

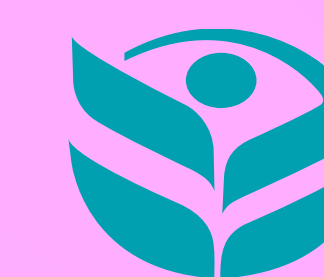


# Peri-operative Attitudes Toward the Use of the Electronic Health Record.

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## Background

The adoption of an electronic health record (EHR) is mandated under current health care legislation reform. The EHR provides data that is patient centered and improves patient safety. There is limited data regarding attitudes of peri-operative nurses toward the utilization of the EHR.

The Patient Protection and Affordable Care Act of 2010

- represents sweeping health care legislation reform.
- use of an electronic health record (EHR) is a major component.
- nursing acceptance and use of the EHR is necessary for success
- acceptance and use enhanced when barriers are identified and managed

The peri-operative environment varies from med/surg nursing because:

- nurses care for one patient at a time
- nurses complete real time documentation
- nurses work in an intense, stressful environment
- work is done behind closed doors
- setting has a very technical focus

Identification of attitudes of peri-operative staff and identifying potential barriers to using the EHR will empower those who implement a new EHR in the peri-operative setting.

## Purpose of Study

The purpose of this project is to identify peri-operative nurses' attitudes towards the use of the EHR. The correct use of the EHR will significantly impact patient safety, communication, and improve care.

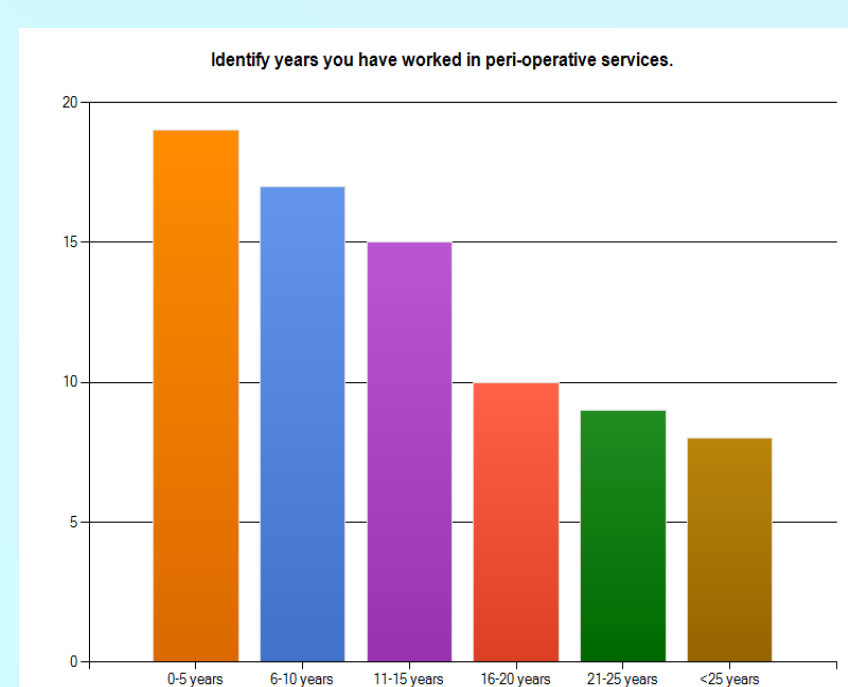
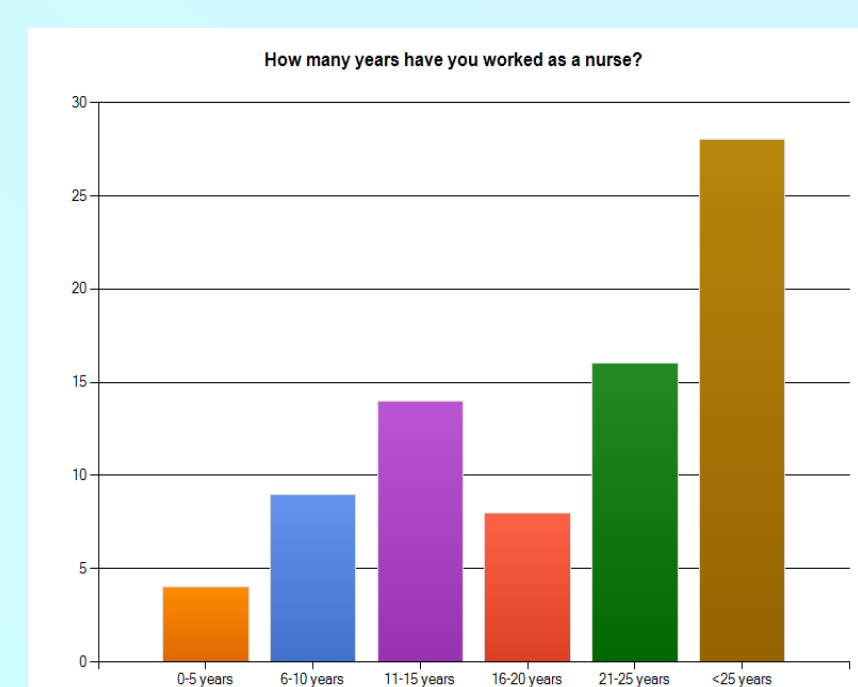
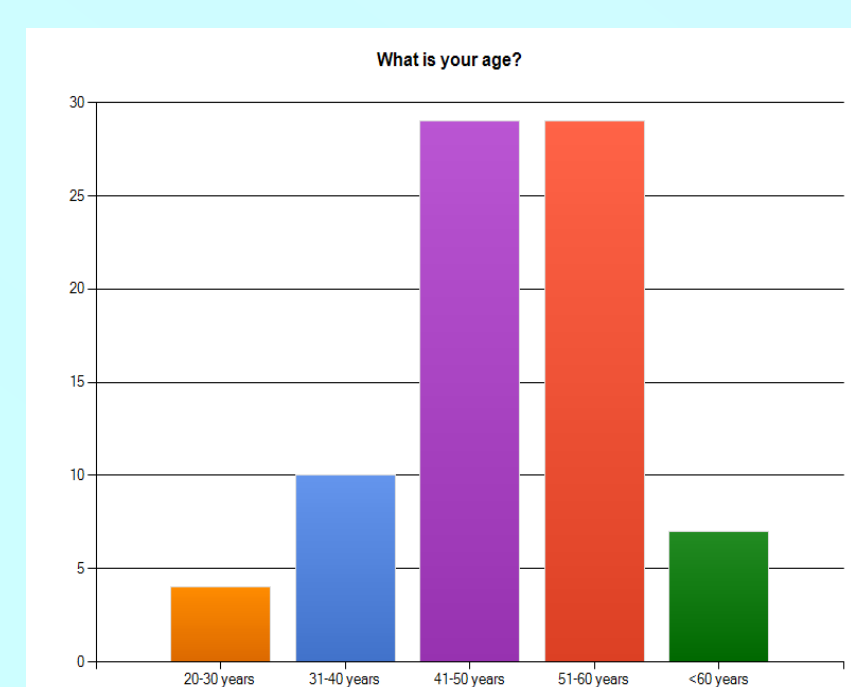
## Methods & Demographics

396 peri-operative nursing staff employed in an integrated tertiary health network in the southeastern United States were targeted to determine their attitudes towards the use of the EHR in providing patient care.

Staff voluntarily completed an anonymous on-line survey in February & March 2012, about their attitudes and use of computers to provide patient care. Staff also had opportunity to make additional comments about the EHR if desired.

80 respondents (20.2% response rate)

- 91.1% (72 respondents) white RNs
- 76.9% (60 respondents) working first shift
- 42% (32 respondents) ADN
- 52.6% (40 respondents) BSN
- 73.4% (58 respondents) between age of 41 to 60 years



## Results

Characteristics (attitudes) of Nurse	Strongly disagree	Disagree	Agree	Strongly agree	P-value
I feel confident about entering patient care information into the computer	5.1%	5.1%	52.6%	37.2%	.000**
Using the computer decreases my workload	9.1%	44.2%	42.9%	3.9%	.284
I have enough time to document	2.6 %	19.2%	66.7%	11.5%	.000**
Electronic health record is beneficial to me as a nurse	3.9%	16.9%	74.0%	5.2%	.000**
It takes me longer to document in the computer than on paper	10.4%	57.1%	26.0%	6.5%	.001**
I enjoy using a computer to communicate with colleagues when not at work	5.1%	46.2%	43.6%	5.1%	.408
I regularly use a computer for personal use at home	3.8%	10.1%	59.5%	26.6%	.000**
Computer documentation will create more work for nurses	6.5%	67.5%	22.1%	3.9%	.000**
Use of electronic record will lead to improved patient care	1.3%	17.9%	74.4%	6.4%	.000**

Characteristics of Computer	Strongly disagree	Disagree	Agree	Strongly agree	P-value
I have access to a computer when I need one to document patient care	7.6%	8.9%	46.8%	36.7%	.000**
All computers on my unit have the same functionality	9.0%	20.5%	55.1%	15.4%	.000**
Computer more a help than a hindrance	5.2%	19.5%	61.0%	14.3%	.000**
Computer improves documentation.	3.8%	9.0%	76.9%	10.3%	.000**
Frequent problems with computers on my unit	1.3%	39.0%	49.4%	10.4%	.040*
Computer documentation will put some staff out of a job	10.1%	83.5%	6.3%	0.0%	.000**

Perceived Characteristics of Organization	Strongly disagree	Disagree	Agree	Strongly agree	P-value
Help readily available when I need it at work	7.7%	26.9%	61.5%	3.8%	.003**
I know more about documenting than my administrators know	3.8%	55.7%	32.9%	7.6%	.045*
Environment is user friendly/provides training and backup support	7.7%	20.5%	67.9%	3.8%	.000**
Computer documentation saves paperwork	10.3%	26.9%	57.7%	5.1%	.011*

P-value results from a test that the proportion of nurses agreeing (agree and strongly agree) with the statement is equal to the proportion disagreeing (disagree and strongly disagree). \*\* indicates rejected at the .01 level of significance; \* indicates rejected at the .05 level of significance.

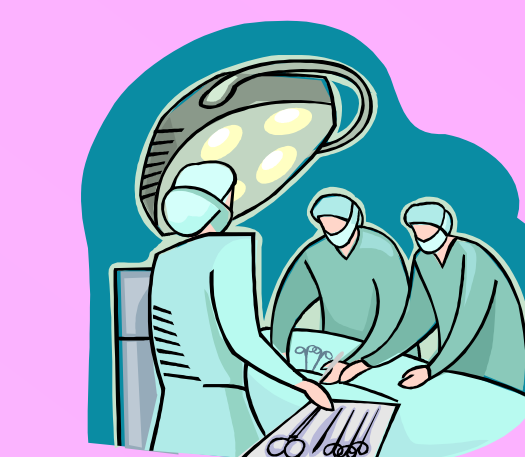
## Results

Very homogeneous in terms of attitudes, access to computers, confidence in use.

Mixed results on using personal computer to communicate with colleagues when not working.

Majority agree :

- that computer is a help in patient care,
- will improve documentation of care
- will lead to improved patient care
- that a computer is available when needed
- that they feel comfortable using the computer



There is no significant difference in age, years of experience, or educational level.

Results indicate that the peri-operative staff feel the electronic health record:

- is beneficial to the nurse
- does not add to the nurse's workload
- does not take the nurse away from the patient,
- will not eliminate any nursing positions.

## Discussion

Peri-operative staff attitudes generally favorable to the use of the EHR.

Additional comments from staff identified potential barriers:

- Need for adequate support and training, including adequate practice time prior to implementation of the new system.
- Dissatisfaction
  - concerning current systems that do not communicate
  - the current need to print records
  - needing to document on multiple screens
- Biggest source of frustration with computers is computer malfunction/slowness of system.
- Concern about location of computer; staff do not like having back to patient in order to document care nor having computer across room from care.
- Suggestion made for hands-free charting.

## Nursing implications

Nursing acceptance and the utilization of the EHR are necessary for the successful integration of an EHR and support the goal of patient centered care. Identification of attitudes and potential barriers of peri-operative nurses in using the EHR will improve patient safety, communication, reduce costs and empower those who implement an EHR.

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