

RESIDENT COMPETITION RESEARCH ARTICLES

Dermatologists' Perceptions and Use of Electronic Health Record Systems

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ABSTRACT

Introduction: Electronic Health Records (EHR) have been adopted and integrated into medical practices over the past 20 years. Many positive and negative implications have been described by physicians using EHR. This study aims to US dermatologists' perceptions and use of EHR within their clinical practice.

Methods: A validated survey was administered to US dermatologists at a national educational conference to assess use and perceptions of EHR.

Results Seventy-two percent (291/400) of those sampled completed greater than 90% survey and were included in outcome analysis. Eighty-six percent of the participants were currently using or had used EHR. Most dermatologists felt that EHR negatively impacted their workflow efficiency and face-to-face time with patients. A portion of dermatologists thought that EHR improved their documentation.

Limitations: Selection bias may have led those with strong beliefs with EHR more likely to complete the entire survey.

Conclusion: Despite widespread adoption, most dermatologists have a negative impression of EHR and felt that it interfered with their ability to effectively see patients. Interventions to improve EHR should focus on improving workflow efficiency and maximizing the amount of time dermatologists can spend with patients.

INTRODUCTION

Electronic health records (EHR) have been lauded as the standard of practice for 21st century medicine.¹ EHR uses a systematically organized digital portfolio with the goals of increasing efficiency and improving charting and quality of patient care.² Despite its widespread adoption, EHR

has been accompanied by a multitude of potential negative implications on clinical practice, physician burnout, patient communication, and financial success.³ There have been no studies specifically assessing dermatologists' perceptions of EHR. The purpose of this study is to determine US dermatologists' perceptions and use of EHR within their clinical practice.

METHODS

The survey instrument was validated and administered to US dermatologists attending a national educational conference. Participants provided verbal consent to participate in the study, and the results of the survey were not disclosed until the end of the data collection to minimize response bias. Respondent demographics were compared to American Academy of Dermatology membership data to verify representative nature of the responding subset.

RESULTS

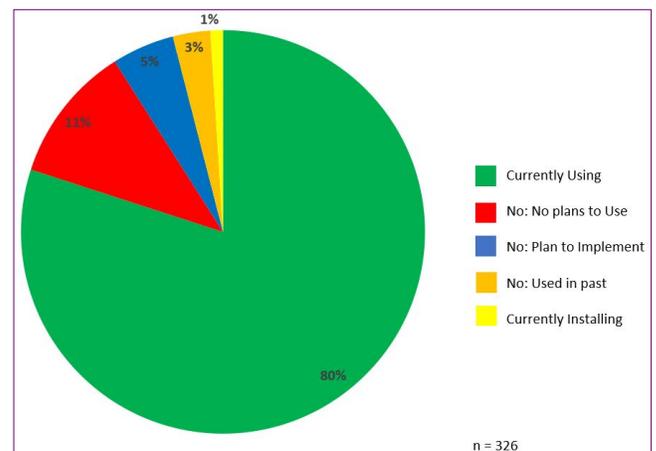
Of the 400 participants surveyed, 291 (72.7%) answered greater than 90% of questions and were included in the outcome analysis. Eighty-six percent (250/291) of the participants were currently using or had plans to implement EHR within the next 2 years. Eleven percent (32/291) reported no desire to use or implement EHR within the next two years (Figure 1). While most dermatologists felt that EHR negatively impacted their workflow efficiency (74.9%) and face-to-face time with patients (57.6%), the majority (56.9%) felt it improved their documentation (Figure 2). The most common reasons dermatologists cited for not adopting EHR were interference with doctor-patient relationship (25.6%), incentives/penalties not worth it (17.4%), too complicated (14%) and cannot afford the cost (9.3%) (Figure 3).

DISCUSSION

Most dermatologists surveyed are currently utilizing or have plans to implement EHR in their practice in the near future. Overall,

dermatologists have a negative view of EHR on their clinical practice. Despite its widespread adoption, most dermatologists felt that EHR decreased their face-to-face time with patients and negatively impacted their clinical efficiency. Less than half of dermatologists felt that EHR improved their overall patient services. The only positive aspect of EHR dermatologists cited was for improved documentation. A greater proportion of dermatologists felt that EHR negatively impacted their patient interaction than thought EHR improved their documentation.

Figure 1. Dermatologists' Use of EHR



Limitations include selection bias since those who hold strong beliefs about EHR may have been more likely to complete the entire survey. Additionally, social desirability bias may have led dermatologists to respond more negatively to conform with the overall negative sentiment of EHR among other physicians.

CONCLUSION

The overall negative sentiment toward EHR has been echoed in other ambulatory specialties.⁴ System malfunctions, lack of an accessible interface, and increased screen-

Figure 2. Impact of Electronic Health Record Systems on Provider

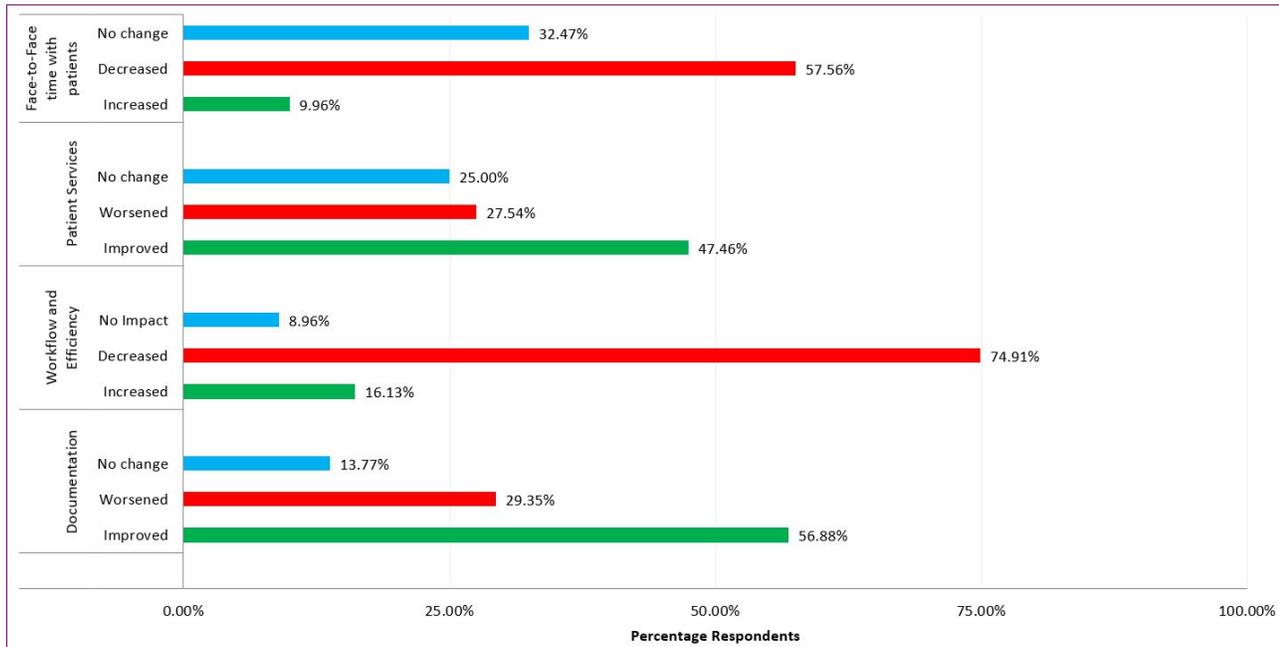
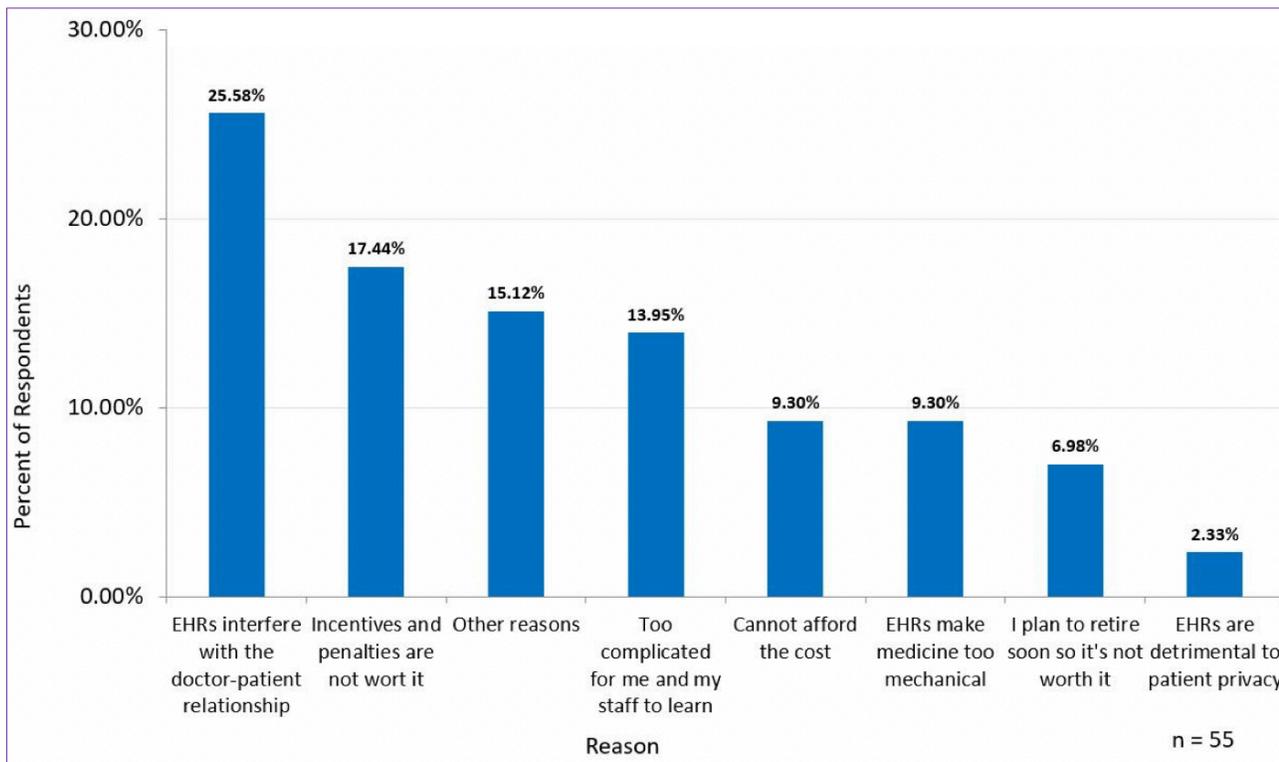


Figure 3. Dermatologists' Reasons for Not Using Electronic Health Record



time requirements are some possible culprits of the physicians' dissatisfaction with EHR.⁵ The improved documentation associated with EHR may be coming at the cost of the doctor-patient relationship. Further studies are needed to weigh the benefits of EHR, investigate the amount of time dermatologists spend using EHR, and to classify specific ways EHR can become more user friendly. Until a better system that consistently improves the physician-patient relationship and patient outcomes is widely available, dermatologists should optimize their workflow to maximize their time with patients and minimize the amount of time they spend interfacing with their EHR.

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