The Impact of Reporting Patient Safety Events: An Integrative Review

A Scholarly Project

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Catherine M. Amitrano

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Scholarly Project Chair Approval:

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Abstract

Since the 1999 Institute of Medicine landmark report, *To Err is Human*, leading organizations such as the Agency for Healthcare Research and Quality have been working with healthcare leaders to reduce patient harm. A problem in healthcare is errors continue to occur at alarming rates. The COVID-19 pandemic impacted patient safety efforts and organizations are trying to get to pre-pandemic patient safety progress. The purpose of this integrative review was to review and evaluate individual research studies on patient safety event reporting and summarize what is known about the topic in terms of how patient safety event reporting impacts patient safety. The integrative review aims to address gaps in the literature related to the impact of patient safety event reporting.

Keywords: Patient safety event reporting, patient safety reporting, patient safety, adverse events, harm events.

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Section One: Formulating The Review Question

Background

Healthcare leaders and staff at all levels are instrumental in reducing patient harm in healthcare. Since the Institute of Medicine's (IOM) 1999 landmark publication, To Err is Human, healthcare leaders across the United States have promoted a sense of urgency to reduce patient harm events from occurring (Institute of Medicine (US) Committee on Quality of Health Care in America, 2000). According to Hessels et al. (2019), despite national attention and significant resource allocation over the past decade, there has not been substantial movement in reducing the incidence of preventable adverse inpatient events. An adverse event is defined as an event that results in an undesirable clinical outcome that is not caused by a patient's underlying disease and either prolongs a patient's stay, causes permanent patient harm, requires life-saving interventions and/or contributes to the patient's death (U.S. Department of Health and Human Services. Office of Inspector General, 2023). The Joint Commission (2021), defines an adverse event as a patient safety event that has resulted in harm to a patient. Slawomirski et al. (2020), define an adverse event as an incident during care that results in patient harm.

According to Valdez (2022), the Director of the Agency for Healthcare Research and Quality, hospitals were making steady progress in improving patient safety before the COVID-19 pandemic. For example, healthcare-associated infections in hospitals were sharply decreasing several years before the pandemic. After the pandemic, there has been an unfavorable increase in adverse patient safety events that have caused harm to patients. An increase in adverse events is occurring as more nurses are leaving the workforce. According to the Agency for Healthcare Research and Quality (2022-a.), healthcare workers who are employed and at work in hospitals

and in nursing and residential care environments has decreased dating back to January 2020 by 2% in hospitals and 12.1% in nursing and residential care healthcare settings.

According to Abuosi, et al. (2022), the frequency and accuracy of reporting adverse events in healthcare organizations are necessary to improve the patient safety culture. Event reporting provides an opportunity to identify opportunities to make change in an organization (Kasda, 2020). Promoting the use of patient safety event reporting within healthcare organizations is a way leaders can stay on top of how to improve the care being delivered within an organization. After a near miss event or good catch is entered into the reporting system, key stakeholders can review and evaluate what occurred, looking for opportunities where improvement is needed. When near misses and no harm events are investigated, and improvements made, this helps prevent severe harm events from occurring.

The phenomena that needs further investigation is the impact of patient safety event reporting in the acute care setting. It is important to research this topic and share with staff the harm that can be prevented through reporting. Healthcare professionals have a duty to prevent harm and promote favorable health outcomes. Through reporting patient safety events, healthcare staff can learn about the barriers and challenges that occur in their work area. Some of the current barriers that exist in reporting adverse events and near misses are due to a lack of understanding what to report, a lack of understanding on how to use the reporting system to report, beliefs the reporting system is cumbersome and time consuming, a lack of feedback after a report is placed, and concerns about repercussions with reporting (Slawomirski et al., 2020).

Through the initial review of research studies, it is apparent studies on event reporting are occurring in national and international healthcare facilities. An integrative review will allow for a

broad examination of the topic of patient safety event reporting. A wide range of inquiry can be made in an integrative review of the topic (Toronto & Remington, 2020).

Defining Concepts and Variables

There are several important concepts for the integrative review. The first is the importance of patient safety event reporting and the impact it has on the care being delivered to patients. Through thorough analysis of the events being examined, practice changes can occur. According to Camacho-Rodriques, (2022), event reporting is part of a robust patient safety program. Robust patient safety event reporting is part of a highly reliable organization. Highly reliable hospitals have effective communication, teamwork, strong leadership, error reporting, organizational learning, and continuous quality improvement. According to Rotteau, et al. (2021), principles of a highly reliable organization consist of preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, and deference to expertise. In the qualitative study of Rotteau et al. (2021), only one of the 71 participants shared an example related to deference to expertise, including how the error investigation process gave staff the opportunity to discuss what occurred in an error.

The variables examined in the integrative review are directly related to patient safety. The variables include patient safety event reporting, adverse events, health outcomes, and the impact patient safety event reporting has on the culture of safety. When adverse events occur, staff need to document the harm events in the electronic reporting system, so a proper investigation can occur. From this, improvements in patient safety can occur.

Rationale for Conducting the Review

The reason for conducting the review is patient harm continues to occur to patients in the healthcare setting. Ahsani-Estahbanati et al. (2022) conducted a systematic review including 76 papers and four databases where they concluded despite an abundance of suggested interventions, patient safety has not remarkably improved. Patient safety has not returned to a pre COVID-19 pandemic state and patients are continuously being harmed. With many organizations facing staffing challenges, now is the time to get back to at least the level of patient safety that was documented before the outbreak of COVID-19. According to Salvon-Harmon (2023), to deliver the healthcare our patients expect, we must urgently revisit the safety culture which is a fundamental driving force of not only patient safety, but workforce safety. One step we can take is to develop a reporting system for a just culture, or adapt the current reporting culture in place. Doing this will allow for the tracking and trending of events resulting in actions needed to improve safety. According to the World Health Organization (2023), establishing systems for patient safety incident reporting for learning and continuous improvement is needed.

Since there has been a decline in safety performance indicators (McGaffigan et al. (2023), it is imperative to evaluate the research and where the gaps exist in promoting a culture of patient safety. According to McGaffigan et al. (2023), the Patient Safety Authority, an independent state agency that collects and trends patient safety reports, found that reported safety events declined from 2019 to 2020. Kepner and Jones (2023), note the Patient Safety Authority had a 11.1% drop in patient safety event reporting, from 2021 to 2021. Also, there was an increase in the number of events that caused serious patient harm. These statistics validate the need to continue to research the topic of patient safety reporting and identify barriers as to why staff are not reporting. It’s important to note that Pennsylvania, which has the Patient Safety

Authority, is the only state that mandates staff to report all events that cause patient harm or have the potential to cause harm.

Another rationale for completing the integrative review is there has been limited research in some areas related to patient safety event reporting. For example, there is a growing need to understand patient perception on involvement in the reporting of patient concerns and events. Patient safety event reporting allows leaders to closely examine near miss and adverse events to develop strategies to prevent future significant patient harm. Morey et al. (2021) shared how there is limited research on how the patient's perspective is represented by clinical staff or student nurses who use formal reporting systems. Also, during the initial search period when there was exploration of a topic and research question there was a limited number of research articles located on patient safety event reporting in United States based acute care hospitals where patient harm can often occur. A significant number of articles in the initial search conducted research at international healthcare locations. Articles reviewed in the initial search also indicated much of the research was conducted before the COVID-19 pandemic.

Purpose and/or Review Question

The review question for the integrative review is: What is the impact of patient safety event reporting in healthcare organizations? The purpose of the integrative review is to examine the impact patient safety event reporting has healthcare organizations and their culture of safety. Also, the integrative review aims to address gaps in the literature related to the impact of patient safety event reporting.

The purpose of this integrative review was to review and evaluate individual research studies on patient safety event reporting and summarize what is known about the topic in terms

of how patient safety event reporting impacts patient safety. The review provides nursing and other healthcare disciplines with a comprehensive update on the topic, so hopefully the evidence can be translated into practice in a short amount of time. In an integrative review future research needs are also identified. After individual studies are interpreted and synthesized into meaningful conclusions, the clinical questions can be answered and new knowledge shared (Toronto & Remington, 2020).

Formulate Inclusion and Exclusion Criteria

Inclusion criteria included peer-reviewed research articles that address patient safety event reporting withing the last 5 years, preferably the last 3 years. The goal was to select studies performed primarily in an acute care setting. Studies were considered when they included information about the reporting of patient safety events or included high reliability concepts.

Exclusion criteria included non-peer reviewed articles or journal articles and general articles on the internet that were not research based. There are online articles from various well-known healthcare organizations. However, these studies are not part of the formal literature review and synthesis of literature section of the paper. Articles published by well-known organizations, such as the Institute of Healthcare Improvement of the Agency for Healthcare Research and Quality will only be used in the discussions supporting the primary literature review and synthesis. Dissertations, theses, capstone projects, editorials, conference slides, and book reviews are not included in the literature used for the integrative review.

Conceptual Framework

The conceptual framework for the integrative review is the framework created by Whittemore and Knafl (2005). The integrative review is a method of review that allows for the

combination of several methodologies for review, including experimental and non-experimental research. The integrative review contributes promotes various perspectives on a phenomenon of concern and provides a critical analysis of methodological, empirical, and theoretical literature. The integrative review brings attention to the future needs of research. In this integrative review, conclusions are drawn from a diverse amount of resources on a particular topic. A systematic process is utilized to address the phenomena relevant to a field of study that the researcher is interested in. (Whittemore & Knafl, 2005; Toronto & Remington, 2020). The integrative type of review has a role in evidence-based nursing practice.

Section Two: Comprehensive And Systematic Search

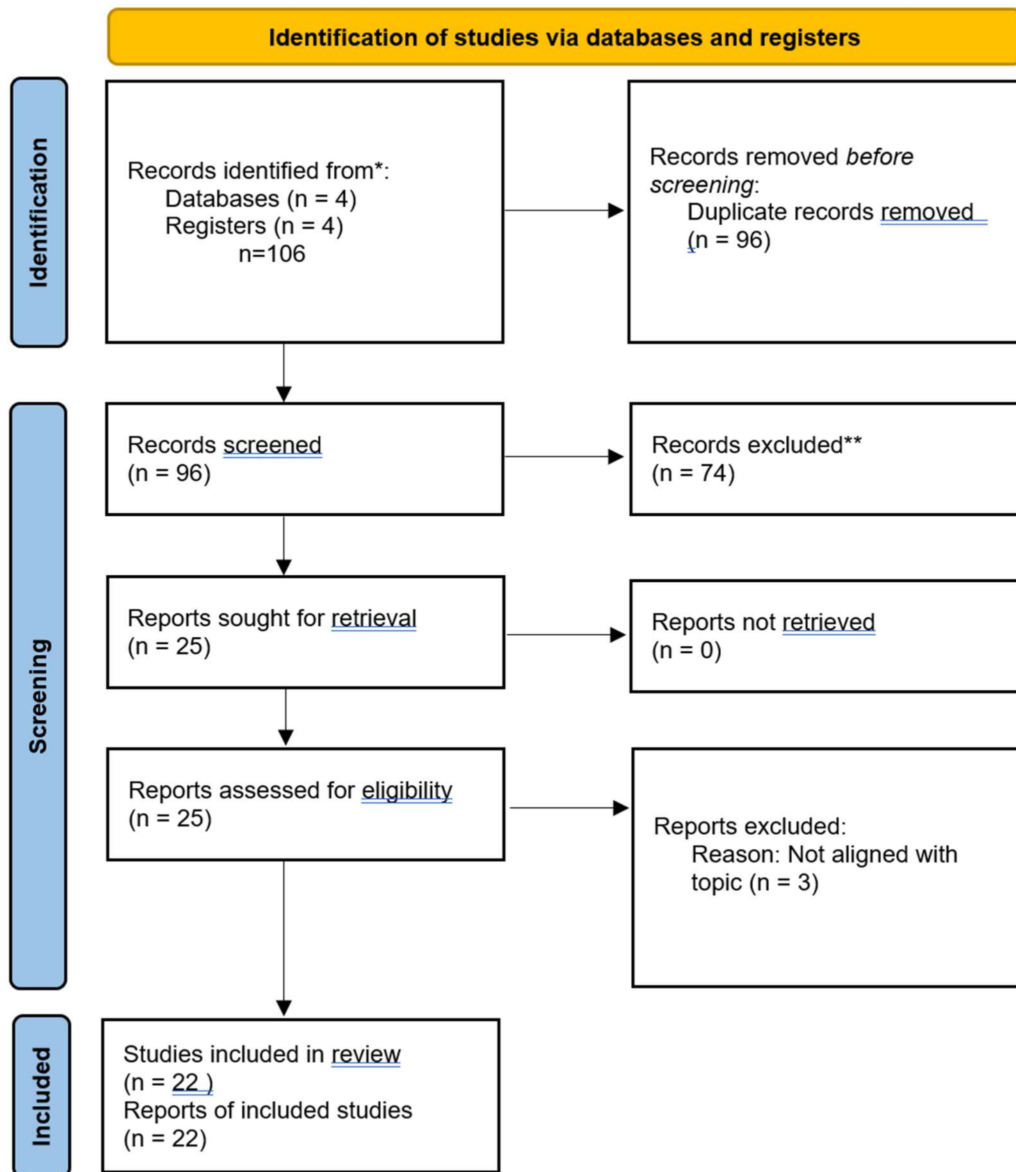
The search process followed the recommendations made by Toronto and Remington (2020), where information from the research is gathered at different stages, including the research of the background, when the question was formulated, and the search for information for the analysis of the literature and the discussion. Since an integrative review is used, various types of research methods are included. The main database used for the search of literature occurred using Cumulative Index of Nursing and Allied Health Literature (CINAHL). Various search words and terms were used to find appropriate literature, including patient safety event reporting, event reporting and reducing patient harm, and patient safety electronic database. Medline and ProQuest were additional databases used as part of the search.

Search Organization and Reporting Strategies

Search strategies as outlined by Whittemore and Knafl (2020) occurred for the integrative review. To provide a comprehensive search, two search strategies were utilized, primarily including the use of computerized databases and some journal hand searching. Locating research on patient safety event reporting and reducing harm successfully occurred by using various

search terms and search engines. The initial search efforts primarily used the CINAHL database through the Liberty University library. Additional databases used through the search process included the Proquest Nursing and Allied Health Database and Medline. The CINAHL database utilized the EBSCOhost platform. The Proquest Nursing and Allied Health Database used the Proquest platform and the Medline database from the US National Library of Medicine used several platforms including PubMed, ProQuest, Ovid, and EBSCOhost platforms. Primary search terms and phrases included patient safety, patient safety events, patient safety electronic event reporting, patient safety event reporting, patient safety reporting, reporting harm events in hospitals. As far as Boolean operators, AND, and OR were used in the search. For example, patient safety reporting AND hospital was used in the search. The operator OR expanded results when similar terms were used. Quotation marks were used around a phrase related to patient safety event reporting to instruct the database to search for all of the content. When exact quotes were used around impact of patient safety reporting, the number of returned articles was dramatically reduced.

The search flow is illustrated through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram found below (Page et al. 2021). Searching the described databases using the identified search words and techniques, focusing on the impact of reporting, and the criteria of full journal articles and peer reviewed articles within the last five years produced 106 journal articles. When duplicate articles were removed 96 remained. The 96 articles were reviewed for further appropriateness. Studies not specifically addressing the impact of patient safety event reporting were excluded. This resulted in 22 articles being fully analyzed to address the scholarly project topic. Throughout the search, a balance between comprehensiveness and relevance were kept at the forefront.



Personal expertise in using various search techniques was utilized to return as many credible and relevant articles as possible. Personal expertise comes from multiple library search training sessions over a lengthy career, using the library training as a faculty member, and teaching students how to apply search strategies.

A comprehensive search in the University library occurred and database search completion occurred after several hours of searching for articles. Access to more than one online library occurred and the process was complete when the same articles surfaced using a variety of search terms. When new searches did not return any new, unique, or relevant results, the database search process was complete (Toronto and Remington, 2020).

Terminology

Adverse Event - A patient safety event that resulted in harm to a patient (The Joint Commission, 2021).

Just Culture – a model of workplace justice intended to create fairness and better outcomes for patients. It includes an open reporting culture and a focus on system design and good behavior choice (Marx, 2019).

Patient Harm - Unintended and unnecessary harm resulting from , or contributed to by healthcare. This can also include the absence of indicated medical treatment (Slawomirski et al. 2020).

Patient Safety - The reduction of risk of unnecessary harm associated with health care to an acceptable minimum (Slawomirski et al. 2020).

Patient Safety Culture - The extent to which an organization's culture supports and promotes patient safety (Agency for Healthcare Research & Quality, 2022-b.)

Patient Safety Event Reporting - The process of writing up a patient event that either caused harm or could have caused harm. The event could be a near miss, also known as a close call, a no harm event, adverse event, or severe harm event.

Severe Harm - An event or condition that reaches an individual resulting in life-threatening bodily injury (The Joint Commission, 2021).

Section Three: Managing The Collected Data

The data collected was managed using the guidelines set forth by Tononto and Remington (2020). Articles were screened for relevancy and appropriateness. The inclusion and exclusion criteria were used during the screening of articles. Abstracts were reviewed to determine initial appropriateness. If the abstract showed an article was relevant, it was added to the data base for full article review. Once an appropriate article was identified, the articles were further organized in a personal database file by themes. The themes include patient safety event reporting in an acute care organization, patient safety event reporting in other than acute care organizations, and medical errors in healthcare and reporting. Documenting and managing the search process can be accomplished through a citation manager, flow diagram, or personal database, such as an Excel worksheet. The search process was accomplished using a personal database. A reference matrix was also utilized to promote resource organization and to assist reviewers with the ability to see the appropriateness of the literature.

CINAHL was one of the primary databases used for the collection of research articles. Proquest, PubMed, and open resource libraries, such as the National Library of Medicine were also used. Primarily nursing and allied health peer reviewed articles were used. A systematic searching approach was used such as using natural key words and controlled language, Boolean operators, and advanced search features.

After multiple articles were pulled, concepts were identified, and articles placed in categories. Concepts that surfaced included, reporting patient safety events, improving patient

safety, strategies to improve reporting harm, and reducing barriers to reporting. Related terms were used in the search and were evident in the articles pulled. Over 25 searches occurred to find articles addressing the impact of patient safety event reporting. At that point, it was noted the same articles returned from the search. When no new searches returned new or unique articles, the search is considered successful and complete for the purposes of the project. Conference proceedings, dissertations and thesis were not used. Some gray literature from well known organizations was reviewed and provided additional context to the issue being researched. In the paper, some gray literature is shared to support the research findings.

Section Four: Quality Appraisal

After a comprehensive search, there was a high return of articles related to patient safety and reducing harm in the healthcare setting. After screening multiple articles for relevancy and appropriateness as it relates to the impact of reporting patient safety events, all articles that were returned were reviewed. As previously mentioned, the sources were placed in a personal database using an Excel spreadsheet. Various levels of evidence were present with varying evidence strengths present. Melnyk's Level of Evidence was used (Appendix A). The range of evidence strength was from level I through level 7. The levels of evidence were discovered as part of the matrix table.

Sources of Bias

The sources selected, depending on whether the research was quantitative or qualitative, were found to have reliability, validity, transferability, credibility, dependability, and confirmability. Participants were clearly described in all the studies which promotes the concept of transferability. Most studies had more than one researcher. Also, all the articles selected were peer reviewed, and this promoted credibility as well as dependability of the research. Findings

were grounded in the data presented which promotes confirmability. Some of the research reviewed included randomization, and all used appropriate measurement tools and/or standard protocols. These efforts promoted appropriate selection, measurement, and performance. All articles included in the review had minimal to no identified bias.

Internal Validity

Proper scientific methods were utilized in the studies. It was apparent how the results from the study were generalizable. Some studies were small in size and repeating the study was suggested.

Appraisal Tool: Literature Matrix

The articles reviewed were critically appraised using Melnyk's Level of Evidence (Melynk & Fineout-Overholt, 2015). This appraisal tool was selected due to experience using the tool. According to Toronto and Remington (2020), there is no consensus on the best way to appraise the quality of a study. Melnyk's Level of Evidence incorporates methological rigor by including hierarchy of evidence. The hierarchy of evidence is based on the quality appraisal on the study design (Toronto and Remington, 2020). Refer to the literature matrix, Appendix D.

Applicability of Results

When reviewing the articles, the entire article was reviewed, making sure to analyze the content in the abstract, introduction, design methods, sampling, data collection efforts, ethical concerns, results, and discussions about the research process and findings, and content relevant to the research question. Credibility of the appraisal process should be noted when the results of the appraisal are entered into a matrix (Toronto and Remington, 2020). According to Whittemore and Knafl (2005), integrative reviews incorporate a wide range of purposes to define concepts in the literature, review evidence, and to analyze the methodology of topics of interest.

The results of the studies revealed that a culture of patient safety can promote the reporting of patient harm events through a formal process such as an electronic reporting platform. Multiple factors impact the likelihood of staff to report adverse events. Some of the factors include a blame-free culture, education on how to report a patient safety adverse event, and timely feedback from leaders on what happens after a report is placed. The results of the appraisal of each study are entered into the matrix noted in Appendix D.

Reporting Guidelines

The Preferred Reporting items for Systematic Reviews and Meta-Analyses (PRISMA) was used to minimize bias in the reporting of the final review. This assisted in how the review is reported as a whole.

Section Five: Data Analysis and Synthesis

All articles used for the integrative review were manually reviewed with three forms of analysis considered, including constant comparison, content analysis, and thematic analysis as outline by Toronto and Remington (2020). Industry experience in this area assisted the manual review. According to Toronto and Remington (2020), a primary goal of an integrative review is to create a better understanding of a topic by the use of diverse resources and synthesis of the literature. The goal is to make a new whole by integrating smaller pieces of evidence from various literature sources.

Data Analysis Methods

Thematics analysis was the method used for identifying, analyzing, and reporting patterns with the data. According to Toronto and Remington (2020), thematics analysis is a widely used and flexible method to use for data analysis. The review of research articles has created a better

understanding of the literature on the topic of the impact of reporting patient safety events as well as what makes a strong patient safety culture that will promote the reporting of adverse events. The information drawn from the rigorous review allows for further transformation of the material.

Descriptive Results

A review matrix is one way to display the appraisal results. Refer to Appendix D. After completing synthesis of the literature, several themes emerged. One major theme in the research is several actions acknowledged as promoting a strong culture of safety will promote the likelihood of adverse events being reported. Sixteen of the 22 articles reviewed discussed the correlation between a strong patient safety culture and the willingness to report (Aaron, et al., 2020; Abuosi et al., 2022; Albarrak, et al., 2020; AlThubaity and Mahday Shalby, 2023; Bates et al., 2023; Camacho-Rodriguez et al., 2022; Haskins & Roets, 2022; He et al., 2020, Hessles et al., 2019; Kakemam et al., 2021; Munktogoo et al., 2024; Skutezky et al., 2022; Tevis et al., 2020; Vijayan et al., 2022; Yoon et al., 2022; and Zhao et al., 2022. A second theme that emerged was patients should have a role in reporting adverse events, AlThubaity and Mahday Shalby, 2023; Bush et al., 2020, and Morey et al., 2021.

Single studies also provided valuable insight on the topic of patient safety event reporting. These single studies were not directly related to the impact of patient safety event reporting, but echo the importance of additional factors to consider when attempting to strengthen a culture of safety. Kasda, et al. (2020) found through a quality project during the COVID-19 pandemic that real-time reporting of harm events with newly added personnel resources allowed the team to address harm events more promptly. Abu Alrub, et al., (2022) found electronic reporting has higher satisfaction rates with users. Rotteau et al. (2022) note how

a patient safety culture is strengthened with the use of high reliability concepts. Schulson et al. (2021) note in their study vulnerable populations had less reporting of adverse events.

Synthesis

Thematic synthesis was used for analyzing and synthesizing the findings from the research. The most significant theme that developed through the synthesis of the literature was how a patient safety culture should be strengthened by employing a variety of actions. Suggested actions include, promoting a blame-free, non-punitive, and Just Culture, educate staff on how to use the reporting system used in the organization, and promote transparency where leaders share what has been entered into the reporting system and what actions are being taken to address the event. Leadership feedback should be timely. Consistency in reporting should be promoted and teamwork should be routinely encouraged by leadership. Barriers to reporting must be addressed and eliminated (Aaron, et al., 2020; Abuosi et al., 2022; Albarrak, et al., 2020; AlThubaity and Mahday Shalby, 2023; Bates et al., 2023; Camacho-Rodriguez et al., 2022; Haskins & Roets, 2022; He et al., 2020, Hessles et al., 2019; Kakemam et al., 2021; Munktogoo et al., 2024; Skutezky et al., 2022; Tevis et al., 2020; Vijayan et al., 2022; Yoon et al., 2022; and Zhao et al., 2022. A second theme that emerged was patients should have a role in reporting adverse events, AlThubaity and Mahday Shalby, 2023; Bush et al., 2020, and Morey et al., 2021).

Aaron et al. (2020) conducted a narrative review examining 68 articles that described strategies used to increase event reporting among residents and fellows. From the review, the authors extracted how a combination of strategies to promote a culture of patient safety has a cumulative and sustainable effect on promoting patient safety. They shared how the focus of patient safety is no longer remediation of an individual, but the identification of system changes and standardized processes that will reduce the likelihood of an error occurring. Even though

there is an understanding of the importance of reporting safety events, the barriers must be addressed to improve the occurrence of event reporting. According to Aaron et al. (2020), event reporting system are cumbersome and time consuming which can cause resistance to use the system. In their review, the authors noted how behavioral modeling or training was used to increase desired performance of ideal behaviors. The review by Aaron et al. (2020) showed that no single or isolated strategy solves challenges, but a combination of strategies has a cumulative and sustainable effect of supporting a culture that fosters reporting. According to Mitchell et al. (2016), as cited in Aaron et al. (2020), the healthcare industry will need to take incident reporting as serios as the health budget if they want to learn from its mistakes. In their conclusion, Aaron et al. (2020) share the most sustainable interventions include a combination of behavior modeling, surveys and messaging, and easy accessibility of reporting through the electronic medical record.

He et al. (2020), conducted a cross-sectional survey of 549 staff members in six nursing homes. They concluded a barrier-free adverse event reporting system should be created to reduce the obstacles often seen in reporting. A patient safety culture encourages reporting of adverse events. Promoting a blame free patient safety culture is an essential strategy to improve the care provided to patients. If reporting barriers are not addressed, this could lead to higher rates of non-reporting of adverse events and eventually the failure to not only identify problems, but the lack of solving patient safety problems which would lead to very serious consequences.

Haskins and Roets (2022), conducted a non-experimental student exampling the actions nursing leaders must take to enhance a culture of patient safety. Thirty-four nurse managers and 417 nurses were included in the study. The findings conclude that nursing leaders have specific actions they can take to contribute to a culture of patient safety, including information sharing,

promoting a Just Culture to manage behavior choices and using data from the reporting system to manage patient safety issues.

Ethical Considerations

As part of ethical considerations for the project, the Liberty University Institutional Review Board was contacted, and the project is exempt (Appendix B). Additional ethical considerations were taken during the integrative review. Twenty hours of CITI training was completed (Appendix C).

Timeline

Milestone	Deliverable	Description	Estimated Completion Date
CITI Training	CITI Training Complete	Complete online CITI training	10/9/23
Proposal Powerpoint	Proposal Powerpoint	Complete Proposal Powerpoint	10/9/23
Defend Proposal	Proposal Powerpoint	Defend Proposal of Integrative	12/3//23
IRB Approval	Letter Stating IRB Approval Not Needed	Received Letter Stating IRB Approval Not Needed	12/7/23
Draft Final Paper	Complete Draft IR Paper	Complete Draft IR Paper For Review	2/18/24
Final Edits	Complete Final Edits		3/8/24
Final Defense	Defend IR via Powerpoint	Defend IR to Chair	3/11/24
Scholarly Crossing	Submit Final Copy of IR	Submit Final Copy of IR	5/3/24

Section Six: Discussion

The review of literature for the integrative review shows how promoting a culture of patient safety in healthcare organizations correlates with an increase and comfort in reporting

adverse event. The findings are significant as leaders and staff continuously try to improve the healthcare provided to patients.

Implications for Practice/ Future Work

Conducting additional research on the impact of patient safety event reporting on adverse events is needed. There was a low return on actual studies that address or note the impact reporting has on the culture of safety. A large focus on current research was on the strategies needed to improve a culture of safety which is then correlated with improving the amount of event reporting. More studies are needed in US hospitals since the return on studies in US hospital was low.

The research analysis showed the benefits of educating staff on the use of systems used for reporting as well as the benefits of reporting on the culture of safety. Sharing the studies that are available with staff are important as healthcare organizations are working on system redesign. Healthcare executives and mid-level leaders can keep the topic of event reporting at the forefront in patient safety huddles, at quality and clinical meetings, so leaders will continue to focus on moving toward a more highly reliable organization where strong patient safety cultures exist.

Dissemination

Dissemination of a scholarly project can occur in various forms. Dissemination of this project can occur in the classroom and clinical setting as additional scholarly work is accomplished. The review of the project can promote discussions with other colleagues on event reporting and strategies for improving a culture of safety. Publication of the project in a nursing or patient safety journal can be explored.

References

Aaron, M., Webb, A., & Luhanga, U. A. (2020). narrative review of strategies to increase patient safety event reporting by residents. *J Grad Med Educ. 12*(4):415-424. doi: 10.4300/JGME-D-19-00649.1.

Abuosi, A. A., Poku, C. A., Attafuah, P. Y. A., Anaba, E. A., Abor, P. A., Setordji, A., & Nketiah-Amponsah, E. (2022). Safety culture and adverse event reporting in ghanaian healthcare facilities: Implications for patient safety. *PloS One, 17*(10), e0275606-e0275606. https://doi.org/10.1371/journal.pone.0275606

Agency for Healthcare Research and Quality. (2022-a). *National healthcare quality and disparities report: Executive summary.* https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2022qdr-final-es.pdf

Agency for Healthcare Research and Quality (2022-b). *What is patient safety culture?* https://www.ahrq.gov/sops/about/patient-safety-culture.html

Albarrak, A. I., Almansour, A. S., Alzahrani, A. A., Almalki, A. H., Alshehri, A. A., & Mohammed, R. (2020). Assessment of patient safety challenges and electronic occurrence variance reporting (e-OVR) barriers facing physicians and nurses in the emergency department: A cross sectional study. *BMC Emergency Medicine, 20*(1),

98-98. https://doi.org/10.1186/s12873-020-00391-2

AlThubaity, D.D., & Mahdy Shalby, A.Y. (2023). Perception of health teams on the implementation of strategies to decrease nursing errors and enhance patient safety. *J Multidiscip Healthc*. 13;16:693-706. doi: 10.2147/JMDH.S401966.

Bates, D. W., Levine, D. M., Salmasian, H., Syrowatka, A., Shahian, D. M., Lipsitz, S., Zebrowski, J. P., Myers, L. C., Logan, M. S., Roy, C. G., Iannaccone, C., Frits, M. L., Volk, L. A., Dulgarian, S., Amato, M. G., Edrees, H. H., Sato, L., Folcarelli, P., Einbinder, J. S., . . . Mort, E. (2023). The safety of inpatient health care. The New *England Journal of Medicine, 388*(2), 142-153. https://doi.org/10.1056/NEJMsa2206117

Busch, I. M., Saxena, A., & Wu, A. W. (2021). Putting the patient in patient safety investigations: Barriers and strategies for involvement. *Journal of Patient Safety, 17*(5), 358-362. https://doi.org/10.1097/PTS.0000000000000699

Camacho-Rodríguez, D.E., Carrasquilla-Baza, D.A., Dominguez-Cancino, K.A., Palmieri, P.A. (2022). Patient safety culture in latin American hospitals: A systematic review with meta-analysis. *Int J Environ Res Public Health*. *19*(21):14380. doi: 10.3390/ijerph192114380.

Haskins, H. E. M., & Roets L. (2022). Nurse leadership: Sustaining a culture of safety. *Health SA*. 25;27:2009. doi: 10.4102/hsag.v27i0.2009.

Institute of Medicine (US) Committee on Quality of Health Care in America. (2000). *To err is human: Building a safer health system.* Kohn, L.T., Corrigan J. M., Donaldson, M.S, editors. National Academies Press.

He H., Yu, P., Li L., Xiao, X., Long, Y., Wang, L., Zeng, J., & Li, Y. (2020). Patient safety culture and obstacles to adverse event reporting in nursing homes. *J Nurs Manag. 28:* 1536–1544. https://doi.org/10.1111/jonm.13098

Hessels, A. J., Paliwal, M., Weaver, S. H., Siddiqui, D., & Wurmser, T. A. (2019). Impact of patient safety culture on missed nursing care and adverse patient events. *Journal of Nursing Care Quality, 34*(4), 287–294. https://doi.org/10.1097/NCQ.0000000000000378

Kakemam, E., Hajizadeh, A., Azarmi, M., Zahedi, H., Gholizadeh, M., & Roh, Y. S. (2021). Nurses' perception of teamwork and its relationship with the occurrence and reporting of adverse events: A questionnaire survey in teaching hospitals. *Journal of Nursing Management, 29*(5), 1189-1198. https://doi.org/10.1111/jonm.13257

Kasda, E., Robson, C., Saunders, J., Adadey, A., Ford, B., Sinha, N., Teter, J., Warner, N., & Paine, L. (2020). *Using event reports in real-time to identify and mitigate patient safety concerns during the COVID-19 pandemic*. https://doi.org/10.1177125160435209530 25

Kepner S., & Jones R. (2023). Patient safety trends in 2022: An analysis of 256,679 serious events and incidents from the nation’s largest event reporting database. *Patient Safety.*

5(2):6-19. doi:10.33940/001c.74752

Marx, D. (2019). Patient safety and the just culture. *Obstet Gynecol Clin North Am. 46*(2):239-245. doi: 10.1016/j.ogc.2019.01.003.

Melnyk, B. M. & Fineout-Overholt, E. (2015). Evidence-based practice in nursing & healthcare: A guide to best practice (3rd ed.) Wolters Kluwer Health.

Morey, S., Magnusson, C., & Steven, A. (2021). Exploration of student nurses' experiences in practice of patient safety events, reporting and patient involvement. *Nurse Education Today, 100,* 104831-104831. https://doi.org/10.1016/j.nedt.2021.104831

Munkhtogoo, D., Liu, Y.-P., Hung, S.-H., Chan, P.-T., Ku, C.-H., Shih, C.-L., & Wang, P.-C. (2024). Trend analysis of inpatient medical adverse events in taiwan (2014–2020): Findings from taiwan patient safety reporting system. *Journal of Patient Safety., 20*(3), 171–176. https://doi.org/10.1097/PTS.0000000000001196

Page, M. J, McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J. M. & Moher, D. et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ. 372*(71). doi: 10.1136/bmj.n71

Patient Safety Network. (2019). *Reporting patient safety events.* https://psnet.ahrq.gov/primer/reporting-patient-safety-

events#:~:text=Patient%20safety%20event%20reporting%20systems%20are%20ubiquitous%20in,those%20involved%20in%20events%20to%20provide%20detailed%20information.

Rotteau, L., Goldman, J., Shojania, K. G., Vogus, T. J., Christianson, M., G, R. B., Rowland, P., & Coffey, M. (2022). Striving for high reliability in healthcare: A qualitative study of the implementation of a hospital safety programme. *BMJ Quality & Safety, 31*(12), 867-877. https://doi.org/10.1136/bmjqs-2021-013938

Salvon-Harmon, J. (2023). Actions to renew focus on safety culture. *Healthcare Executive*. May-June. https://healthcareexecutive.org/

Schulson, L. B., Novack, V., Folcarelli, P. H., Stevens, J. P., & Landon, B. E. (2021). Inpatient patient safety events in vulnerable populations: A retrospective cohort study. *BMJ Quality & Safety, 30*(5), 372-379. https://doi.org/10.1136/bmjqs-2020-011920

Skutezky, T., Small, S. S., Peddie, D., Balka, E., & Hohl, C. M. (2022). Beliefs and perceptions of patient safety event reporting in a canadian emergency department: A qualitative study. *Canadian Journal of Emergency Medicine, 24*(8), 867-875. https://doi.org/10.1007/s43678-022-00400-2

Slawomirski, L., Klazinga, N. & Abdulelah, A. (2020). *The economics of patient safety: From analysis to action.* Organization for Economic Co-operation and Development. http://www.oecd.org/health/health-systems/Economics-of-Patient-Safety-October-

2020.pdf

The Joint Commission. (2021). *Sentinel events*. https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/sentinel-event/camh_24_se_all_current.pdf

Tevis, S. E., Schmocker, R. K., & Wetterneck, T. B. (2020). Adverse event reporting: Harnessing residents to improve patient safety. *Journal of Patient Safety., 16*(4), 294–298. https://doi.org/10.1097/PTS.0000000000000333

Toronto, C. E. & Remington, R. (2020). A step-by-step guide to conducting an integrative review. Springer.

U.S. Department of Health and Human Services. Office of Inspector General (2023). *Adverse events.* https://oig.hhs.gov/reports-and-publications/featured-topics/adverse-events/

Valdez, R. O. (2022). In pandemic's wake, we must recommit to patient and workforce safety. https://www.ahrq.gov/news/blog/ahrqviews/patient-workforce-safety.html#:~:text=Healthcare%2Dassociated%20infections%20in%20hospitals,trends%20in%20other%20healthcare%20domains.

Vijayan V, & Limon J. (2022). Increasing patient safety event reporting among pediatric residents. *Cureus. 18*;14(3):e23298. doi: 10.7759/cureus.23298.

Whittemore, R. and Knafl, K. (2005), The integrative review: Updated methodology. *Journal of Advanced Nursing, 52:* 546-553. https://doi.org/10.1111/j.1365-2648.2005.03621.x

Worakunphanich, W., Suwankesawong, W., Youngkong, S., Thavorncharoensap, M., Anderson, C., & Toh, L. S. (2023). Thai stakeholders' awareness and perceptions of the patient adverse event reporting system for herbal medicines: A qualitative study. International Journal of Clinical Pharmacy, 45(2), 491-501. https://doi.org/10.1007/s11096-022-01533-1

World Health Organization. (2023). Patient safety. https://www.who.int/news-room/fact-sheets/detail/patient-safety

Yoon, S. & Lee, T. (2022). Factors influencing military nurses' reporting of patient safety events in south korea: A structural equation modeling approach. *Asian Nursing Research, 16*(3). 162-169. https://doi.org/10.1016/j.anr.2022.05.006.

Zhao, X., Shi, C., & Zhao, L. (2022). Nurses' intentions, awareness and barriers in reporting adverse events: A cross-sectional survey in tertiary hospitals in china. Risk Management and Healthcare Policy, 15, 1987-1997. https://doi.org/10.2147/RMHP.S386458

Appendix A

Strengths of Evidence Table

LEVEL OF EVIDENCE	STUDY DESIGN
Level I	Systematic reviews and meta-analysis of randomized controlled trial
Level II	Randomized controlled trial
Level III	Non-randomized controlled trial (quasi-experiment)
Level IV	Case-control or cohort studies
Level V	Systematic reviews of qualitative or descriptive studies
Level VI	Qualitative or descriptive studies
Level VII	Opinion of authorities and/or reports of expert committees

Melnyk & Fineout-Overholt, 2015

Appendix B

IRB Approval Documentation

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

December 7, 2023

Catherine Amitrano
Kris Diggins

Re: IRB Application - IRB-FY23-24-963 The Impact of Reporting Patient Safety Events: An Integrative Review

Dear Catherine Amitrano and Kris Diggins,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds that your study does not meet the definition of human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research because it will not involve the collection of identifiable, private information from or about living individuals (45 CFR 46.102).

Please note that this decision only applies to your current application. Any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

For a PDF of your IRB letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study Details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

Appendix C

CITI Certificate

Completion Date 09-Oct-2023
Expiration Date 09-Oct-2026
Record ID 58595373

This is to certify that:

Catherine Amitrano

Not valid for renewal of certification through CME.

Has completed the following CITI Program course:

Biomedical Research - Basic/Refresher
(Curriculum Group)
Biomedical & Health Science Researchers
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Liberty University

Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
www.citiprogram.org

Verify at www.citiprogram.org/verify/?w70b24ffc-0957-4060-91c0-18c22f7bd606-58595373

Appendix D

ARTICLE CRITIQUE AND LEVELING MATRIX

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
Aaron, M., Webb, A., & Luhanga, U. A. (2020). narrative review of strategies to increase patient safety event reporting by residents. J Grad Med Educ. Aug;12(4):415-424. doi: 10.4300/JGME-D-19-00649.1.	To review strategies used to increase patient safety event reporting by residents	68 articles were reviewed with event reporting strategies	Narrative Review	A combination of strategies has a cumulative sustainable effort	Expert Opinion – Level VII	None noted	Yes, directly debates event reporting
Abu Alrub, A. M., Amer, Y. S., Titi, M. A., May, A. C. A., Shaikh, F., Baksh, M. M., & El-Jardali, F. (2022). Barriers and enablers in implementing	The purpose of the study was to evaluate staff satisfaction with an electronic reporting system and whether reporting	1500 surveys went out to front line staff and there was a 68.6% response rate	Cross Sectional	Staff reported high satisfaction with the ease of using an electronic reporting system. Reporting	Non-experimental Level IV	Most of the respondent were nurses and some data was missing in the survey, but not	Yes, staff satisfaction impacts use of system

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
an electronic incident reporting system in a teaching hospital: A case study from saudi arabia. *The International Journal of Health Planning and Management, 37*(2), 854-872. https://doi.org/10.1002/hpm.3374	increased with electronic reporting in comparison to paper reporting.			was easier. More reporting occurred with the electronic reporting system in comparison to paper reporting		more than 3%	
Abuosi, A. A., Poku, C. A., Attafuah, P. Y. A., Anaba, E. A., Abor, P. A., Setordji, A., & Nketiah-Amponsah, E. (2022). Safety culture and adverse event reporting in ghanaian	To examine patient safety culture and event reporting	1651 healthcare professionals	Cross Sectional	A patient safety culture can enhance patient safety reporting	Non experimental Level IV	Data collection occurred during pandemic which could have limited the results	Yes, due to the findings.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
healthcare facilities: Implications for patient safety. PloS One, 17(10), e0275606-e0275606. https://doi.org/10.1371/journal.pone.0275606							
Albarrak, A. I., Almansour, A. S., Alzahrani, A. A., Almalki, A. H., Alshehri, A. A., & Mohammed, R. (2020). Assessment of patient safety challenges and electronic occurrence variance reporting (e-OVR) barriers facing physicians and nurses in the emergency	To review the amount of violence in an ED through reporting and promote the use of an eOVR in recording the violence	197 ED participants, nurses and physicians	Cross Sectional	31% of the partici-pants thought reporting was time consum-ing and physicians had a lower know-ledge of how to access the electronic occur-ence variance report	Non Experimental Level IV	Occurred in a single ED in Saudi Arabia	Yes, there was an emphasis on how the staff should be shown how to use the electronic system

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
department: A cross sectional study. *BMC Emergency Medicine, 20*(1), 98-98. https://doi.org/10.1186/s12873-020-00391-2				system. They had a lower satisfaction with the system in compareson to nurses			
AlThubaity, D.D., & Mahdy Shalby, A.Y. (2023). Perception of health teams on the implementation of strategies to decrease nursing errors and enhance patient safety. J Multidiscip Healthc. 13;16:693-706. doi: 10.2147/JMDH.S401966.	Understand the perceptions of healthcare team members about strategies for reducing nursing errors to improve patient safety	400 healthcare hospital team members; 150 nurse, 67 physicians, 29 nurse aides, 30 health workers, and 124 other health team members	Descriptive	57.5% of the participant reported any incidents or defects. Medicine error reporting should be encouraged and not lead to disciplineary actions. Patients should be given opportun-	Non-experimental Level IV	Single overseas hospital study	Yes, study shows percentage of reporting and need for blame free environment

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
				ity to report			
Bates, D. W., Levine, D. M., Salmasian, H., Syrowatka, A., Shahian, D. M., Lipsitz, S., Zebrowski, J. P., Myers, L. C., Logan, M. S., Roy, C. G., Iannaccone, C., Frits, M. L., Volk, L. A., Dulgarian, S., Amato, M. G., Edrees, H. H., Sato, L., Folcarelli, P., Einbinder, J. S., . . . Mort, E. (2023). The safety of inpatient health care. *The New England Journal of Medicine, 388*(2), 142-153. https://doi.org/	The purpose of the study was to identify if adverse events existed in the admission reviewed and whether there are opportunities to improve the reporting process	2750 admissions from 4 hospitals and 23.6% of the admissions had an adverse event occur	Retrospective Cohort Study	There were inconsistencies in reporting adverse events. There is a need to develop a system for consistent reporting of adverse events to improve patient safety	Non Experimental Level IV	More patients with private insurance. The sample may not represent a sample at large	Yes, this is a peer reviewed article that promotes the need for consistent patient safety reporting

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
10.1056/NEJMsa2206117							
Busch, I. M., Saxena, A., & Wu, A. W. (2021). Putting the patient in patient safety investigations: Barriers and strategies for involvement. *Journal of Patient Safety, 17(*5), 358-362. https://doi.org/10.1097/PTS.0000000000000699	To provide a framework to use when considering patient input for patient safety event notification	6 articles	Quality Improvement Project	Patients can offer insight as patient safety events are investigat-ed	Quality Improvement Project Level 7	Very small study. Over 10K articles came up in the search, but only 6 were used	Yes, because this is an interesting topic that I believe not many have studies
Camacho-Rodríguez, D.E., Carrasquilla-Baza, D.A., Dominguez-Cancino, K.A., Palmieri, P.A. (2022). Patient safety culture in Latin	Provide evidence about the state of patient safety culture in Latin American hospitals	30 articles included	System-atic Review	A non-punitive culture with open communi-cation cultivates robust event reporting	System-atic Review Level I	National databases were not searched	Yes, findings indicate staff need more education on reporting adverse events to improve the

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
American hospitals: A systematic review with meta-analysis. Int J Environ Res Public Health. 19(21):14380. doi: 10.3390/ijerph192114380.							culture of safety
Haskins, H. E. M., & Roets L. (2022). Nurse leadership: Sustaining a culture of safety. Health SA. 25;27:2009. doi: 10.4102/hsag.v27i0.2009.	To describe the specific actions required by nurse leaders to enhance the sustainability of a safety culture	339 nurses and 28 nurse leaders	Correlational	Nurse leaders must report incidents of concern that impact patient safety. They must constantly review concerns in the incident reporting system	Level IV	Non experi-mental Level IV	Yes, directly applies to the impact of reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
He H., Yu, P., Li L., Xiao, X., Long, Y., Wang, L., Zeng, J., & Li, Y. (2020). Patient safety culture and obstacles to adverse event reporting in nursing homes. *J Nurs Manag. 28*: 1536–1544. https://doi.org/10.1111/jonm.13098	To investigate patient safety culture and its relationships with obstacles to adverse event reporting in Chinese nursing homes	580 staff from 6 nursing homes	Cross Sectional	Barriers and high rates on non-reporting of adverse events could lead to failure to identify and solve safety problems	Non-experimental Level IV	Due to nature of the survey self-report bias could occur. The study did not include staff from all nursing homes in the city	Yes, relates to a patient safety culture and adverse event reporting
Hessels, A. J., Paliwal, M., Weaver, S. H., Siddiqui, D., & Wurmser, T. A. (2019). Impact of patient safety culture on missed nursing care and adverse patient events. Journal of Nursing	To describe relationships among a patient safety culture, missed nursing care, and 4 types of adverse patient events	385 nurses working on 29 inpatient units	Cross Sectional	A strong patient safety culture is correlated with nurses' intention to report errors	Non-experimental Level IV	Only 74% of all units reported which limits ability to detect relation-ships	Yes, related to the impact of event reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
Care Quality, 34(4), 287–294. https://doi.org/10.1097/NCQ.0000000000000378							
Kakemam, E., Hajizadeh, A., Azarmi, M., Zahedi, H., Gholizadeh, M., & Roh, Y. S. (2021). Nurses' perception of teamwork and its relationship with the occurrence and reporting of adverse events: A questionnaire survey in teaching hospitals. *Journal of Nursing Management, 29*(5), 1189-1198.	To determine how team work impacts adverse events and the reporting of adverse events	327 Iranian nurses from 8 different teaching hospitals	Cross Sectional	Teamwork decreases harm and also improves the amount of reporting of adverse events	Non Experi-mental Level IV	Recall bias Study design does not promote causal association	Yes, because this is the first article about teamwork and reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
https://doi.org/10.1111/jonm.13257							
Kasda, E., Robson, C., Saunders, J., Adadey, A., Ford, B., Sinha, N., Teter, J., Warner, N., & Paine, L. (2020). Using event reports in real-time to identify and mitigate patient safety concerns during the COVID-19 pandemic. https://doi.org/10.117712516043520953025	Develop a new process to mitigate patient safety concerns	The QI project occurred at Johns Hopkins Medicine	Quality Improvement Project	A COVID-19 Safety Officer and COVID-19 Patient Safety Analyst positions were created	Quality Improvement Project Level VII	None noted	Yes, it highlights the importance of event reporting and understanding real time reporting.
Morey, S., Magnusson, C., & Steven, A. (2021). Exploration of	To determine value of reporting and patient's involvement	32 participants in 5 focus groups	Qualitative	Learning from patient safety incidents has	Qualitative Level VI	Small Sample Size	Yes, nursing students explore importance of reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
student nurses' experiences in practice of patient safety events, reporting and patient involvement. *Nurse Education Today, 100,* 104831-104831. https://doi.org/10.1016/j.nedt.2021.104831	in event reporting			significant merit in healthcare			
Munkhtogoo, D., Liu, Y.-P., Hung, S.-H., Chan, P.-T., Ku, C.-H., Shih, C.-L., & Wang, P.-C. (2024). Trend analysis of inpatient medical adverse events in taiwan (2014–2020):Findings	Focus on trends of medical adverse event reporting in Taiwan	70,599 medical adverse event reports	Retrospective	Several strategies are vital to promote reporting. Noted national campaigns for patient safety encourage reporting	Non-experimental Level IV	Did not include outpatient or emergency department reporting. Not all hospitals participated. Dependent on	Yes, article support multiple strategies needed

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
from Taiwan patient safety reporting system. Journal of Patient Safety., 20(3), 171–176. https://doi.org/10.1097/PTS.0000000000001196						what was place in the electronic system	
Rotteau, L., Goldman, J., Shojania, K. G., Vogus, T. J., Christianson, M., G, R. B., Rowland, P., & Coffey, M. (2022). Striving for high reliability in healthcare: A qualitative study of the implementation of a hospital safety programme. BMJ Quality &	To evaluate how participants use HRO concepts	74 interviews	Qualitative	It's important to help staff incorporate HRO principles	Level VI Qualitative	Single site	Yes, good supporting data to the main articles.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Safety, 31(12), 867-877. https://doi.org/10.1136/bmjqs-2021-013938							
Schulson, L. B., Novack, V., Folcarelli, P. H., Stevens, J. P., & Landon, B. E. (2021). Inpatient patient safety events in vulnerable populations: A retrospective cohort study. *BMJ Quality & Safety, 30(*5), 372-379. https://doi.org/10.1136/bmjqs-2020-011920	To examine the rate of patient safety events submitted on vulnerable populations	Singel tertiary Care Academic Medical Center 141,877 hospital admissions examined and 13.6% admissions had patient safety events were submitted	Retrospective	Asia, LEP, and latino patients had less patient safety event reports	Non-experimental Level IV	It was conduct-ed at a single center	Yes, because it addresses the topic of reporting and vulnerable population.
Skutezky, T., Small, S. S., Peddie, D., Balka, E., & Hohl, C. M. (2022). Beliefs	To determine the current perception about Patient Safety Event reporting	50 ED staff and department leaders	Qualitative study using focus groups	The current reporting structure is inconsist-	Single Qualatative Level VI	The participant size was small	Yes, because of the study being qualitative which

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
and perceptions of patient safety event reporting in a canadian emergency department: A qualitative study. Canadian *Journal of Emergency Medicine, 24*(8), 867-875. https://doi.org/10.1007/s43678-022-00400-2			and interviews	ent and informal at times. The electronic system was not found simple to use and partici-pants did not get feedback in a timely manner			would be different than many of the non experiment-al studies already found.
Tevis, S. E., Schmocker, R. K., & Wetterneck, T. B. (2020). Adverse event reporting: Harnessing residents to improve patient safety. Journal of *Patient Safety., 16*(4), 294–	Evaluate barriers to reporting adverse events	67 residents	Expert opinion	Residents under-stand the import-ance of reporting adverse events and near misses. First year residents lacked knowl-	Quality Improvement Project Level VII	Occurred at one facility	Yes, residents learned the impact on quality of care by reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
298. https://doi.org/10.1097/PTS.0000000000000333				edge about how to report. With education, reporting increased twofold			
Vijayan, V., & Limon, J. (2022). Increasing patient safety event reporting among pediatric residents. *Cureus. 18;*14(3):e23298. doi: 10.7759/cureus.23298.	To find intervention that would increase event reporting by pediatric residents	Unknown number of pediatric residents who participated. Project conducted at California children's hospital	Expert Opinion	A lack of feedback on the results of entered patient safety events can lead to decreased reporting	Quality Improvement Project Level VII	Single facility. Unknown number of residents participating	Yes, since the study discusses a multi-pronged approach to increase reporting
Yoon, S., & Lee, T. (2022). Factors Influencing Military Nurses' Reporting of Patient Safety Events in	Explore how Just Culture, authentic leadership, a safety climate, knowledge about patient safety, and safety	303 military nurses across 8 military hospitals in South Korea	Cross Sectional, Descriptive Correlational	Safety climate, Patient Safety Knowledge, and a Just Culture directly	Non-experimental Level IV	Closed questioning and direct survey have inherent limitat-ions	Yes, study discusses what impact reporting

Article Title, Author, etc. (Current APA Format)	**Study Purpose**	**Sample (Characteristics of the Sample: Demographics, etc.)**	**Methods**	**Study Results**	**Level of Evidence (Use Melnyk Framework)**	**Study Limitations**	**Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.**
South Korea: A Structural Equation Modeling Approach. Asian Nursing Research, 16(3), 162-169. https://doi.org/10.1016/j.anr.2022.05.006	motivation affect military nurses' reporting of patient safety events			influence patient safety reporting			
Zhao, X., Shi, C., & Zhao, L. (2022). Nurses' intentions, awareness and barriers in reporting adverse events: A cross-sectional survey in tertiary hospitals in china. *Risk Management and Healthcare Policy, 15*, 1987-1997.	To explore intentions, awareness, and barriers in reporting adverse events	1734 nurse participants, from 2 hospitals in China	Cross Sectional	When nurses under-stand what adverse events are, then they are more likely to report	Non-experimental Level IV	Other factor that can impact reporting were not explored.	Yes, because the study shows the value of reporting.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
https://doi.org/10.2147/RMHP.S386458							

Table

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