Comparing Perceptions and Use of a Commercial Electronic Medical Record (EMR) between Primary Care and Subspecialty Physicians

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Introduction

Electronic medical records (EMRs) are gaining increasing prominence in the delivery of healthcare although the focus is primarily on deploying EMRs. Relatively little research has studied the post-implementation of commercial EMRs. Here we present the results of a web-based survey comparing primary care providers (PCPs) and sub-specialists (SSs) in our tertiary care health system. The respondent demographics and their perception, use, and training in an EMR environment, five year after its initial deployment throughout our healthcare environment.

Methods

We have had the EpicCare EMR by Epic Systems Incorporated (currently using Hyperspace Summer 2004 version) in our tertiary care, university affiliated hospital since 1999. In January and February of 2005, we developed a web-based survey for all primary care providers in internal medicine, pediatrics, family medicine, and internal medicine-pediatrics, and sub-specialists in internal medicine, pediatrics, and family medicine. The demographic, perception, use, and training responses between PCPs and sub-specialists were compared using independent sample t-tests and chi-square tests for continuous and categorical variables respectively.

Results

A total of 84 providers (59 PCPs and 25 SSs) were surveyed. The survey response rate was 55% (84 of 154). Demographic characteristics of respondents appear in Table 1.

In the area of training, 46% of PCPs and 43% of SSs (p=0.36) felt that their initial training was adequate and majority of PCPs (75%) and SSs (81%) (p=0.58) felt that they would benefit from additional training. Forty-seven (47) percent of PCPs, but only 26% of SSs (p=0.09) would participate in an EMR Physician Users’ Group if given the chance.

Table 2 shows differences in EMR perception between PCPs and SSs.

Table 3 depicts the use of EMR functions and the extent to which EMR features, including best practice flags and medication interaction alerts, changed clinical practice.

Conclusions

This study shows that in a mature EMR environment, differences exist between primary and subspecialty providers in their perceptions and use of an EMR. This has important implications for deployment of EMR’s throughout the US health care system in which many different types of physicians practice. Therefore, different approaches may need to be developed for adoption and utilization of EMR’s among primary care and subspecialty physicians.

References

2. DC Kaelber et al: Evaluation of a Commercial Electronic Medical Record (EMR) by Primary Care Physicians 5 Years after Implementation. AMIA 2005 Symposium.