invited all the ED clinical staff to access the on-line education system using their institutional credentials, and once completed and approved, to schedule a training session either via e-mail, phone or walk-in (if available). Everybody was expected to complete the training before the rollout. After the rollout, reduced capacity training was still available for new hires.

Results

The described methodology provided the required preparation, contributing towards the success in the adoption of the new EDIS. We received positive feedback from unit administrators who perceived well prepared clinical staff for the implementation. Although the model was successful, interesting lessons were learned, which will be addressed before the rollout of our new outpatient module of the EHR.

Discussion

Based on an extensive literature review and our experience implementing the framework, we have gained valuable experience including:

- Manage timing with the developer team: gain access to stable version in advance to prepare training material.
- Consider also enrolling residents in the training framework.
- Reduce size of theoretical written material and provide more short categorized videos.
- Online education needs to be differentiated: distinct courses with different coverages for distinct clinical entities.
- Demonstrate the value of your training to clinicians by showing how a well-organized chart helps to provide a safer and more efficient patient care, and the explain the relevance of good quality clinical data for secondary use.
- Deploy satellite training facilities in the users' regular resting spaces (i.e. physician's lounge).
- Provide enhanced training to key clinical stakeholders given that peer-to-peer training is usually preferred by clinicians.
- For newly hired clinicians, integrate the EHR training and education within the regular clinical service orientation classes, introducing the learner to the complete culture, processes and documentation methods of the organization.
- Avoid implementations during the summer: less crowded ED did not compensate for the amount of floating staff and the double training effort required when primary staff returned to work. Find a low demand period with primary staff available.
- Only provide access to EHR if education module is approved. However, be prepared to provide "emergency on-site training", for untrained healthcare providers showing up for their shifts without proper education and training
- Provide a distinctive uniform that differentiates your support staff from usual clinical staff, facilitating their location by clinicians, while preventing confused patients seeking help from them.
- Maintain a continuous streamlined feedback and bug reporting mechanism.

References

- [1] Weir C, Lincoln M, Roscoe D, Turner C, Moreshead G. Dimensions associated with successful implementation of a hospital based integrated order entry system. Proc Annu Symp Comput Appl Med Care 1994:653-7.