

Original Research Article

Nursing Perceptions of Electronic Documentation

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Abstract: The support of an electronic health record (EHR) is directed under current health care regulation improvement. The EHR provides information that is patient focused and advances patient safety. There are limited data; nevertheless, regarding the perception of nurses headed for the use of the EHR. The purpose of this project was to identify nurses' perception for the use of the EHR. Design: Quantitative descriptive survey was used to determine perception for the electronic health record. Nurses in a health care system completed an online survey to determine their perception toward the EHR in providing patient care. Generally, participants felt the EHR was beneficial, did not add to the load, enhanced documentation, and would not eradicate any nursing jobs. Nursing recognition and the use of the EHR are compulsory for the successful addition of an EHR and to provision the aim of patient-centered care. Identification of perception and potential obstacles nurses in using the EHR will improve patient protection, communication, decrease costs, and allow those who implement an EHR.

Keywords: perception, electronic health record, electronic medical record, research.

INTRODUCTION

An electronic health record (EHR), or electronic medical record (EMR), refers to the systematized collection of patient and population electronically-stored health information in a digital format. These records can be shared across different health care settings. Records are shared through network-connected, enterprise-wide information systems or other information networks and exchanges. EHRs may include a range of data, including demographics, medical history, medication and allergies, immunization status, laboratory test results, radiology images, vital signs, personal statistics like age and weight, and billing information. The utilization of computers in the human services industry is turning into the Standard [1].

The world of ICT is changing significantly the manner health professionals including nurses deliver patient care [5]. As computer turn out to be all the more generally executed in social insurance benefits, their effect on the medicinal services order increments. The usage of computer has an effect of subjective transformation on nursing administrations. In the future, computers will keep on affecting the medicinal services condition, people and the calling of nursing [2]. Governments are utilizing data and correspondence

advancements (ICTs) to enhance social insurance in light of the World Health Organization (WHO) call for services of wellbeing to coordinate data innovations in the conveyance and administration of human services administrations [3].

At the need of time that health care services should response quickly and exactly for the treatment ad betterment of client all over the world paper work has been changed in electronically computerized it is more safe as compare to paper documentation and files .according to above mentioned literature nurses should have good knowledge attitude regarding maintain the electronic record this is very easy to share with concerning authorities and can retrieve the data easily at time of need so, I'm interested either nursing profession is to change to going their practice for saving the record of client ,The reason of my interest To enlightened the importance that all healthcare agencies should have EHRs in place in the near future to ensure safety and better documentation of care. For many reasons, the move to a paperless healthcare record is a daunting and expensive project for healthcare agencies, and not everyone is enthusiastic about the use of EHRs. Thus, rare hospitals adopted. Because of the problems encountered in implementation of EHRs are both

organizational and behavioral, they think it has some drawbacks not only advantages

Problem Statement

The Clinical Systems Department at the investigation site had actualized different types of EHR documentation for nursing and knew about some current issues and issues that required consideration. For instance, some nursing staff was included in double documentation, written work on scrap paper, at that point exchanging information to the EHR; others had announced issues of successive downtimes and absence of sufficient hardware to report nursing care at the purpose of care conveyance.

Research question

Specific research questions were as follows:

(1) What are nurses' perceptions about the current EHR system, including satisfaction with its functionality and the most frequent problems, barriers, and sources of frustration related to EHR for nursing?

(2) What methods of electronic documentation do nurses prefer, and where do they prefer to document various types of clinical data?

Significance

The procedure will be seen as crucial to guarantee that future changes to the current electronic framework would be useful and serve nurture client needs. Our examination connected a technique for ease of use appraisal that will be planned exclusively to increase coordinate contributions from the medical attendant clients, who were in the best position to give thoughts and recommendations on the ease of use of the current EHR framework and how to enhance its usefulness

Purpose of study

The motivation behind our examination will be to survey the usefulness of the present framework and recognize medical caretakers' inclinations for electronic documentation techniques for clinical information; saw issues with, and boundaries to, EHRs documentation; and to decide inclinations for alterations to the EHR framework. Consequences of the investigation would then empower clinical framework staff to outline future adjustments to the EHR framework and meet fundamental necessity and guidelines of nursing care documentation.

Definitions of Terminology

Perception

The ability to understand or notice something easily : the way that you notice or understand something using one of your senses for example nurses express functionality, problems, barriers, and frustrations with the current EHR system .

Preference

Something that is liked or wanted more than another thing for example nursing personnel prefer to document at the bedside, assuming that point of care documentation is possible. In order

Specific Objectives

- Supporting Safe Nursing Practice through Patient Care Technologies and Workflow Design
- Improving Patient Outcomes and Safety through Electronic Health Records & Clinical Decision Support.

Literature Review

There is a wealth of writing depicting attendants' states of mind and boundaries in utilizing the EHR in therapeutic as well as surgical and basic care units. The writing reflects that documentation and audit of the electronic record give nursing staff expanded information of the patient's present wellbeing status and has exhibited apposite impact on the medical attendant's care of the patient. This beneficial outcome on tolerant care is outlined with enhanced patient and family inclusion in mind, efficiency of care, access to data affecting patient wellbeing, enhanced correspondence autonomous and basic leadership by the medical caretaker [4].

Information is emerging from a wide range of sources on adverse and unintended consequences of health IT. This includes data from case reports, claims databases, reports through patient safety organizations, electronic surveillance (event triggers), and adverse and sentinel event reports to The Joint Commission and the Veterans Health Administration. Identifying the spectrum of problems and the specific types and characteristics of safety events related to health IT is a critical step in being able to identify and prioritize the health IT issues that need to be addressed. Equally 8 important, the ability to acquire these data validates that the reporting pathways are functional, and that tools designed to facilitate reporting, such as the health IT-specific Agency for Healthcare Research [12].

Medical caretakers' discernments and states of mind towards the utilization of ICTs at the work environment assume an imperative part in giving successful and proficient patient care. Seen usability and convenience of the ICT by medical attendants have been related to disposition[17].

The population of the province is severely compromised by the lack of infrastructure and access to healthcare facilities, and also due to the vast rural nature of the province. Very often, health professionals lack services such as libraries and access to up-to-date journals and other health information [15].

The EMR/EHR appears to have both positive and negative impacts on primary-care outpatient practices. There are clear advantages over traditional paper-based records in terms of legibility and accessibility. Fears of computers interfering with the patient [16].

Financial issues, including adoption and implementation costs, ongoing maintenance costs, loss of revenue associated with temporary loss of productivity, and declines in revenue, present a disincentive for hospitals and physicians to adopt and implement an EHR. EHR adoption and implementation costs include purchasing and installing hardware and software, converting paper charts to electronic ones, and training end-users[11].

It becomes more important for clinicians and patients to share information. Electronic health information exchange can help address this need. To this end, all provinces and territories (PTs) in Canada have created interoperable electronic health records (iEHRs). These secure systems offer authorized users an integrated view of a person's healthcare history across the continuum of care. They include information such as lab results, medications, diagnostic images, clinical reports and immunization profiles. This study explores user experiences and perceived outcomes of EHR use [19].

Research Design

The research design will be quantitative, cross-sectional

Population

The survey will be conducted at a large Services hospital located in a jail road of Lahore. Fifteen clinical units that currently use some form of electronic documentation were included in the study. The sampling method will be convenience sampling of all nursing personnel with access to the clinical documentation system from the 15 units

Inclusion Criteria

The research study will be a descriptive, cross-sectional design to assess functionality, needs and preferences, and attitudes of nursing personnel (RNs, licensed practical nurses, and nursing assistants) toward the use of the EHR

Excluded criteria

Student who are less than 18 year old not willing to participate in study, did not completed their

first semester of their enrolled course were excluded in this study

Sample

The sampling method will be convenience sampling of all nursing personnel with access to the clinical documentation system from the 150 nurses of 15 units

Research Tool

The Clinical Systems Department warned the researchers that any questionnaires used with the nursing staff would need to be brief because their time will be very limited on the clinical units. Therefore, the research team's goal will be to develop a questionnaire and attitude scale that will be parsimonious and would take no more than 5 minutes to complete. The investigator-developed instrument will be constructed using the procedure recommended by Waltz et al. First, a blueprint will be developed using the research questions to identify the key domains for the data collection tool and the attitude scale. Relevant items were developed for each domain the experts were all certified in nursing informatics and had experience implementing EHRs systems. Using Waltz et al's procedure for

Ethical Consideration

Participant in the research will take part voluntary. The research study is consisted of a questionnaire with no physical, psychological and social harm

RESULT

In this research work the questionnaire was circulated in 150 participants for collection the data. 111respondents data complete collected, 30 questionnaires were missed or not received and 9 questionnaires were incomplete. Instrument consist on five-point Likat scale ranging from strongly agree, agree, undecided, disagree to strongly disagree, to measure the Nursing Perception about Electronic Documentation in this profession. All participants were female nurses, of different age, and different experience.

DATA ANALYSIS

Respondents was grouped accordingly to age and their participation was as, 46 (41.4%) participant was 20 to 30 year of age. 58 (52.3%) participant was 31 to 40 year of age. 6 (5.4%) participant was 41 to 50 year of age. 1 (.9 %) participant was 51 to 60 year of age. Table 1.

Table-1: Respondent Age group.

Respondent Age					
Age		Frequency	Percent	Valid Percent	Cumulative Percent
Age	20 to 30 Year Age	46	41.4	41.4	41.4
	31 to 40 Year Age	58	52.3	52.3	93.7
	41 to 50 Year Age	6	5.4	5.4	99.1
	51 to 60 Year Age	1	.9	.9	100.0
Total		111	100.0	100.0	

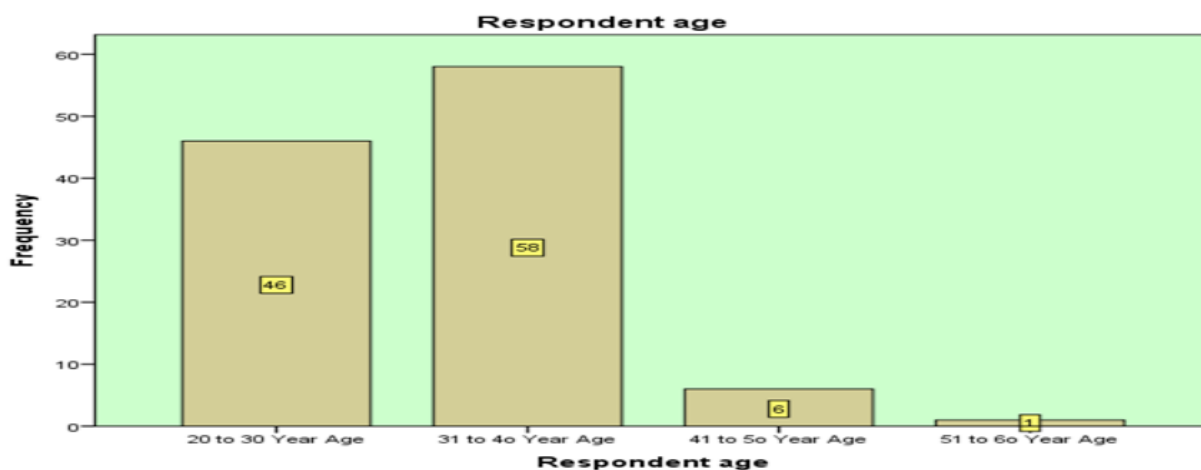


Image-1: Respondent Age group

According to the Table 2. In this study participant have different experience. 0 to 10 year experienced member were 71 (64%), 11 to 20 year

experienced member were 37 (33.3%), 21 to 30 year experienced member were 2 (1.8%), 31 to 40 year experienced member were 1 (.9%),

Table-2: Respondent Experience

Respondent Experience					
Experience		Frequency	Percent	Valid Percent	Cumulative Percent
Experience	0 to 10 Year	71	64.0	64.0	64.0
	11 to 20 Year	37	33.3	33.3	97.3
	21 to 30 Year	2	1.8	1.8	99.1
	31 to 40 Year	1	.9	.9	100.0
Total		111	100.0	100.0	

According to the table 3 the respondents education was as, lady vocational (LVN) nurse was 25

(22.5%) Registered nurse (RN) was 76 (68.5%). bachelors of sciences in nursing (BSN) were 10 (9%).

Table-3: Respondent Education

Respondent Education					
Education		Frequency	Percent	Valid Percent	Cumulative Percent
Education	LVN	25	22.5	22.5	22.5
	RN	76	68.5	68.5	91.0
	BSN	10	9.0	9.0	100.0
	Total	111	100.0	100.0	

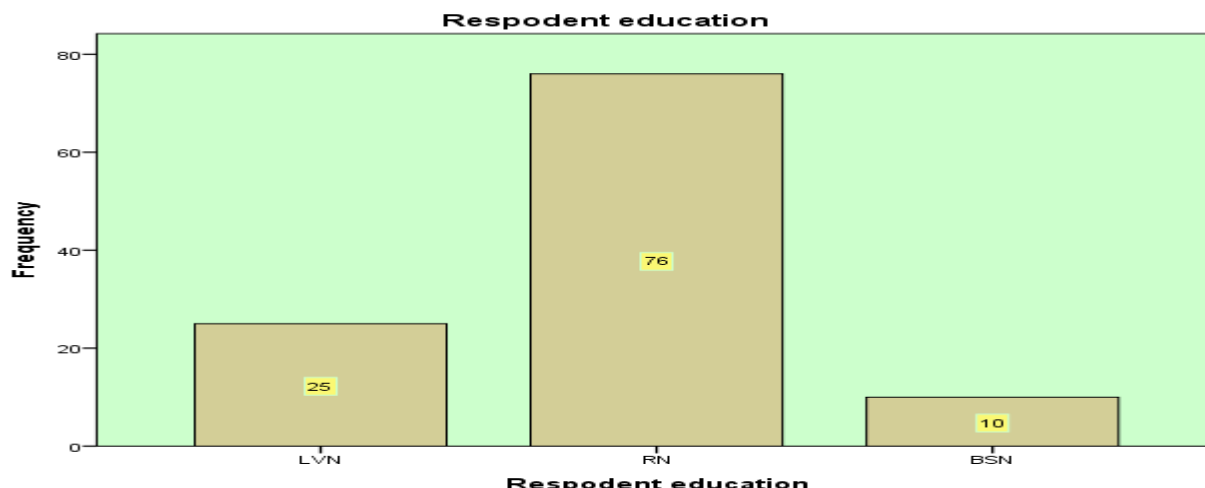


Image-2: Respondent Education

According to the table 4. the respondent's computer use experience was as, 59 (53.2%) persons have 0 to 5 year experience. 46 (41.4%) member have 6

to 10 year computer using experience. 5 (4.5%) member were 11 to 20 year experienced. And only 1 (.9%) person have 21 to 30 year experience.

Table-4: Respondent Computer experience

		Computer experience			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 to 5 Year	59	53.2	53.2	53.2
	6 to 10 Year	46	41.4	41.4	94.6
	11 to 20 Year	5	4.5	4.5	99.1
	21 to 30 Year	1	.9	.9	100.0
	Total	111	100.0	100.0	

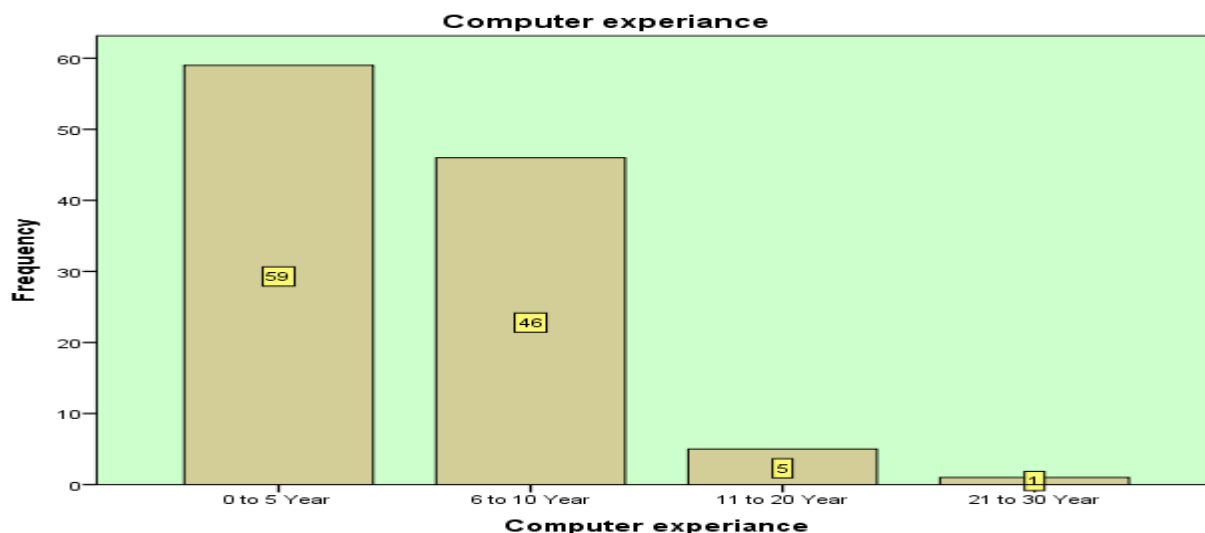


Image-3: Respondent Computer experience

According to the table 5, In this study participant answered to this question, Computerization of nursing data offers nurses a remarkable opportunity

to improve patient care, as, 24 (21.6%) members were strongly agree, 67 (60.4%) members were agree, 18 (16.2%) were undecided, 2 (1.8%) were agree.

Table-5: Computerization of data offers nurses a remarkable opportunity to improve patient care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	21.6	21.6	21.6
	Agree	67	60.4	60.4	82.0
	Undecided	18	16.2	16.2	98.2
	Disagree	2	1.8	1.8	100.0
	Total	111	100.0	100.0	

According to the table 6, participant answered to this question, Computer cause nurse to give less time to quality patient care, as, strongly agree were 13

(11.7%), agree were 46 (41.4%), undecided were 50 (45%), disagree were 1 (.9%), strongly disagree were 1 (.9%).

Table-6: Computer cause nurse to give less time to quality patient care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	11.7	11.7	11.7
	Agree	46	41.4	41.4	53.2
	Undecided	50	45.0	45.0	98.2
	Disagree	1	.9	.9	99.1
	Strongly Disagree	1	.9	.9	100.0
	Total	111	100.0	100.0	

According to the table 7. Response to this question, If I had my way, nurses would never have to use computer, was, strongly agree were 15 (13.5%).

agree was 48 (43.2%). Undecided were 27 (24.3%). Disagree were 20 (18%) and strongly disagree were 1 (.9%).

Table-7: If I had my way, nurses would never have to use computer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	13.5	13.5	13.5
	Agree	48	43.2	43.2	56.8
	Undecided	27	24.3	24.3	81.1
	Disagree	20	18.0	18.0	99.1
	Strongly Disagree	1	.9	.9	100.0
	Total	111	100.0	100.0	

According to the table 8. Response were note to this question ‘‘Computer save repeated documentation and allow the nurses to become more

efficient as that strongly agree were 15 (13.5%), agree 54 (48.6%), undecided were 27 (24.3%), disagree were 10(9%), and strongly disagree were 5 (4.5%).

Table-8: Computer save repeated documentation and allow the nurses to become more efficient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	13.5	13.5	13.5
	Agree	54	48.6	48.6	62.2
	Undecided	27	24.3	24.3	86.5
	Disagree	10	9.0	9.0	95.5
	Strongly Disagree	5	4.5	4.5	100.0
	Total	111	100.0	100.0	

According to table 9. Participant response for this question, that Paper work for nurses can be reduced by the use of computer, was as, strongly agree were 14

(12.6%), agree were 56 (50.5%), undecided were 23 (20.7%), disagree were 12 (10.8%), strongly disagree were 6 (5.4%)

Table-9: Paper work for nurses can be reduced by the use of computer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	14	12.6	12.6	12.6
	Agree	56	50.5	50.5	63.1
	Undecided	23	20.7	20.7	83.8
	Disagree	12	10.8	10.8	94.6
	Strongly Disagree	6	5.4	5.4	100.0
Total		111	100.0	100.0	

According to the table 10. Research participant replied to this question, Computer make nurses job easier, strongly agree were 16 (14.4%), agree were 43

(38.7%) undecided were 36 (32.4%).disagree were 14 (12.6%) and strongly disagree were 2 (1.8%).

Table-10: Computer make nurses job easier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	14.4	14.4	14.4
	Agree	43	38.7	38.7	53.2
	Undecided	36	32.4	32.4	85.6
	Disagree	14	12.6	12.6	98.2
	Strongly Disagree	2	1.8	1.8	100.0
Total		111	100.0	100.0	

According to the table 11 response of participant was about this question, the more computers in an agency, the fewer jobs for employees. Strongly

agree were 13 (11.7%). Agree were 55 (49.5%). Undecided were 23 (20.7%), disagree were 20 (18%).

Table-11: The more computer in an agency, the fewer jobs for employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	11.7	11.7	11.7
	Agree	55	49.5	49.5	61.3
	Undecided	23	20.7	20.7	82.0
	Disagree	20	18.0	18.0	100.0
	Total	111	100.0	100.0	

According to the table 12, response of participant was about this question, Nurses will face more lawsuit because of computers. Strongly agree

were 18 (16.2%). agree were 46 (41.4%). Undecided were 29 (26.1%). disagree were 14 (12.6%). Strongly disagree were 4(3.6%).

Table-12: Nurses will face more lawsuits because of computers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	18	16.2	16.2	16.2
	Agree	46	41.4	41.4	57.7
	Undecided	29	26.1	26.1	83.8
	Disagree	14	12.6	12.6	96.4
	Strongly Disagree	4	3.6	3.6	100.0
Total		111	100.0	100.0	

According to the table 13. Response of participant was about this question, Time spend using computer is out of proportion to the benefits, Strongly

Agree were 14 (12.6%). Agree were 59 (53.2%). Undecided 20 (18%). Disagree were 13 (11.7%). Strongly disagree were 5 (4.5%).

Table-13: Time spend using computer is out of proportion to the benefits

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	14	12.6	12.6	12.6
	Agree	59	53.2	53.2	65.8
	Undecided	20	18.0	18.0	83.8
	Disagree	13	11.7	11.7	95.5
	Strongly Disagree	5	4.5	4.5	100.0
	Total	111	100.0	100.0	

According to the table 14. Response of participant was about this question, only one person at a time can use a computer terminal and therefore, staff

efficiency is inhibited. Strongly Agree were 16 (14.4%). Agree were 54 (48.6%) undecided were 24 (21.4%). Disagree were 17 (15.3%)

Table-14: Only one person at a time can use a computer terminal and therefore, staff efficiency is inhibited.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	14.4	14.4	14.4
	Agree	54	48.6	48.6	63.1
	Undecided	24	21.6	21.6	84.7
	Disagree	17	15.3	15.3	100.0
	Total	111	100.0	100.0	

DISCUSSION

While some of the difficulties with the EHR system were identified before to the study, the computer user effort from nursing staff helped to well define the extent of the difficulties and obstacles that nurses come across when an electronic health record is used, their predilections for documentation, and why an electronic health record is difficult at times to use. The data from the study were also useful in responsible nurse-users' specific needs and their inclinations for changes in the EHR system. Study findings helped to recognize which nursing departments were facing the most difficulties and where the problems were with the electronic health record system.

Our outcomes confirm findings of earlier studies that have indicated that nurses with more skilled with computers have a more encouraging character toward the use of EHRs and their possible to improve patient care and value. Interestingly, and researchers found that physicians and nurses were not as much of knowledgeable about the benefits got from the use of an electronic clinical system than pharmacists, and more skeptical regarding the role of computer information systems in dropping costs, improving the quality of healthcare, and fitting it into their daily work routine. However, their study did not have Electronic Health Records Documentation in nursing respondents report their expertise with computers.

Results from this study were reported back to the nursing staff in the form of an internal newsletter and through staff meetings. The study findings have been used by the clinical systems staff to implement changes in the EHR system and plan purchases for new technology on the basis of user needs and preferences. Another study is planned to determine if modifications to the system have improved ability. In addition, nurse-users will be asked to assess whether system changes have assisted in improving documentation, patient safety, and quality of care. In this study assess to nurses perceptions of electronic documentation, An appreciation of the nurses' feeling and perception towards computerizations could be the differences between a successful implementation of a new computer system or a disaster with major resources wasted with a system still needing]more resources to fix. Healthcare is working to take advantages of these benefits, but organization needs to understand their nurses perceptions so that the change can be successful and maximizes ultimate goal of improving patient care.

Limitation

The one of the limitation of the study is the fact that all the participant nurses comes from the identical units in the hospital and provide the same type

of care, labor and delivery. It may be that the need for or use of computers in delivering care to the patient. May be higher or lower in other units of hospital. Other limitation is that these nurses have only been showing to and used one type of computer software, which could influence their belief about computer in health care in general, the particular software could be difficult or easy to use; it could have many or one screen to navigate in order to recover information. The system of documenting care could be simple or complicated. Everyone should monitor the same policies and rules using and documenting care. Alterations in this area could principal to greater user satisfaction with the system. This would lead to improved evaluation of it.

CONCLUSIONS

A descriptive study of nurse-end users of an EHR documentation system generated important information about obstacles, obstructions, requirements, and preferences of nurses'. Using a researcher-developed Likert-type scale, nurses' attitudes were found to be very positive about using EHRs to improve clinical documentation. The short-term perceptions scale and tool may be beneficial to others who are designing alike researches to assess the functionality of EHR documentation systems. As a Whole, nurse-respondents perceived EHRs as having the possible to advance patient care and patient protection. The tool was found to hold sound hypothesis validity and reliability. A follow-up study is intended to assess effects of user-designed system deviations built on outcomes of this study

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