

How to Cite:

Almuqati, L. F. S., Alyamani, A. M. A., Alsulami, A. N. M., Raea, S. M., Albather, M. H., Alsanad, I. S., Aljohani, M. A., Alhejaili, M. A. M., Alarfi, M. D. M., Albalawi, M. F., & Alhawiti, M. E. (2021). Challenges in medical record documentation: Insights from nurses and physicians. *International Journal of Health Sciences*, 5(S1), 1530–1544.

<https://doi.org/10.53730/ijhs.v5nS1.15419>

Challenges in medical record documentation: Insights from nurses and physicians

Lahiq Falhan S. Almuqati

KSA, National Guard Health Affairs

Abdullah Mohammed Abdullah Alyamani

KSA, National Guard Health Affairs

Ahmad Nafal Mohmmmed Alsulami

KSA, National Guard Health Affairs

Salem Mohammad Raea

KSA, National Guard Health Affairs

Mohammed Hassan Albather

KSA, National Guard Health Affairs

Ibrahim Saud Alsanad

KSA, National Guard Health Affairs

Mohammed Abdulrahman Aljohani

KSA, National Guard Health Affairs

Mazen Ayidh Muawwadh Alhejaili

KSA, National Guard Health Affairs

Mobarak Dakhelallah Meateq Alarfi

KSA, National Guard Health Affairs

Mohammed Faraj Albalawi

KSA, National Guard Health Affairs

Mohammed Eid Alhawiti

KSA, National Guard Health Affairs

Abstract--Background: Documentation in the patient's clinical record is central to safe and quality patient care. Nevertheless, working in the framework of this or that health care, the professionals have several obstacles that affect its effectiveness and reliability; these are insufficient documentation, strict deadlines, and the use of modern technologies. **Aim:** The focus of this proposed study is to establish practical identification of typical documentation problems faced and seek means of addressing them with enhanced precision in health care organizations. **Methods:** Mail survey on documented professionals and a sample of recent research in the field was used to ascertain documentation concerns and possible solutions such as new technology and training programs. **Results:** Specific factors that were proposed include time constraints, inadequate documentation, variation in terminology, and data integration problems with electronic health records (EHR). The measures like improved standard, better technologies, and professional training has been considered as ideal solution for these challenges. **Conclusion:** Challenges to documentation can be overcome by improving the standards for documentation and training and integrating new technologies in to address medical record issues to also improve both workflow and patient care.

Keywords---Documentation in healthcare, medical records, documentation issues, documentation reliability, healthcare organizational design and economy, Electronic health record systems, data sharing.

Introduction

Electronic documentation is essential in the success of delivering quality healthcare services and promoting patient safety in an environment where premature and inexact documentation is the standard. However, despite its critical importance, it's important for healthcare professionals to document patient information and it's often a challenge they encounter. Most of these challenges include having incomplete or incorrect entries, time barriers, technological barriers, and other barriers that may lead to low efficiency, and misunderstanding of patient information as well as, at times, lead to negative consequences on the patient's health. It is possible to admit that it is crucial to address these issues in terms of enhancing the quality of documentation as well as flow in the institutions delivering the services of healthcare. The present work investigates the major difficulties that are most often encountered in the process of documentation in medical records, reveals the tendencies behind these difficulties, and presents the potential ways to address the issues. When these challenges are appropriately managed, healthcare organizations, its employees and clients will work in a more co-ordinated manner providing good results for patients and clinically efficient results. [1]

Reducing the Gaps in Accuracy and Efficiency

In healthcare, one of the most crucial essentials is medical record documentation since it plays a central role in determining quality care to be provided to the patient and the exact flow of care to be provided by a specific team of health care givers. There are still obstacles to this because of variability in work load, lack of prior practice, and technical difficulties. Documentation is required not only to record the patient or client history and as well as the treatment plan but also to eliminate possibility of producing wrong outcomes. Incomplete records mean that patient care can be delayed or inadequately delivered and that patient safety itself can be jeopardized. Besides, when records are untrue in significant ways, violations can ensue which cause healthcare providers and institutions to be at risk of liabilities. To that end, meeting these goals necessitates a complex and comprehensive model of intervention at the systems level, as well as at the level of individual professionals.[2,3]

Documentation on the other hand pertains to the actual documentation itself and actually involves the writers, the health care providers. Indeed, the study shows that nurses and physicians work in an environment where they are under pressure to offer both direct care and extensive documentation. Current processes using paper or subpar electronic health record (HER) systems creates delays and poor health worker experiences, such as burnout. The calls for better and easier to use and navigate HER systems are a major step toward addressing the efficiency gap however implementing them must be coupled with appropriate education and instruction. More remedies include having improved on processes like templates where the time used on documentation is well minimized but the documentation done is more concise. [4,5]Closing these gaps in accuracy and efficiency can only occur through concerted coordinated efforts of all players in the health care system. EHSOs and CISOs, healthcare managers and IT specialists should engage frontline nurses and physicians to create solutions that are feasible in the context of actual work. Additional improvements may also be made with regard to using regular audit, feedback, and continued education of the staff responsible for clinical documentation. [6]

Finding out the challenges facing health care documentation

It is important to understand that healthcare documentation is an essential component of patient management as it entails complete information of a patient in all his/her aspects, diagnosis, treatment plans and overall progress. Nevertheless, several challenges that exist limit the usefulness of this documentation affecting the quality of documents and healthcare delivery as well. Among these indicators, the large working load of healthcare employees and in particular, nurses and physicians are being considered one of the major challenges. Due to the nature of giving direct patient care and helping with other administrative work there is little to no time left for proper note taking. For instance, congested facilities such as hospitals especially during rush hours, they force clinicians to engage in patient care and at the same time make notes on their activities. This can lead to hastily written and half-baked observations, missing or incorrect information that also affects the clinicians' decision process and the patient's care delivery.[7,8] This is shown in the figure below where

another challenge to effective healthcare documentation is the HER complexity. While many of these technologies' goal is to enhance the usability and availability of patient records, HER systems are frequently described as being complicated for users, necessarily time-consuming, or displaying confusing interfaces. Many members of the healthcare profession discovered that they are now constantly required to resolve issues with the system, as well as manage the technology that is actually supposed to be providing care to patients. HER's gradual implementation alongside decision-making and documentation complexities may increase the cycling timeframe to lower the rate of difficulties and provide adequate software training to staff across other teams. This is still a big issue for many healthcare organizations because older employees or those who are not as technologically literate take more time to finish documentation and even sometimes resist integrating new systems into their work.[9]

The final barrier emanates from inadequate documentation practices where it has not been possible to establish standard practices. Interprofessional adverse event reporting can be best described as a communication breakdown because it is common for healthcare providers in different institution sub specialty, department, to use varying terminology, formats, and abbreviations; this leads to inconsistency of the recorded information. Lack of standard in documentation methods becomes a source of frustration, misunderstanding, and mistakes especially when records must be transferred in between different care givers. The latter can also cause problems when fulfilling the obligations set by legal and regulative acts, including documentation processes. Lacking structure and best practices, different healthcare institutions can experience various compliance challenges might lead to sanctions or even a loss of accreditation. [10,11]

Lastly, probably the biggest barrier to documentation is burn out and stress of doctors and other health care providers. Caring for patients, especially those with chronic or complex conditions can be both mentally and emotionally exhausting that basic human capacity for musculoskeletal fatigue may be exceeded, as well as the ability to carefully document all aspects of patient care. Stressed healthcare staff may ignore proper documentation in favor of spending time, means of communication and physical attention on critical care necessities of patients. This can serve to intensify the vicious cycle of burnout as HCWs feel as though they cannot cope with the sheer number of tasks in their context which includes documentation tasks that are now on the rise.[12]

A Comparative Analysis of Perceptions and Practices

In the health setting, the quality of documentation in the medical record and the time that takes to accomplish this activity would determine effective patient care and the best clinical decision to be made. Nevertheless, the dynamics of the nurses and physicians sometimes exhibit discrepancy in documentation due to age-degree difference, concerns of probable litigation, and difference in work setting among others. Comparison of these perceptions and practices sheds light on understanding of how each group deals with documentation and what affects the quality and uniformity of entries. These differences only serve to emphasize the need for better integrated approach concerning documentation in healthcare especially for the nurses and the physicians. [13] Some of the common reasons

why nurses embrace documentation include listing it as a necessary job that is also boring since it involves monitoring and assessing patients, after them. A survey of several nurses revealed that documentation can be considered as essential to patient care an element since it is an indicator of a patient's progress, a tool that facilitates continuity of care and is also required in case of legal and regulatory body involvement. However, nurses often complain that the nature of their occupations limit the amount of original and detailed entries made, due to the time constraints resulting from heavy patient turnover in hospitals and shortages of nurses per patients.[14]

It is apparent that documentation is seen as an onerous chore at many times, especially when it disrupts primary care to patients. Nurses may also feel that the documentation requirements introduced are excessive especially with the use of advanced and more realistic options provided by the HER which requires full compliance with specific degrees of documentation and compliance to templates generated in the system. Two things that both nurses know to be essential: accurate documentation and compassionate care that happens immediately: two things that are hard to do at the same time. Physicians, however, have preconceptions regarding MR documentation based on their role of clinical decision making and legal responsibilities. Doctors usually record patient demographics, chief complaints, examinations, diagnoses and prognosis, operational notes or tally, and treatment notes mainly aiming at the pathological nature of patients. They know that documentation is important for fulfilling treatment and referral needs and for self-defense in legal or malpractice lawsuits. Nevertheless, the documentation process turns out to be very tiresome and needy of time by most physicians, especially in circumstances where they have to expand details about each patient interchange. Many doctors work under the impression that EHRs hinder documentation as they take a lot of time entering data than engaging with the patients. In addition, they may believe that the documentation system doesn't cover their requirements effectively, for instance, in adding the intricate medical history or numerous test outcomes. The increasing urge to increase productivity coupled with high patient turnout only serves to exacerbate these feelings and doctors end up seeing documentation as an encumbrance on patient care rather than an addition to the process.[15]

However, the two studies revealed some similarities whereby both the nurses and the physicians also had practice similarities concerning medical record documentation. They both acknowledge that documentation of patients' care is comprehensible and authentic to facilitate patient safety and for the provision of subsequent care. Yet, there are variations in the practical behaviors of these kinds of specialists because of dissimilarity in training patterns, concerns as well as the number of cases they handle. Nurses are more often responsible for continuous assessment of patients' status and for documenting activities that go on in a patient's day, that is, the administration of medications, taking of vital signs, and physical examination. Their documentation is usually oriented to giving an overview of the patient's current requirements for the near future. While patient-citizens derive better health benefits from HC provision, physicians appear to be more concerned with diagnostic data, treatment recommendations, and chronic disease management. A comparison of these attitudes and behaviours highlights the need for better interprofessional relations between RNs

and MDs regarding documentation. Thus, the proponents of healthcare organizations can recognize the different functions and responsibilities of both sexes to enhance the kind of formal documentation systems that both the groups find suitable to follow. This could involve such measures as the provision of format which can easily be followed in documenting, providing means for HER additional training for the nurses and physicians as well as involve both the physicians and the nurses in working towards improving on the HER documentation. Conclusively increasing an alignment process between perception and practice in the documentation system in healthcare can be advantageous to healthcare facilities and the patients at large.[16,17]

Possible Solutions for the Enhanced Quality of Care and Efficient Work Processes

This again means that medical record documentation affects the quality of patient care as well as the functioning of a particular healthcare system. When done well, documentation is useful for clinical decisions, communication among other care givers, and guarantee continued care for the patient. However, if documentation is marred by errors, omissions or inefficiencies then it produces dire consequences for patient concerns, safety, and over all health care systems. These seminal points relate to so many methods of designing documentation systems that are as critical to revolve around patient satisfaction as they are to embrace legal structures and regulatory compliance within institutional frameworks. Overcoming the barriers involved in effective documentation can have a dramatic impact on the quality of care as well as the efficiency with which healthcare is delivered.[18]

When done correctly and on time, documentation affects the overall quality of care given to patients because it supplies the healthcare givers with information to work on. Electronic health records ensure that physicians, nurses and other healthcare givers are able to understand patient histories, make progress and modify therapy if necessary. Clear documentation also improves collaboration among practitioners in transdisciplinary setting and minimizes precursors of adverse patient outcomes in form of errors. On the other hand, it leads to inadequate diagnosis, wrong treatment, and prolonged time before a patient begins receiving appropriate care. There are consequences tagged with it – poor patient care that contributes to medication errors, poor monitoring, and complication that never should have occurred in the first place, all of which poses risks to patient safety as well as quality of care. Scarcity of documentation also makes it easier to provide care that is devoid of evidence because the providers themselves may have inadequate information they need to take decisions stemming from the application of latest practice parameters or patient information.[19] The first and quite obvious utilization of medical record documentation is within care delivery organizations where documentation enhances the quality of care delivery and is an essential part of workflow organization. Clinicians invest much of the day in generating notes and records of patient care and therefore, can procrastinate the workflow of patient care. When documentation is labor intensive or incomplete due to problematic HER systems, poor template design or lack of standardization then healthcare workers are deprived of precious time by being bogged down with paperwork at the cost of

meaningful patient interaction. This can ultimately lead to the burn out, frustration and low job satisfaction levels experienced among healthcare providers. In addition, poor documentation can result in duplicate work where after inputting data, information has to be duplicated again or data errors are corrected adding more work for healthcare professionals and for this reasons developing countries have to approach this challenge seriously.[20]

Reducing and managing paper-based work flows is critical to the success of health care organizations. Effective implementation of user centric, data exchanging HER systems also significantly improves the documentation process to elucidate patient records for the healthcare givers and growers. Use of templates that can be configured so that they fit various activities, voice recognition system, and integration features should be used to minimize the time taken to enter data repeatedly yet guarantee adequate documentation. The general documentation process can also be optimized for the variability across different healthcare teams and Institutions and thereby decrease confusion. In addition, use of training interventions which guarantee that the healthcare practitioners are competent in handling HER systems will reduce on errors and efficiently resulting from operational unfamiliarity and self-efficacy.[21]

Optimization of this aspect leads to a wider impact on the healthcare system as a whole. The entities show that the use of accurate and timely records leads to better billing and coding and that healthcare providers are paid fairly for services rendered. Documentation also aid in the compliance to the regulatory demands like those of the Centers for Medicare & Medicaid Services (CMSs) or other accreditation authorities thus limiting on fines or even loss of accreditation. Furthermore, better documentation can allow for better acquisition of data for research and public health uses, which in turn can help establish further optimal approaches and measures to advancing population health.[22] Consequently, a commentary on medical record documentation with regard to quality care and efficient work patterns is voluminous. Adopting measures that reduce and eliminated those barriers results in better and improved HER systems, training, and processes that translate into better patient safety, clinical outcomes, and improving healthcare, at its core, efficient documentation is not simply about lessening the administrative tasks, but about enhancing the healthcare provider's ability to provide supreme patient care at the same time as enhancing the effectiveness of the health-care system. [23]

Understanding the Human and Systemic Factors

As the findings have shown, medical record documentation is related to the systems themselves, but also depends on other factors, which define provider's practice. This paper argues that there are both individual and systems factors that define the precision, speed, and sophistication of documentation. Knowledge of these factors is crucial in realizing limitation and enhancing the documentation process with an over arching goal of enhancing the delivery of patient care and health systems management.[24] Other aspects which were identified include cognitive factors that include mental load, fatigue and more to do with training of the health care providers. Cognitive load, information input refers to the effort that is needed to receive and input patient data to documents on medical records.

However, in critical care settings such as hospitals, care providers are contemporarily managing several patients, challenging and time-sensitive conditions, and the total load may be extremely overwhelming. It may also result in omissions, wrong entries or failure to provide certain specific information concerning the patient. Cognitive overload is very dangerous in circumstances that involve capturing multiple forms of information or when the healthcare workers are performing other activities alongside patient care and documentation, the patients suffer because the workers will make mistakes as they overlook some important procedures. However, fatigue is a detrimental element of humans which tend to reduce the quality of documentation. The patients, especially those at the extreme end of the age spectrum, require a number of interventions which are sometimes offered consecutively or simultaneously, with long shifts, numerous patients and emotional demands leading to burnout, quick work and attention fatigue/raw worker error manifesting in at least incomplete records and possibly inaccurate ones.[25]

One another human aspect is in training and competency in documentation techniques and processes. Failure has also been reported by some healthcare workers when using HER systems that they were not well trained on or when HER systems were poorly developed. Lack of training creates some disadvantages particularly when members of the healthcare profession are bound expectations of fast entry of a lot of data. A lack of acquaintance with the system or doubts about some of its functions add time to the process and make mistakes inevitable. In addition, the rate of technological advancement in the healthcare industry with so frequent releases or updates or modifications to programs only compounds the problem for the healthcare providers and consumers in relation to embracing new updates or features. Thus, staff training and development that are implemented on an ongoing basis are important to mitigate an adverse effect of human factors on documentation.[26] This means that there are various degree of influences from systemic factors in the overall documentation in healthcare organizations. This means that the design and functionality of HER systems, as discussed in section 3 , play a substantial role in determining documentation practice. Even as EHR systems sought to enhance documentation accuracy and productivity, if adequately developed EHR systems can in fact cause work interruptions and a corresponding escalation in time required to complete documentation. For example, complexity of the system, difficult to navigate, poor design and lack of a more personal touch can hamper the system. Moreover, some HER systems that are not integrated with other systems are sources of isolated information, where health care professions need to type in the same details on the facilities over and over, which becomes repetitive and time wastage. Future work can benefit from a more integrated care environment where information from primary care, hospitals and specialists reflexively feed into one another; there are more challenges for patients having separate records in primary, secondary and tertiary care with no central source of access for health care givers. [27]

Another systematic factor is the corporate culture and its attitude toward documentation. Similar to medicine, focus on documentation is already a critical component of healthcare institutions where adequate resources and support are available. Conversely, when healthcare organizations consider documentation to be a secondary concern and do not make time and resources available for it, the

quality of documentation suffers. Understaffing, high patient volumes, and financial limitations can put organizational pressure.[28] Of the many problems facing our planet, climate change is perhaps the most urgent. The warmer temperatures, disappearing ice caps and erratic weather patterns are all typical signs of climate change. Hence scientists have now raised an alarm that if another step is not taken to curb down carbon emissions immediately the results would be disastrous. Coming together to solve this crisis is no small task - it requires governments, businesses and each of us doing our part. Sustainable renewable energy solutions such as wind, solar energy. The use of it by humans will also help reduce the effects that climate change has on us through eco-friendly provider choices.[29]

For a model of documentation that prioritizes doing the minimum for purposes of checking boxes over creating an accurate, complete record (or even cares about what is actually compliant). I understand the importance of regulation for standardization and accountability, but I believe that these regulations do put pressure on me to document my practice in a way that often becomes regulatory compliance instead of clinical accuracy or relevance. However, the success of such attempts rests upon understanding the human and systemic factors that play a prominent role. Documentation related to healthcare is influenced by the cognitive capabilities, training, and fatigue of healthcare professionals as well as the design and functionality of documentation systems and organizational priorities. A holistic approach that recognizes and addresses the human factors as well as systemic realities is needed to tackle these challenges. This may mean better usability and integration of HER systems, Ensuring that staff are well trained, developing a supportive organizational culture, and tailoring documentation practices to meet both patient care practice and regulatory need. Focusing on the human factors and systemic components will help reduce barriers around medical record documentation leading to improved quality, efficiency, and accuracy — ultimately impacting patient care.[30]

Enhancing Collaboration for Better Patient Outcomes

Collaboration among members of the health profession is central to ensuring optimal outcomes for patients, especially where there is the need for medical recording. As the healthcare systems become complex, putting together multidisciplinary teams to handle patient care, the demand for effective and shared communications centered on documentation work has never been more pressing. Improving collaborative documentation processes can promote an enhancement in patient safety, better clinical decision-making. The simplest route through collaborative teamwork to enhance better patient outcomes is to share accurate and current information. The shared team records in a collaborative healthcare environment are vastly different from mere clinical records, which reflect individual entries of certain healthcare providers but are seen as advantages to the team. Nurses, doctors, pharmacists, and other relevant class of care attendants require access to comprehensive and precise patient data when making decisions. For example, if a nurse has indicated in the chart that a patient has developed a change in vital signs or condition, this change needs to get to the doctor immediately, so that he or she can adjust the treatment plan or carry out other interventions. Likewise, a nurse or healthcare worker should have

immediate and easy access to the treatment plan initiated by the doctor, and they should also have access to the diagnostic findings for coordination of patient care. The seamless flow of such information ensures the swiftness of responses to changes in a patient's condition, decreased risk of errors, and concrete uniformity of care amongst all involved professionals. Enriched collaboration in documentation will also help to mitigate miscommunication, which is a prime cause of medical errors. When health practitioners shoulder their practices in isolation, depending on their own notes and assessments, such providers can miss key information that may lead to great delays between what others need and what is actually set place.

The other advantage of collaborative advancement in documentation is improved care coordination. Patient care often involves interaction with other healthcare professionals, or different physicians and other health care workers, contributing toward the patient's management to varying degrees. Inadequate methods of documentation make it hard to properly communicate with other care givers and may result in week care direction or confusion. Coordinated documentation enables the diverse aspects of a patient's health to be comprehensively understood hence enhancing co-ordinate health. For example, if a patient is being treated for a chronic illness and several doctors are documenting the progress of the treatment, the documentation entered can be mapped so that the treatment provided by each doctor is coherent. This lowers the risk of prescription, therapies or follow up instructions disagreement, hence increasing the flow of coordinated patient centered care delivery.[31]

Further, you can enhance cooperation in documentation and make the work process faster. It is a common scenario in most healthcare organizations to find personnel spends a lot of their precious times searching for information, or trying to understand notes that were hardly clear. These inefficiencies can be avoided where, through teamwork, documentation is clear, complete and correct. Another aspect implies that all the teams that work on documentation should adhere to the same procedures and that all team members should be trained on ways and means of entering the data and interpreting it. The following can be stated in diagnosis: when all members of the healthcare team are aware of how the documentation is to be done, many hours are saved and health care professionals can spend more time with patients. It could be more effective in such areas such as emergency, and ICU or trauma centers where quick and accurate notes need to be taken in order inform quicker decision making processes. In the same respect, it has to do with documentation because cooperation in this area enhances a decision-making process given the holistic understanding of a patient's state. In a coordinated health system different disciplines such as nurses, physicians, pharmacists, therapists as well as social workers can contribute in the patient record, thus giving a holistic view of the patient. Such an approach will take into consideration various patient cares beginning with the medication administration up to psychological and physical rehabilitation. Therefore intimacy and individualization of the treatment can be accomplished to a larger extent resulting in better prognosis of the connected diseases.[32]

Increased collaboration in medical record documentation results into an increased co-ordinated and patient centered practice. This is because it corrects

the defects that have always plagued MOM such as a lack of completeness and accuracy, not to mention enhancing the rapport between medical practitioners and the doctors or other caregivers that attends to the patients. Research has shown that when healthcare givers work together as a team, then the patient benefits from integrated and quick comprehensive care. This collaborative approach fosters trust, reduces the risk of errors, and ensures that all members of the healthcare team are working together toward the same goal: enhancing the patient health status outcomes.

The goal of this working paper is to outline and address potential obstacles in the process of documentation.

Documentation in the medical record is one of the significant sub processes of healthcare; still it has risks that block the quality, accuracy and efficiency of medical records. Systematic approaches should be used to discuss generically and to prevent the most likely documentation obstacles to strategic enhancements that are beneficial to healthcare organizations in terms of conformity to the legal and code requirements as well as in the practical value of documentation as a tool in patient care and organizational improvement. These barriers can be either people or systems related and as such they necessitate interventions that aim at fixing the ways of working, the solutions, and the use of healthcare professionals.; Documentation problems: Here, one of the most frequent problems is that some papers are only partially documented, or documented incorrectly. It may be partial due to reasons such as; time factors/ constraints, work pressures/ demands, or lack of understanding of what needs to be captured on record. For example, in clinical practice, staffs may be under pressure and record output quickly out of emergency, or in probably hectic wards they might spend most of their time attending to the patients, leaving documentation behind. This can result in omitted or improperly documented necessary patient information affecting the execution of a clinical decision and safety of the patient. In addition, lack of clear cut rules regarding what is complete and accurate documentation promotes variability among the loose providers and other departments. [33,34]

Conclusion

Medical record documentation remains one of the best practices in healthcare provision although its practice has some difficulties that negate its purposes. These obstacles include gaps within documentation, time constraints, unpredictable language used in different systems, and interface integration challenges all of which challenge the precision, speed, and security of patient care. However, all these challenges can be addresses through the following measures; Documentation needs to be made clear, there should be proper integration of technology, and there should be proper training for the health care professionals. Documentation becomes more reliable, efficient and integrated with care coordination, work flow and, therefore is highly effective in avoiding mistakes in patient care. When these sources common hurdles that hinder documentation of medical records are eliminated, then health care facilities will benefit from improved clinical care, safer patient care and a favorable change of health care environment.

References

1. McMillan, B., Eastham, R., Brown, B., Fitton, R., & Dickinson, D. (2018). Primary care patient records in the United Kingdom: Past, present, and future research priorities. *Journal of Medical Internet Research*, 20(12), e11293. <https://doi.org/10.2196/11293>
2. Alpert, J. M., Morris, B. B., Thomson, M. D., Matin, K., Geyer, C. E., & Brown, R. F. (2019). OpenNotes in oncology: Oncologists' perceptions and a baseline of the content and style of their clinician notes. *Translational Behavioral Medicine*, 9(2), 347-356. <https://doi.org/10.1093/tbm/iby048>
3. Strudwick, G., Clark, C., Sanches, M., & Strauss, J. (2018). Predictors of mental health professionals' perceptions of patient portals. *AMIA Annual Symposium Proceedings*, 989-997.
4. Blease, C., O'Neill, S., Walker, J., Hägglund, M., & Torous, J. (2020). Sharing notes with mental health patients: Balancing risks with respect. *Lancet Psychiatry*, 7(11), 924-925. [https://doi.org/10.1016/S2215-0366\(20\)30375-5](https://doi.org/10.1016/S2215-0366(20)30375-5)
5. Chimowitz, H., O'Neill, S., Leveille, S., Welch, K., & Walker, J. (2020). Sharing psychotherapy notes with patients: Therapists' attitudes and experiences. *Social Work*, 65(2), 159-168. <https://doi.org/10.1093/sw/swaa003>
6. Zanaboni, P., Kummervold, P. E., Sørensen, T., & Johansen, M. A. (2020). Patient use and experience with online access to electronic health records in Norway: Results from an online survey. *Journal of Medical Internet Research*, 22(2), e16144. <https://doi.org/10.2196/16144>
7. Blease, C., Torous, J., & Hägglund, M. (2020). Does patient access to clinical notes change documentation? *Frontiers in Public Health*, 8, 577896. <https://doi.org/10.3389/fpubh.2020.577896>
8. Rahimian, M., Warner, J. L., Jain, S. K., Davis, R. B., Zerillo, J. A., & Joyce, R. M. (2019). Significant and distinctive n-grams in oncology notes: A text-mining method to analyze the effect of OpenNotes on clinical documentation. *JCO Clinical Cancer Informatics*, 3, 1-9. <https://doi.org/10.1200/CCI.18.00135>
9. King, G., Maxwell, J., Karmali, A., Hagens, S., Pinto, M., Williams, L., & Adamson, K. (2017). Connecting families to their health record and care team: The use, utility, and impact of a client/family health portal at a children's rehabilitation hospital. *J Med Internet Res*, 19(4), e97. <https://doi.org/10.2196/jmir.7479>
10. Johansen, M. A., Kummervold, P. E., Sørensen, T., & Zanaboni, P. (2019). Health professionals' experience with patients accessing their electronic health records: Results from an online survey. *Stud Health Technol Inform*, 264, 504-508. PMID:31437974
11. Moll, J., & Cajander, A. (2020). Oncology health-care professionals' perceived effects of patient accessible electronic health records 6 years after launch: A survey study at a major university hospital in Sweden. *Health Informatics Journal*, 26(2), 1392-1403. <https://doi.org/10.1177/1460458219847384>
12. Alpert, J. M., Morris, B. B., Thomson, M. D., Matin, K., Sabo, R. T., & Brown, R. F. (2019). Patient access to clinical notes in oncology: A mixed method analysis of oncologists' attitudes and linguistic characteristics towards notes. *Patient Educ Couns*, 102(10), 1917-1924. <https://doi.org/10.1016/j.pec.2019.05.008>

13. Wass, S., & Vimarlund, V. (2019). Same, same but different: Perceptions of patients' online access to electronic health records among healthcare professionals. *Health Informatics Journal*, 25(4), 1538-1548. <https://doi.org/10.1177/1460458219841282>
14. Denneson, L. M., Cromer, R., Williams, H. B., Pisciotta, M., & Dobscha, S. K. (2017). A qualitative analysis of how online access to mental health notes is changing clinician perceptions of power and the therapeutic relationship. *J Med Internet Res*, 19*(6), e208. <https://doi.org/10.2196/jmir.7534>
15. Drinkwater, J., Stanley, N., Szilassy, E., Larkins, C., Hester, M., & Feder, G. (2017). Juggling confidentiality and safety: A qualitative study of how general practice clinicians document domestic violence in families with children. *Br J Gen Pract*, 67*(659), e437-e444. <https://doi.org/10.3399/bjgp17X690209>
16. Pisciotta, M., Denneson, L. M., Williams, H. B., Woods, S., Tuepker, A., & Dobscha, S. K.** (2019). Providing mental health care In the context of online mental health notes: Advice from patients and mental health clinicians. *J Ment Health*, 28*(1), 64-70. <https://doi.org/10.1080/09638237.2018.1509824>
17. Moll, J., & Cajander, A. (2020). On patient accessible electronic health records and the experienced effect on the work environment of nurses. *Stud Health Technol Inform*, 270*, 1021-1025. PMID:32570536
18. Bates, D. W., Saria, S., Ohno-Machado, L., Shah, A., & Escobar, G. (2018). Big data in health care: Using analytics to identify and manage high-risk and high-cost patients. *Health Affairs*, 33(7), 1123-1131. <https://doi.org/10.1377/hlthaff.2018.0299>
19. Chen, J. H., & Asch, S. M. (2018). Machine learning and prediction in medicine: Beyond the peak of inflated expectations. *New England Journal of Medicine*, 376, 2507-2509. <https://doi.org/10.1056/NEJMp1702071>
20. Fogel, A. L., & Kvedar, I. C. (2018). Artificial intelligence powers digital medicine. *NPJ Digital Medicine*, 1(1), 1-4. <https://doi.org/10.1038/s41746-018-0022-8>
21. Jiang, F., Jiang, Y., Zhi, H., Dong, Y., Li, H., Ma, S., & Wang, Y. (2020). Artificial intelligence in healthcare: Past, present, and future. *Stroke and Vascular Neurology*, 2(4), 230-243. <https://doi.org/10.1136/svn-2019-000121>
22. Nguyen, L., Tran, D., Pathirana, P. N., & Nguyen, H. D. (2019). Artificial intelligence in the medical domain: The future is brought closer. *International Journal of Medical Informatics*, 134, 104013. <https://doi.org/10.1016/j.ijmedinf.2019.104013>
23. Obermeyer, Z., Powers, B., Vogeli, C., & Mullainathan, S. (2019). Dissecting racial bias in an algorithm used to manage the health of populations. *Science*, 366(6464), 447-453. <https://doi.org/10.1126/science.aax2342>
24. Patel, V., Aggarwal, V., Dave, A., & Stebbing, J. (2020). Artificial intelligence in healthcare: Anticipating challenges to ethics, privacy, bias, and trust. *Journal of Business Research*, 123, 642-649. <https://doi.org/10.1016/j.jbusres.2019.09.039>
25. Smith, A., & Anderson, J. (2018). AI, robotics, and the future of jobs. *Pew Research Center*. <https://www.pewresearch.org/report/ai-robots-and-the-future-of-jobs>
26. Jagmeet Singh Aidan, Harsh Kumar Verma, and Lalit Kumar Awasthi. (2017). Comprehensive survey on Petya ransomware attack. *In 2017 International*

- Conference on Next Generation Computing and Information Systems (ICNGCIS), IEEE*, 122-125.
27. Abdullah Al Omar, Mohammad Shahriar Rahman, Anirban Basa, and Shinsaku Kiyomoto. (2017). Medibchain: A blockchain-based privacy-preserving platform for healthcare data. In *Security, Privacy and Anonymity in Computation, Communication, and Storage: SpaCCS 2017 International Workshops, Guangzhou, China, December 12-15, 2017, Proceedings 10*, Springer, 534-543.
 28. Sunday Adeola Ajagbe, AO Adesina, and JB Oladosu. (2019). Empirical evaluation of efficient asymmetric encryption algorithms for the protection of electronic medical records (EMR) on web applications. *International Journal of Scientific and Engineering Research* 10, 5 (2019), 848-871.
 29. D Akarca, PY Xiu, D Ebbitt, B Mustafa, H Al-Ramadhani, and A Albeyatti. (2019). Blockchain secured electronic health records: Patient rights, privacy and cybersecurity. In *2019 10th International Conference on Dependable Systems, Services and Technologies (DESSERT), IEEE*, 108-111.
 30. Muhammad Anshari. (2019). Redefining electronic health records (EHR) and electronic medical records (EMR) to promote patient empowerment. *IJID (International Journal on Informatics for Development)* 8, 1 (2019), 35-39.
 31. W Bani Issa, I Al Akour, A Ibrahim, A Almarzouqi, S Abbas, F Hisham, and J Griffiths. (2020). Privacy, confidentiality, security and patient safety concerns about electronic health records. *International Nursing Review* 67, 2 (2020), 218-230.
 32. M Ahmed, E Elaziz, and N Mohamed. (2020). Nurse's knowledge, skills, and attitude toward electronic health records. *Journal of Nursing and Health Science* 9 (2020), 53-60.
 33. Andrew R Besmer, Jason Watson, and M Shane Banks. (2020). Investigating user perceptions of mobile app privacy: An analysis of user-submitted app reviews. *International Journal of Information Security and Privacy (IJISP)* 14, 4 (2020), 74-91.
 34. Raag Agrawal and Sudhakaran Prabakaran. (2020). Big data in digital healthcare: lessons learnt and recommendations for general practice. *Heredity* 124, 4 (2020), 525-534.

التحديات في توثيق السجلات الطبية: رؤى من الممرضين والأطباء

الملخص

الخلفية: يعد التوثيق في السجل الطبي للمريض جزءاً أساسياً من تقديم رعاية آمنة وعالية الجودة. ومع ذلك، يواجه المهنيون الصحيون عدة عقبات تؤثر على فعاليته وموثوقيته، بما في ذلك التوثيق غير الكافي، المهل الزمنية الصارمة، واستخدام التقنيات الحديثة.

الهدف: يركز هذا البحث المقترح على تحديد المشكلات النموذجية المتعلقة بالتوثيق في المؤسسات الصحية عملياً، والسعي لإيجاد وسائل لمعالجتها بدقة محسنة.

الطرق: تم استخدام استبيان عبر البريد الإلكتروني شمل مهنيين مختصين بالتوثيق وعينة من الأبحاث الحديثة في المجال لتحديد مشكلات التوثيق وحلول محتملة مثل التكنولوجيا الحديثة وبرامج التدريب.

النتائج: تضمنت العوامل المحددة قيود الوقت، التوثيق غير الكافي، التباين في المصطلحات، ومشاكل تكامل البيانات مع السجلات (تم اعتبار تحسين المعايير، وتطوير التكنولوجيا، والتدريب المهني حلولاً مثالية لهذه التحديات. EHR الصحية الإلكترونية)

الخلاصة: يمكن التغلب على تحديات التوثيق من خلال تحسين معايير التوثيق، وتوفير برامج تدريبية، ودمج التقنيات الحديثة لمعالجة مشكلات السجلات الطبية، مما يساهم أيضاً في تحسين سير العمل وجودة الرعاية الصحية.

الكلمات المفتاحية: التوثيق في الرعاية الصحية، السجلات الطبية، مشكلات التوثيق، موثوقية التوثيق، تصميم واقتصاديات المؤسسات الصحية، أنظمة السجلات الصحية الإلكترونية، مشاركة البيانات.