Physician Wellness: Usage, Practices and Satisfaction:
Electronic medical records in a primary care clinic setting

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Introduction

The use of electronic medical records (EMR) has increased dramatically over the past decade. As such, increased demands are being placed on physician time to write notes, check patient messages, refill prescriptions and complete other tasks through the EMR. With the increased accessibility of patient records on the computer, physicians are now spending more time after hours completing patient tasks. The impact of the changes in workflow as a result of EMR on physician wellness has remained largely unexplored, however there are several articles in the literature regarding growing physician dissatisfaction, especially in the primary care setting.
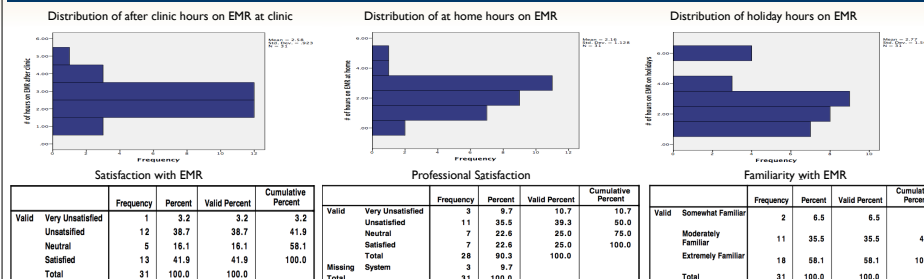
Physician burnout is a common problem for providers. An estimated 30-40% of physicians in the United States will experience burnout at some point during their career. Burnout may result from a variety of factors including lack of personal time, work interfering with time at home or with family, inefficiency or excessive mental workload. Electronic medical records can contribute to the factors listed above by making patient charts accessible from anywhere at anytime and causing interference with personal time and a lack of separation between work and family.
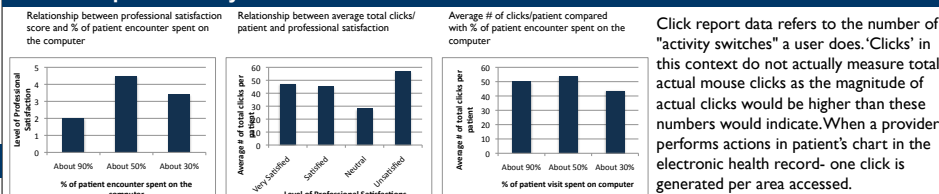
Objectives

To evaluate patterns of physician usage of electronic medical records in relation to attitudes and practices regarding workflow, professional satisfaction and time management.

Methods

- A 13 question survey was created to learn more about physician attitudes towards electronic medical records. Questions were generated in consultation with the literature, the EMR associate medical director and the UCD Physician Wellness Committee.
- The survey data collected was compared to "click report" data collected from the electronic health record (*Epic Systems- Verona, Wisconsin*).

Distribution of after clinic hours on EMR at clinic

Distribution of at home hours on EMR

Distribution of holiday hours on EMR

Satisfaction with EMR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsatisfied	1	3.2	3.2	3.2
	Unsatisfied	12	38.7	38.7	41.9
	Neutral	5	16.1	16.1	58.1
	Satisfied	13	41.9	41.9	100.0
	Total	31	100.0	100.0	

Professional Satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Unsatisfied	3	9.7	10.7	10.7
	Unsatisfied	11	35.5	39.3	50.0
	Neutral	7	22.6	25.0	75.0
	Satisfied	7	22.6	25.0	100.0
	Total	28	90.3	100.0	
Missing	System	3	9.7		
Total		31	100.0		

Familiarity with EMR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Familiar	2	6.5	6.5	6.5
	Moderately Familiar	11	35.5	35.5	41.9
	Extremely Familiar	18	58.1	58.1	100.0
	Total	31	100.0	100.0	

Click Report Analysis

Relationship between professional satisfaction score and % of patient encounter spent on the computer

Relationship between average total clicks/patient and professional satisfaction

Average # of clicks/patient compared with % of patient encounter spent on the computer

Click report data refers to the number of "activity switches" a user does. 'Clicks' in this context do not actually measure total actual mouse clicks as the magnitude of actual clicks would be higher than these numbers would indicate. When a provider performs actions in patient's chart in the electronic health record- one click is generated per area accessed.

Qualitative Assessment

- *Very satisfied with seeing patients and getting along with colleagues, but unsatisfied with EMR charting.*
- *Great system. Too much EMR burden imposed on MD's.*
- *Team approach is needed to improve EMR use.*
- *Why do we use paper forms when the patient could use a touch screen?*

- *Dangerous medication refill system. Cumbersome new sign-on system*
- *EMR has improved our efficiency but has given me carpal tunnel syndrome*
- *Every upgrade undertaken has made my work more cumbersome*

I'm treatin' the computer screen
Photo Credit: ZDoggMD EHR State of Mind, used with permission

Results

- 31 primary care physicians completed the survey. There were 15 men and 12 women, 4 declined to state.
- Physicians who reported being unsatisfied with their professional lives had more clicks than those who reported neutral or positive feelings towards their professional lives.
- Physicians who spent 90% of the patient visit had more clicks per patient than physicians who spent 50% of the patient visit on the computer.

Conclusions

Electronic medical records have the potential to impact physician wellness. As such we must look for novel methods of improving workflow and addressing the aspects of EMR that detract from physician time with patients. In addition we must allow tasks that do not need to be completed by a physician to be delegated to other clinic staff.

Recommendations/Further Study

We hope to be able to include physicians in medical specialties other than primary care and physicians who work in the hospital as well as in a clinic setting. In addition, a parallel project is currently being started to give a similar survey to resident physicians. In future, we hope to compare responses from residents with responses given by attending physicians.

References

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