
| RESEARCH ARTICLE

The Influence of the Application of Digital-Based Nursing Documentation on the Quality of Nursing Services

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| ABSTRACT

Digital or Electronic-Based Nursing Documentation (END) is now regarded as a fitness precedence in many international locations around the world. However, the evidence for the effectiveness of electronic-based nursing documentation in health care is still uncertain. This overview targets to evaluate the literature systematically on the outcomes of END interventions in merchandising or enhancing the high-quality of care. Three databases, Google Scholar, PubMed, and Ebscohost, were used to extract the applicable articles. The articles were selected primarily based on inclusion standards and observed the favored reporting framework for the Systematic Review and Meta-Analysis (PRISMA) framework for an imperative assessment of every article. The key phrases used were Electronic Documentation or Electronic Nurse Documentation and Quality of Care in the primary search in every article title, and finally, the criteria for inclusion and deletion were met by 7 articles. According to the findings of a systematic review, there is little proof that using END interventions may raise or improve the standard of care in nursing environments. Based on the outcomes of the learn about that has been carried out, it can be concluded that the tremendous effect on utility of this digital nursing recording gadget can enhance the satisfaction of nursing care and the efficiency and protection of affected person data.

| KEYWORDS

Electronic Document, Electronic Nurse Documentation, Quality of Care

| ARTICLE INFORMATION

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1. Introduction

In the scope of health care, documentation is a written or electronic record that is vital and can describe the client's health status or treatment that leads to the patient's health (Perry & Potter, 2014). Health care documentation is an expert duty that is crucial to keep the accountability of fitness practice. The subject of nursing supervision emphasizes the importance of precise, transparent, and contemporary patient/client records within legal, ethical, and professional contexts (American)

The focus of the discussion is on the importance of accurate record-keeping as a phase of medical practice and as a prerequisite for the delivery of effective, beneficial, and safe evidence-based care. Insufficient information, unclear, imprecise, or illegible statistics input, and a lack of signatures are just a few of the unfavorable unique document maintenance findings from prior studies. (Yu et al., 2008). Unclear and lacking information on paper-based documentation fails to meet contemporary healthcare standards for patient safety, continuity of care, criminal proof of the healthcare process, and/or differences in healthcare features on each patient. As a result, over the past ten years, there has been a transition to electronic-based documentation. (Sousa et al., 2012)

Global locations all over the world now value electronic documentation (ED) for health (WHO Global Observatory for eHealth, 2012). ED has been utilized to restrict misperceptions or to music and exhibit changes in affected man or woman recognition such as deep vein thrombosis, pulmonary embolism, or catheter-related urinary tract infections to enhance the affected character's defense (Rocheftort, Verma, Eguale, Lee, & Buckeridge, 2015).

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However, the proof of the effectiveness of electronic-based nursing documentation in fitness care is anamadala. An observational study was conducted by Morrison, Curtin, McDonald, and Hernandez Boussard (2016) to learn about the usage of the State Inpatient Database to inspect whether or not hospitals with totally carried out ED structures had affected personal outcomes higher than the hospital with or beside the ED program. They discovered that the presence of an ED was no longer associated with worse patient outcomes, including mortality during hospitalization, readmission, and complications. They came to the conclusion that more research was needed to show how directly ED affects enhancing affected persons effects. According to their hypothesis, ED should be used more as a "recording mechanism after patient care interventions than as a high quality screening mechanism during the proper implementation section of patient care interventions" (Yanamadala et al., 2016).

In an integrative overview, it is specifically defined that in nursing practice, including the use of digital nursing documentation (END) can improve the quality of care for patients (Kelley et al., 2011). This was done in six large, numerous states in North America. As a consequence of the END, they stated the limited empirical differentiation of fitness results, implying that little is known about their influence on the standard of treatment for hospitalized patients. The desire to adorn and aid impacted character security is also implied in END, in addition to a great deal of attention. Ball, Weaver, and Abbott claim (2003) that statistics technological know-how has the manageable to streamline methods in a way that will increase the accuracy and effectiveness of protection techniques and reduce the chance of human error. The wider literature backyard of nursing helps the significance of ED for affected person safety. Kossman and Scheidenhelm (2008) performed a find out about the usage of a qualitative method (n = 46), discovering that Electronic Health Records (EHR) enhance affected person security by way of imparting essential records entry and hypersensitive reaction warnings that can make contributions to unintended errors, in particular medicine errors. DeSousa et al. (2012) conducted an integrative study to determine the contribution of the EHR to patient security and came to the conclusion that the EHR must be founded on a terminology/classification system and a limited summary of information and/or facts. They argue that through certain ED recordings and the use of statistical choices, nurses are granted the proper decision-making procedures that ought to enhance patient health care by offering first-rate care based on patient condition and safety.

The assumption is that digital documentation will make a contribution to the nice of care and affect personal safety. This assessment aims to systematically overview the literature on the consequences of END interventions or exercise improvement in advertising or enhancing the pleasant of care and/or affected person protection in health facility digital documentation.

The general objective of this research is to systematically find out the effect of implementing END on service quality. The specific objectives of the research are to identify the following:

1. Knowing the description of the application of END in nursing
2. Knowing the effect of implementing END on Service Quality.

The results of this systematic article can be used as Evidence-Based Practice in nursing and add to nursing knowledge to improve the quality of health services, especially in nursing.

2. Method

2.1 Data source

Three databases, together with Google Scholar, PubMed, and Ebscohost, were used to extract the applicable articles. The articles have been chosen primarily based totally on inclusion requirements and discovered the favored format for publishing results from systematic reviews and meta-analyses (PRISMA) framework for a quintessential comparison of each article. The key phrases used are Electronic Documentation or Electronic Nurse Documentation and Quality of Care used in the fundamental search in every article title and eventually 7 articles in accordance with the meta-analysis.

2.2 Search Strategy

Several key phrases have been used to reap the applicable articles used in this review, which consist of "Electronic Documentation", "Electronic Nurse Documentation", and "Quality of Care. Available articles associated with digital documentation to enhance nursing offerings have been reviewed and extracted for data. To gain applicable articles, the book length was once restricted to ten years between 2011 and 2021. The researcher used the Participant-Intervention-Comparison-Outcome (PICO) layout to layout article standards for the meta-analysis as follows:

- Q: Documentation at the Hospital
I: *Electronic Documentation*
C: Control Group
O: Quality of Care

2.3 Inclusion Criteria

The following are the study's inclusion criteria:

1. English articles published in 2011-202
2. The lookup diagram is Case Study, Quasi Experiment, Pre-post Intervention
3. Intervention with Electronic Documentation
4. The outcome shows the results of Service Quality

2.4 Exclusion Criteria

The exclusion criteria for this study are:

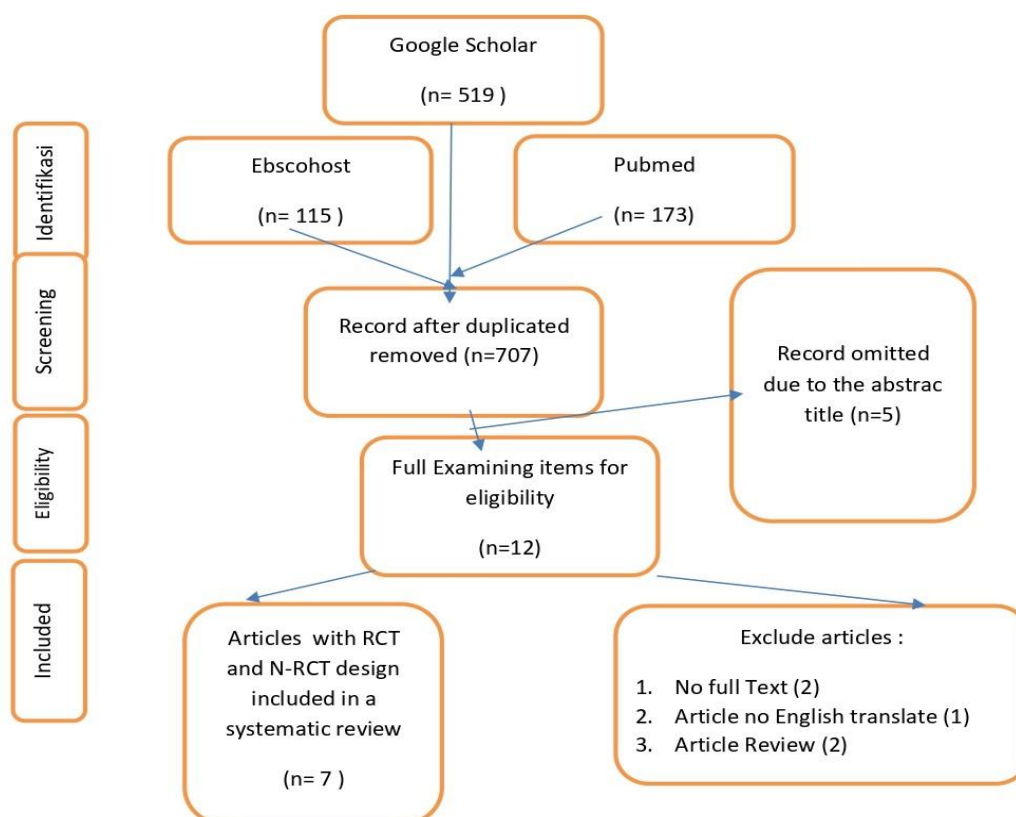
1. Intervention not with Electronic Nurse Documentation
2. Types of research protected descriptive, qualitative, one-group quasi-experimental designs and combined strategies, barring checking out software effects.
3. Published in the structure of a dissertation or assessment, learn about such as a literature review, thinking analysis, systematic review, and meta-analysis
4. Irrelevant research results

2.5 Quality of Assessment and Control of Risk of Bias

Standard Consolidated Reporting Reports (CONSORT) [13], the scale validated for intervention research in the meta-analysis, was once used to investigate high-quality and manipulate for the hazard of bias located in every study. Quality evaluation objects consist of: (1) Adequate random number generation (selection bias); (2) Noticeably concealed allocation (selection bias); (3) Blinding of personnel and contributors (performance bias); (4) Blinded outcome contrast (detection bias); (5) Incomplete disclosure of end result information (friction bias); and (6) Selected reporting (reporting bias) and unique biases.

The threat of bias contrast gadget from the Cochrane machine used to be used as a criterion for assessing the risk of bias. We assigned a danger bias scale consisting of low, high, and uncertain risks. When we discover a couple of adjustment models, we extract all the data that shows the most stage of adjustment to manipulate for the chance of bias.

Chart 2.1 PRISMA Flowchart study selection diagram



3. Results

This study discusses the effect of END on excellent health care on nursing documentation. Two research located measures of the excellence of nursing care initiatives, each of which stated substantial upgrades after the END initiative (Tejedor et al., 2013; Walker-Czyz, 2016). Tejedor et al. (2013) measured daily activities in CVC inward care rooms using the END method. ($n = 34$) Outside the ICU, researchers found that, over the course of a year, the documentation error rate dropped from 0.6 (3,770 documentation errors in 6,238 movements digital CVC measurements) to 0.08 (461 errors in 5,552 digital things to do CVC measurements), and stayed low until 5 months later, when reporting methods changed according to Walker-(2016) Czyz's deployment of the integrated evidence-based EHR, post-intervention HAF expenditures were drastically reduced in comparison to a nonsignificant affiliation ($b = 0.48, p > 0.05$) preventive. For each month, the chance of falling per 1,000 affected character days decreased via the use of a one-half reduction over 10 months with an ordinary discount of 15%. A decrease in CLABI used to be viewed at some point in the prevention period and barely elevated post-EHR, accompanied with the aid of a decrease. Post-intervention for each month, the CLABI fee per 1,000 patient days diminished by way of less than half of the infections per ten-month cycle. The records for CAUTIs, HAPUs, and VAPs showed a drop over the prevention period, a slight increase after the implementation of the EHR, and then a significantly higher decrease after the intervention, which led to a reduction in the average infection costs.

Two studies focus on academic interventions; one aims to improve nursing documentation relating to oncology nurse practitioner compliance by utilizing wonderful resource measures in symptom administration and end-of-life care (Esper & Walker, 2015), and the other employs a guided scientific reasoning (GCR) application to support the utility of classification of nursing diagnoses with the nursing method (Bruylants et al., 2013). One study examined the amount of time required for documentation after developing an evidence-based scientific method for cystoscopy, nephrectomy, and transurethral resection of bladder tumors (Hsieh et al., 2016). Through the use of registered nurses in the emergency room, Nielson et al. (2014) studied the use of real-time comments to increase the satisfaction of documentation of essential features.

In Esper and Walker's (2015) study of academic interventions for oncology nurse practitioners, upgrades had been additionally found in increasing adherence to documenting quite a number of factors of care as evidenced in audit effects with the very best tiers of enchancement discovered for tracking psychological issues (145% increase) and pain management (70% increase). After the implementation of END in 2011, no long-term sustained effect ($p 0.00$) was identified in any other educational intervention carried out in 2004 and repeated in 2006, employing the GCR to help paper-based documentation of the nursing process (Bruylants et al., 2013).

Research with the aid of Nielson et al. (2014) used a real-time comments device for nurses thru passive visible Braden scale (78%), immunization recognition (58%), pinnacle (28%), weight (14%), injection of blood components (44%), preliminary pain contrast (4%) and soreness scale used (5%), were the extended percentages for these seven locations.) No adjustments had been pronounced for five factors (unreported areas), and there used to be a mentioned reduction in compliance for 4 factors (unreported areas).

The study by Hsieh et al. (2016) shows that fine documentation of health care related to the revised template and growing scientific pathway on kidney care significantly decreases the total amount of documentation from 138.5 hours to 55.8 hours prior to the implementation. Even though the p-value was no longer given, a decrease in documentation time from 72.5 to 28.7 hours during the day shift and from 61.9 to 22.5 hours during the night shift was seen and called significant. Following the intervention, the mean documentation time per impacted person day dropped from 18.42 to 9.32 minutes. There is no limit in documentation time for the length of the evening shift. In conclusion, the data points to END interventions as having the potential to improve documentation quality through the reduction of errors, the development of documentation compliance with specific aspects of care, and the reduction of documentation time during day shifts. However, as shown by the use of one intervention, the long-term effects of END might also not be sustained.

The lookup of Dwisatyadini, Hariyati, & Afifah (2018) improved the completeness of documentation earlier, both before and after the introduction of SIMPRO. It reduces the time nurses need to handle nursing care documentation. The use of SIMPRO to enforce nurses has an impact on increasing the thoroughness of nursing care documentation in the Dompot Dhuafa Hospital's outpatient unit. The use of SIMPRO by excellent nurses can speed up the documentation of nursing treatment in the Dompot Dhuafa Hospital's outpatient facility. The large disparity between the completeness of nursing care documentation before and after the adoption of SIMPRO has a typical value of -1.742 (43.55%). Prior to the installation of SIMPRO, the time difference between nursing care documentation was, on average, 273,613 days (4.6 minutes).

3.1 Characteristics of Study Articles

Author, Year, Country	Research Design and Research Objectives	Research Method	Research Intervention	Location, time, and sample	Research result
Bruylants et al. (2013) Switzerland	Pre/post-test design Objective: To reflect on consideration on the impact of the " Guided Clinical Reasoning " (GCR) academic software and the introduction of a smart digital nursing documentation machine (e-doc) on the splendid of the nursing procedure.	All staff members were trained to utilize the NNN approach with e-docs in 2008 with the launch of the e-doc machine "WiCare Doc." Note: 2004 introduction of the NNN taxonomy-based nursing system and GCR application to implement ND GCR Program for 2006 is repeated	Implementing nurse diagnostics in Group 1 Group 2: "Guided Clinical Reasoning" intervention (GCR) Group 3: The use of electronic documents (e-docs) and the discontinuation of "Guided Clinical Reasoning" (GCR))	Venue: Medium-sized commonplace hospital. Sample: 36 randomly assigned documentation	No lasting impact of e-docs on the exceptional of nursing care ($p < 0.000$) used to be once placed in 2011 in distinction to the paper-based method in 2006, which had the easiest incredible after the 2nd GCR training.
Tejedor et al. (2013) USA	Pre/posttest design Objective: To diagram and validate the every day CVC dimension system with the contribution outdoor the intensive care unit utilizing electronic documentation.	34 non-ICU wards For nurses to record and file CVC every 6 to 8 hours, tools and strategies have been developed that use drop-down menus and free text fields to contain information such CVC type, location, real-time insertion/deletion date, and CVC maintenance. manual and automated tuning methods, the correctness and dependability of employed EMRs, and nursing reviews. Two years and seven months	All 34 non-ICU inpatient wards in 2 tutorial scientific centers within a single fitness care system, each with approximately five hundred inpatient beds and sharing an EMR-certified Stage 6 Society of Health Information and Management System (PowerChart, Cerner). Nursing documentation for ward victims is absolutely reachable in EMR. At the time of this discover out about (January 2009 to September 2011), ICU used a guide strategy to calculate CVC days and was once excluded from the study.	Venue: Two hospitals with a shared EMR system	At baseline, there was once a imply (\pm wellknown deviation) of 0.32 ± 0.25 days of digital CVC blunders (omission blunders and commissions are summed and calculated the same) routinely calculated CVC manually. After several technique improvement cycles of 7 months, the error rate lowered to <0.05 CVC size error per day and remained at or under this stage for two years.

<p>Nielson et al. (2014) Canada</p>	<p>Pre/posttest design Objective: This study finds out about aimed to discover whether the use of real-time comments improves the nice of documentation of imperative factors through Registered Nurses (RN) in the emergency branch (ED).</p>	<p>ED Plan, Do, Study, Action (PDSA) is a top-notch improvement model employed in hospitals to advance passive digital cues with real-time comments and equipment for important recording. Compared to longitudinal cumulative month-to-month statistics, baseline data on sixteen documentation components</p>	<p>The learn about was once carried out in a large city emergency branch (ED) to decorate affected character safety, beautify the quality of documentation, and extend the timeliness of documentation. The PDSA (Plan, Do, Study, Act) model is used to raise an authentic and dependable method for improving the medical care method</p>	<p>The find out about used to be carried out in a big city emergency department (ED) to beautify affected person safety, enhance the fine of documentation, and extend the timeliness of documentation. The Plan, Do, Study, Act (PDSA) paradigm is utilized to improve a trustworthy and legal way of enhancing clinical care.</p>	<p>From March 2011 to March 2012, an entire of 89,521 ED EHRs were reviewed. Approximately 7,460 ED archives are audited per month. Compliance is recorded as "yes" or "no" for every necessary documentation element. Baseline statistics (percentile compliance) have been in contrast with monthly, cumulative, and longitudinal data. Sixteen documentation factors have been compared. Improvement is achieved with seven elements. No adjustments have been recorded in the 5 elements, and there was once a slight minimize in compliance for the four elements. Improvements had been observed as follows: preliminary Documentation of immunization popularity (54%), comparison of discomfort (4%), delivery of blood components (44%), high (28%), and the Braden Scale (78%).</p>
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<p>Esper & Walker (2015) the USA</p>	<p>Pre/post-test graph the use of one cohort Objective: to assess NP records of distinctive quality oncology exercise initiative movements (QOPI) before and after educational intervention (EI)</p>	<p>NP documentation of precise QOPI measures earlier than and after the instructional intervention (IE) was once as soon as evaluated. An EHR shortcut, known as "Smart-Phrase," is used to enlarge the effectivity in the documentation of these steps.</p>	<p>enhanced IE quality with the following four elements: Interactive didactic examples and case studies; the development of SmartPhrases to aid in the documenting of QOPI metrics; the creation and distribution of SmartPhrase playing cards to all NPS; and (d) sending NP a weekly reminder email for four weeks. The EI includes a mod or severe illness assessment, a pain plan, a wonderful pain plan, a look at treatment effect, bowel evacuation before and after therapy, and an emotional evaluation and intervention.</p>	<p>Study site: at Cancer Center: 18 ANP Patient medical charts Review of the precise supportive care QOPI measures (n = 100). Recognizing and using areas of documentation shortcomings (which are below 80% compliance) to advance IE for TN</p>	<p>Better adherence prices at 4 weeks post-EI. The easiest enhancement fees were observed for documentation of emotional problems (145% improvement) and over 70% for amazing plans for controlling pain. Although "SmartPhrases" are employed, they cannot be considered to have changed once they have been added to the impacted person chart.</p>
<p>Hsieh et al. (2016) Taiwan</p>	<p>Pre/post design The following are the study's goals: 1. Compare the amount of time required for progress papers to be documented before and after implementation. 2. To assess the effectiveness of the new charting tool in terms of team member satisfaction.</p>	<p>The learn about used to be conducted in a surgical unit with 50 beds. Example: A one-week analysis of 22 nurses partial template focusing on CNS, END. The eight most often utilized evidence-based scientific pathways, such as cystoscopy, nephrectomy, and TUR of bladder tumors were reviewed and produced by CNS and senior</p>	<p>All focal points are created by CNS in conjunction with senior nurses. The CNS retrieves three to five nursing files for each new topic in order to run the initial analysis. In order to create template codecs for each emphasis, the SSP then evaluates pertinent nursing regulations, recommendations, journal papers, and textbooks.. All nursing insurance policies are revised</p>	<p>The project used to be performed in an 1195-bed acute and tertiary scientific center in Taiwan in a 50-bed surgical unit with 22 full-time nurses assigned to the unit. The daily personnel in 14 nurses work on this unit (day shift, 6.5; night time shift, 4.5; and night time shift, 3). There were 330</p>	<p>Three months following the intervention, documentation time that lasted longer than a week had dropped from 138.5 hours to 55.8 hours. The morning shift was cut in half, from 72.5 to 28.7 hours, and the afternoon shift was cut in half, from 61.9 to 22.5 hours. No cutoff time existed for the night shift (4.1 vs. 4.5 hours). From M = 21.9, SD = 16.8, to M = 10.0, SD = 9.32, patient time per day decreased. Note: NR p-value</p>

		<p>nurses. Each has two to three foci. Data is gathered twice: prior to deployment and three months later.</p>	<p>yearly based on proof and authorized by way of the Quality Control Commission.</p> <p>A total of forty one foci had been revised and thirteen new foci related to scientific pathways have been developed. The CNS develops an The unit director and senior nursing team members evaluate the material after the initial focus template. After discussion, the contents have been later altered. The most recent version was added to the database after being examined and authorized by the Department of Nursing's Quality Control Commission. The use of specialization allows for the grouping of all new foci for scientific pathways. Instead of browsing through all the foci in the previous database, he can click on the focus of a urological procedure in the new center of attention database's urology section..</p>	<p>hospitalizations per month on average (between 10 and 15 patients per day), and the average length of stay was 7.2 days. .</p>	
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<p>Walker-Czyz (2016) New York</p>	<p>To compare before-and-after sketches of the influence of implementing an integrated EHR on the quality of nursing care</p>	<p>The find out about was conducted in focal point organizations to explore how EHR equipment can enhance nursing care. Checklist for approved procedures, review of the literature on hospital-acquired diseases' prevention, policy revisions to replicate EBP requirements, sketch of an electronic documentation display with recommendations Theoretical Foundation: Diffusion Principles of innovation Timeframe: 46 months</p>	<p>The interrupted time sequence (ITS) mannequin investigated statistics 1 yr before pre-EHR implementation, at the factor of implementation, and 1 yr after pre-EHR implementation. All facts have been amassed monthly for forty six months; The intervention occurred around month 22. The following hypotheses had been investigated: (1) fine of nursing care, defined as HAC, satisfaction, and price would amplify after EHR adoption, and (2) implementation of EHR have an impact on quality, safety, and nurse pride in the course of the begin of the period. adoption of an innovation is observed with the aid of stabilization (return to baseline) or high quality outcome</p>	<p>The study used to be carried out in an urban sanatorium with a retrospective find out about the use of data from 431 health center beds, 10 medical-surgical units, 2 critical care devices, and in New York.</p>	<p>(1) HAF: widespread reduction post-intervention. $F 3.42 = 3.57, P = .02, R^2 = 0.15$ (2) HAPU s: no sizeable reduce post-intervention, $F 3.41 = 60.99, P > 0.05, R^2 = 0.80$ (3) VAP: no enormous discount after the intervention. $F 2.42 = 16.77, P > .05, R^2 = 0.51$ (4) CLABI: post-intervention chronic decline. $F 2.42 = 6.52, P < .01, R^2 = 0.23$ (5) CAUTI: no vast post-intervention decrease, $F 2.42 = 12.11, P = 7.58, R^2 = 0.43$</p>
<p>Dwisatyadini, Hariyati, & Afifah, 2018 Indonesia</p>	<p>without a manipulating group, do the pre- and post-test. This study's goal was to determine how implementing SIMPRO would affect nursing's effectiveness and completeness.</p>	<p>The study was formerly conducted by comparing the 31st documentation and the nursing documentation's efficiency in the Dompot Dhuafa Hospital's outpatient setting before and after. The implementation</p>	<p>SIMPRO implementation (Nursing Management Information System by way of Roro). The pre-test data collecting took place from May 28 through May 30, 2014, and the post-test was administered from June 16 through June 18, 2014.</p>	<p>installation for outpatients at the Dompot Dhuafa Hospital in Parung.</p>	<p>Based on the consequences of the study, the average cost of documentation completeness before SIMPRO implementation used to be 1.87 (SD 0.922), and after SIMPRO was once implemented, it elevated to 3.61 (0.588). This expand indicates the extent to which nursing documentation is complete will increase with the deployment of SIMPRO.</p>

	documentation	of SIMPRO.	Previously, data analysis was performed by means of the paired and independent t-tests in statistics. A localhost database is used by Simpro.		Prior to the implementation of SIMPRO, nurses typically took 476.13 seconds to document nursing care (SD 78,896). The average documentation time, which was 202.52 seconds before the introduction of SIMPRO, was reduced by more than half.
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4. Discussion

4.1 The Effect of END Implementation on Service Quality

The authors positioned seven studies on END treatments designed to raise the standard of treatment. All three interventions—e-documentation redesign, education, and the use of passive visible cues—reminded nurses to fulfill important documentation needs or to send emails or use reminder playing cards to assist END. This paper gives a summary of the numerous interventions developed to aid in the implementation of END and which may also be expected to enhance Patient security and the standard of treatment. When it came to effectiveness, every intervention had been linked to improvements in one or more penalties for poor treatment. The majority of the effects are related to documentation procedures, specifically the accuracy, completeness, and content documentation of files. Evidence indicates reductions in documentation errors, compliance with documenting some aspects of care, and time spent documenting maintenance. However, it is challenging to draw any inferences regarding the impact of implementing END in practice due to the variety of interventions and the results evaluated. Additionally, there is insufficient evidence to support statements regarding the long-term consequences of END.

Overall, we did make some, if little, discoveries, evidence of the effect of END in advertising or improving the fine of care. The bargain in documentation blunders mentioned in the END-supported education and alternate management first-class enhancement task (Tejedor et al. 2013) has the viable to decrease threats to affected person safety. The built-in implementation of evidence-based EHR used to be determined to enhance the gorgeous of care with related bargain fees in threats to affected individual protection such as pneumonia linked to mechanical air flow, pressure and blood float ulcers due to central tract or catheter-associated urinary tract infections, and hospital-acquired falls (Walker Cxyz 2016).

It is not yet assured that nurses will adhere to documentation requirements when implementing the END or that the quality of care will increase. While END permits nurses to provide patient security, Kossman and Scheidenhelm (2008) found that the quality of care suffers as a result of decreased time spent at the patient's bedside and the loss of individualized treatment. The END can improve nursing processes, but it cannot replace software or support necessary inquiry and scientific reasoning (Bruylands et al., 2013). When used in conjunction, END can be constrained in terms of giving a complete picture of a patient's health state when using a computerized care planning system, particularly if the ability to record scientific assessments and patient variations is lost (Lee, 2006), possibly leaving out certain crucial fitness issues. However, supplying passive visual cues and technologies like "SmartPhrase" to nurses as individual real-time audits with error remarks may improve documentation quality, facilitate data collection, and reduce fall and contamination rates Nielson et al., 2014; Tejedor et al., 2013; Esper & Walker, 2015; Hsieh et al., 2016; The use of Kossman and Scheidenhelm's data further supports the findings of our investigation (2008) findings, which found that hypersensitive reaction warnings and critical information entry prevented unintended errors. A well-designed evidence-based template for clinical pathways can reduce the amount of time spent on documentation by including pertinent data and educational materials in the documentation process, which also lowers the likelihood of including inaccurate information (Hsieh et al., 2016).

The use of science in fitness offers many blessings for victims and nurses to enhance safety, efficiency, and accuracy in providing fitness services (Gaudet & Howett, 2018). Many nurses have used electronic-based documentation constructions to record every nursing system and help medical practitioners process, manage, and communicate statistics under various circumstances. Consequently, it has the potential to improve the beautiful nursing options (Secginli, Erdogan, & Monsen, 2014).

However, the utility of END, which is now not fundamental, can also damage the implementation of verbal change carried out by nurses (Sezgin & Yildirim, 2016). Although various researchers have supported the advantages of electronic-based switching to electronic documentation from paper-based documentation, on the other hand, it affords important challenges in healthcare corporations (Chand & Sarin, 2014). In addition, the utility of a machine that is now not integrated with all offerings in the hospital

causes the data on the desktop to be separated into isolated pieces of information. So fitness workers have a problem gaining access to the information wanted to furnish care (McLachlan, Dube, Johnson, Buchanan, Potts & Gallagher 2019).

5. Conclusion

This systematic comparison observed restricted proof of the consequences of enforcing END interventions in advertising or enhancing the nice of care in nursing settings. Although the END proved to have some high-quality results, the outcomes are equivocal because of the few studies, concerns about the study method's quality, the tiny number of studies, and potential bias risks. To investigate the effects of the END intervention and the use of paper-based documentation as a control, reliable randomized controlled trials are required. A qualitative technique is also desired due to the fact that it may be used to identify the intervention's achievements and deepen your knowledge of the END system's flaws and the experiences of nurses and other users. This will influence decisions about the structure and use of the END in the nursing environment.

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