Strategies to Reduce Electronic Health Record Related Burnout Among Nurses

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Abstract. The introduction of electronic health records (EHR) systems can have a profound impact on the daily clinical activities of nurses. Recent studies have suggested that the adoption of EHR systems may have contributed to burnout among nurses. This poster presentation will explore potential strategies to address the emerging issue of burnout associated with EHR systems in nurses.

Keywords. Burnout, electronic health record, nursing informatics, nursing

1. Introduction

Nurses are one of the main end-users of health information technologies. Novel technologies, such as patient portals [1] and barcode medication administration systems [2], have influenced how nurses perform their day-to-day clinical activities. In particular, the introduction of electronic health record (EHR) systems in clinical care delivery have led to a number of unintended consequences [3] which may have contributed to burnout. While this issue is well documented among physicians, it is increasingly being recognized among nurses and other health professionals. This poster discusses strategies that organizations can implement to reduce EHR related burnout among nurses.

2. Methods

This poster presents information identified in the academic literature regarding strategies to support the potential reduction of EHR related burnout among nurses. Academic databases (e.g., MEDLINE) were searched using relevant key terms (e.g., burnout). Articles that were included in the analysis must focus on strategies that could be applied among nurses to reduce EHR related burnout. Articles that examined EHR burnout in

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other healthcare professionals (e.g., physicians, pharmacists) and/or burnout caused by other factors were considered out of scope for this review.

3. Results

Before introducing strategies to reduce burnout, a baseline burnout measurement is important to conduct. Strategies to reduce EHR related burnout among nurses include the following two groupings, as well as an evaluation of their efficacy:

3.1. Understanding EHR Usage Patterns

Understanding how nurses currently use and complete documentation on EHR systems will provide insight into the issues and bottlenecks related to EHR usage. Gaining a representative and accurate perspective may involve a multifaceted approach that includes delivering validated questionnaires, conducting interviews with point-of- care nurses, and evaluating backend usage data [4]. In particular, backend analytics can provide insights into how nurses are using the different features of the EHR throughout their shift. However, while significant work has focused on identifying meaningful metrics for physicians [5], there is currently limited insight into relevant metrics for nursing practice.

3.2. Delivery of Evidence-Driven Interventions

Based on the identified issues and bottlenecks, a number of interventions, such as evidence-driven training and support [6], may be used to support point-of-care nurses in effectively using EHR systems. These interventions may be delivered in collaboration with nurse managers, who have been identified to have a significant role in supporting the effective usage of these technologies [7]. The poster will provide an overview of the various other interventions identified in the literature.

4. Conclusions

This poster presentation will present a variety of evidence-informed approaches to addressing the emerging burden associated with using the EHR in clinical care delivery among nurses. As most of the work has focused on physician use of the EHR [8], these findings will provide a unique perspective on the gaps and opportunities to address this problem in nursing practice. Outlining such an approach based on the literature may provide a feasible and data-informed way to iteratively identify and mitigate burnout related to the use of the EHR. A limitation of this work is that the cause of burnout is multifactorial [9], and thus addressing EHR related frustrations and challenges may not eliminate burnout entirely among nurses. By reducing EHR-associated burnout among nurses, it will ensure that EHRs can be appropriately and effectively used to support care delivery.

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