Power System Technology
ISSN:1000-3673

Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

Reducing Medical Errors Through Efficient Collaboration

Fares Ali Hatrish Alyami[1], Wail Saoud Farj Alanazi[2], Salem Abdullah Ahmed Alharthi[3] and Fahad Saleh Hadi Al Mansour[4]

[1] Corresponding Author, Technician-health administration, FALYAM31@moh.gov.sa, Hotat Bani Tamim Hospital

[2] Medical Secretarial Technician, Erada and mental health hospital in Al-Kharj

[3] Medical Secretarial Technician, Almaakus Health Center

[4] Health Informatics Technician, Abbash General Hospital

Abstract

Reducing medical errors represents a major challenge for today's health care system; it requires efficient collaboration among various players to prevent errors and identify problems and their causes early on (Scharein & Trendelenburg, 2013). These individuals are diverse and depend on the tasks involved, but they include administration, secretaries, and records staff. This piece presents the main findings of the study "Enhancing Collaborative Efficiency in Health-Care Administration, Secretarial, and Records Services for Medical-Error Prevention," which seeks to improve collaboration among these three functional groups. It addresses the administrative and clerical roles specifically, reflecting the user's preference. The study highlights the benefits of a multi-pronged team approach and other organizational best practices to enhance collaboration, with the goal of reducing medical errors. These errors, which are any preventable adverse events that cause harm to patients, have long been recognized as a major threat to patient safety. They include wrong-site surgeries, wrong prescriptions, and incorrect medication or dosage. Both to prevent them and to ensure timely corrective actions, collaboration among health-care personnel—especially the administrative and clerical teams discussed in this article—must be efficient.

Reducing medical errors remains an international concern due to the relatively high incidence of medical injury and preventable death. Electronic critical-incident reporting systems are used increasingly in hospitals, especially in anesthesia. Hospitals often use systematic logbooks separately for each clinical subdepartment in large institutions, but the participation rate is low due to the considerable workload. Critical incidents related to treatment and safety have been analyzed mostly in response to large events. Assessment by the Committee on Quality and Patient Safety provides routine, independent, multidisciplinary analysis. The highest monodisciplinary group participation rates are achieved from housekeeping departments and anesthesiology, followed by the key groups of nursing and medical staff. Medication problems, vessel and line problems, and faulty equipment constitute 50% of the error reports, with communication and diagnostic errors occurring less frequently.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

Keywords: Medical Errors, Collaboration, Efficiency, Patient Safety, Communication, Teamwork, Healthcare, Prevention

1. Introduction

Globally, adverse events in healthcare remain problematic, with more than 70% of hospitalized patients experiencing disability and 14% dying because of medical errors. Morbidity and mortality attributable to such errors increased 243% between 1983 and 1998. Data-sharing systems, enabling healthcare providers to implement a common reporting framework, have emerged as strategies to enhance patient safety through voluntary reporting, information exchange, and learning (G Anderson, 2007). Analysis of data from the Pittsburgh Regional Healthcare Initiative, involving 42 hospitals adopting Medmarx, revealed that initial error reports varied widely according to hospital characteristics. Over a 12-month period, hospitals experienced a significant rise in reported errors, yet the number of corrective actions per reported error did not substantially change. Computer simulations evaluating organizational interventions—such as computerized physician order entry, decision support systems, and the deployment of clinical pharmacists—suggest that improvements in patient safety require comprehensive organizational changes beyond voluntary reporting and clinical initiatives.

2. Understanding Medical Errors

A medical error is an adverse event that results from a failure in the healthcare delivery process. It is a type of adverse event that may or may not lead to patient injury. Errors can occur at any point in the delivery process, ranging from diagnosis and treatment to communication and follow-up. Medication errors, surgical errors, diagnostic errors, equipment failures, and system failures are common types of medical errors. The Institute of Medicine has estimated that as many as 98,000 people die every year in hospitals in the United States as a result of medical errors. In addition, hundreds of thousands of people are injured or experience diminished quality of life because of various medical errors (G Anderson, 2007).

2.1. Definition and Types of Medical Errors

Medical error is a preventable adverse effect of care, or a potentially harmful error in healthcare that may or may not cause harm to the patient; it is also sometimes called medical mistake and healthcare error (Ahsani-Estahbanati et al., 2022). The most common forms of medical error include prescribing, dispensing, and administration errors. Errors of omission include not recording appropriate information and not following the terms of a policy or protocol. Medical errors, according to the WHO, are common in all countries and places where healthcare is provided, and a third of these are preventable. The category Carr highlighted was also known as teamwork and communication errors within medicine.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

2.2. Impact of Medical Errors on Patient Safety

A medical error occurs when an action or omission in healthcare delivery leads to a negative or unintended outcome, encompassing a range of errors including medication mistakes and misdiagnoses. Such errors affect approximately 1 in 7 hospitalizations, underscoring the associated risks to patient safety (G Anderson, 2007).

3. The Role of Administration in Healthcare

Administrators in medical organizations provide leadership, governance, and policy frameworks aimed at reducing errors arising from communication failures or misplaced responsibilities (Akiyama et al., 2020). Hospital administrative staff must recognize that their tasks are closely connected to patient identification and should perform these duties with meticulous attention. These administrators work across various departments, often coordinating activities between them, thus serving as pivotal nodes in organizational communication. Incident reports highlight that communication errors contribute to adverse patient outcomes, including extended waiting times and financial losses. Factors such as inadequate provider training, language barriers, cultural differences, and insufficient documentation exacerbate hand-off communication failures. Consequently, effective communication training and education for administrative personnel are essential to bridge interactions with patients and other medical staff. Medication errors constitute a significant source of patient harm, with prescription mistakes accounting for a considerable portion of incidents. Contributing elements include poor coordination, similar drug nomenclature, and insufficient training. Although administrative roles have expanded to encompass tasks conventionally assigned to medical assistants, the requisite pharmacological education remains inadequate. Models incorporating clinical pharmacists into physician rounds predict a 27% reduction in errors, and root cause analyses projecting system modifications could potentially decrease medication mistakes by up to 70% over time (G Anderson, 2007). Organizational responsiveness to errors reflects the aggressiveness with which patient safety concerns are addressed. Reliance solely on voluntary reporting and clinical interventions fails to produce sustained improvements; instead, comprehensive system-wide organizational changes are imperative for significant error reduction. Current reporting rates hover between 5% and 10%, impeded by factors such as distrust, data privacy apprehensions, and implementation costs associated with health information technologies. The prevailing culture within medicine—characterized by pronounced individual autonomy and diffuse accountability—constitutes a formidable barrier to adopting the necessary organizational reforms. Effective leadership and governance, therefore, must confront these cultural impediments to establish robust policy frameworks that not only delineate clear responsibilities but also foster an environment conducive to transparent communication and collaborative error mitigation.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

3.1. Leadership and Governance

Leadership and governance set the tone for the whole organization, they communicate expectations for collaboration and inspire people to work together for the sake of patient safety (G Anderson, 2007). Moreover, leadership and governance directly influence healthcare policies that control how organizations define responsibilities and allocate resources to meet safety goals. Effective leadership can stimulate progress by setting clear objectives that enhance the overall safety strategy, which depends on defined priorities and responsibilities, adequate availability of resources and support, multidisciplinary collaboration, and continuous evaluation of the effectiveness of healthcare services. Leadership and governance are becoming increasingly influential as delivery systems grow more complex, necessitating a focus on the management and coordination of multiple organizations and professionals.

3.2. Policies and Procedures

Policy development offers a guideline and a statement of intent that outlines how an organisation will manage its activities, allocate resources and serve its stakeholders. Policies usually cover broad areas and take a long-term perspective—they provide an overall set of principles and directions, within which procedures are developed to address the specific details of a particular situation. Healthcare administration policies and procedures should be straightforward to communicate and easy to comprehend. Healthcare policy and procedures manuals should be readily available for reference. Policies should address the needs of patients and staff, while setting realistic expectations from administration and closing the gap between management and those delivering services. Policies and procedures encourage standardisation of processes both within and outside an organisation, ensuring the approach to delivering healthcare services is consistent with regulatory requirements and best practice. Although more proactive interventions are desirable, system-wide organisational changes are fundamental for substantial reductions in medical errors and adverse events (G Anderson, 2007). In this respect, healthcare organisations will need to spend more time to refine existing policies and procedures to be more safety conscious before finally submitting them to a framework that complements an organisation's safety initiatives.

4. The Role of Secretaries in Healthcare Settings

Secretaries in healthcare organizations provide administrative support to the leadership so that the management functions of the organization operate efficiently and effectively. They achieve this by performing a diverse range of communication, coordination and administrative tasks that assist with the leadership responsibilities of healthcare managers and clinical professionals. Given the broad scope of support that they provide in these settings, it is of fundamental importance that secretaries are abreast of the latest developments relating to

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

medial errors and participate in strategies to reduce the frequency of such errors. The pivotal leadership role that secretaries perform during major healthcare accidents is well recorded, with high-performing organizations engaging this sector in strategy development (Akiyama et al., 2020). Educational programs on key leadership principles and particular action points for adoption into practice should be provided and an institutional process established to promote the dissemination of the latest research findings to this sector. Equally important is the role that secretaries play in briefing staff on changes to policies, plans and incident-related information. Organizations are well advised to foster collaborative arrangements between training providers, managers and the secretarial sector so that appropriate and timely information is conveyed. These measures are consistent with the government's recommendations that health bodies engage administrative staff when developing strategies for reducing the rate of clinical mistakes. Accuracy of records is essential for reducing clinical errors. Secretaries are often tasked with assisting in the preparation of such records, performing transversal roles that support a wide range of professionals and other staff and fostering an interdepartmental environment in which information sharing is the norm. Consequently, collaboration between secretaries and records staff is a critical element in any healthcare organization's action plan for mitigating the rate of such errors.

4.1. Administrative Support Functions

Hospital administrative staff need to recognize that their task is connected to identifying patients, and pay carefully attention to performing this task correctly. Administrative staff work in various hospital departments and often involve contact and coordination with others. Errors of communication contributed to cases impacting patient care, including miscommunication leading to long wait times and financial losses. Hand-off responsibility relies on effective communication; failures involve factors such as training, language barriers, and documentation issues. Hospital staff need to provide communication training and education to connect with patients and other staff. Medication administration errors occur frequently and can harm patients, with 11% of patients affected by medication errors often due to poor coordination, multiple conditions, or hospital stays. Prescription errors account for a significant portion of incidents, often caused by similar medication names, poor communication, and insufficient training of staff assisting physicians.

Managing and processing patient information via electronic medical record management (EMRM) systems improved data security, availability, and consistency across records. New systems and processes aimed to enhance clinical workflows and patient outcomes. Participants indicated that adopting CPOE systems and user-friendly HIE processes saved physicians time and allowed data access across facilities. Transitioning from paper to electronic charts reduced medication errors and prevented lost records. Challenges included inconsistent data entry, language barriers, and internet outages that impeded system access.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

Ensuring accurate data input, verifying uploaded documents, and employing systems like Full Scripts helped reduce medication errors. Overall, electronic health records and associated support functions enhanced care quality and safety (Akiyama et al., 2020).

4.2. Communication and Coordination

Communication and coordination form the foundation for effective collaboration among administration, secretaries, and records staff. Studies have identified communication errors as the most important cause of adverse events in healthcare (Fukami et al., 2020). In complex healthcare environments, communication must be timely, accurate, and repeated to ensure a consistent understanding. One approach to enhancing collaboration therefore applies a team-based strategy. Team training for all employees reduces adverse patient events, demonstrating the approach's effectiveness for developing a medical team's strengths. Communication challenges can significantly hinder efforts to foster a team approach at a large organization. A quality improvement project at a large university hospital found that limited time, scheduling conflicts, staffing models, vacations, and holidays impeded the ability to reach all approximately 240 participants (Didonato, 2018).

5. The Role of Records Staff

Records staff support healthcare delivery by creating patient records, entering vital signs and laboratory results, filing, processing insurance claims, answering phone calls, and more. These responsibilities require the correct interpretation and processing of clinical and administrative information, in compliance with a wide range of legislation, professional codes, and hospital policies (Adane et al., 2013). This flexible administrative support, with an emphasis on accuracy and current knowledge, helps to minimize errors and delays. Data availability influences workloads: exhaustive data reduces the need to query staff but increases administrative effort (Naamneh & Bodas, 2024). An approach that clearly defines, supports, and rewards the role is more likely to be effective than one that places all responsibilities and equipment in clinical areas.

Records personnel may be located within the healthcare unit or in a separate area. Locating them with other administration, and in particular the secretarial staff, creates scope for efficient collaboration. Whether staff are co-located or not, however, integration and cooperation are essential. In particular, procedures for communicating clinical and administrative data and special instructions must be clear and effective. Proactive help and training can improve the quality of non-routine data. Daily review of patient records by specialized staff to ensure completeness and accuracy is another strategy that supports error reduction.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

5.1. Data Management and Accuracy

Healthcare generates vast volumes of data across daily administrative and clinical activities. Managing this data requires timely response, well-enforced standards, and collaborative attention from administration, secretaries, and records personnel (G Anderson, 2007). Records staff face considerable challenges in encountering incorrect, missing, or contradictory information, particularly when data arrives late. Ensuring accuracy is a paramount challenge for healthcare administration.

5.2. Legal and Ethical Responsibilities

The legal and ethical responsibilities of healthcare providers play a central role in patient safety and conscientious, effective care—which, in turn, are essential for the creation and maintenance of a safe environment for patients (Robin Carmichael, 2017). The legal and ethical obligations of the providers are largely encapsulated in the principles of healthcare ethics: beneficence (to benefit the patient), non-maleficence (to not harm the patient), autonomy (the patients' right to make decisions regarding their own care), and justice (the equal and fair distribution of resources). Complementing these principles are duties such as competence, compassion, confidence, fidelity, privacy, and veracity. Medical ethics have increasingly focused on patient safety and quality of care as measures of whether those ethical obligations are being met. Ethical frameworks tend to focus on principles and values that underlie the duties towards patients, and these principles inherently demand that healthcare providers do what they can to reduce medical errors and provide effective, safe, and conscientious care. The prevention of medical errors is therefore a consideration not only of competence and diligence but also of the moral and ethical obligations owed to patients.

6. Collaboration Strategies

Collaboration represents a key element in organizational change, and leadership is crucial in shaping an efficient organizational process, within an effective governance framework and ethical and political guidelines. Abladements requiring retention are reglementary chaos that necessitates a secure GIS and CBL implementation. Some correspondence—healthsafeis "assuming that critical events are going to occur and emphasizes an OHS program. Collaboration is the process by which different health-care providers work closely together to reach a common goal; it involves some form of communication and interdependence between each other (G Anderson, 2007). Team-based approaches extend an emphasis on interdependence through high levels of intensity and integration throughout the working environment. When collaboration is efficient, the workforce readily adapts to shifting priorities, address problems before they become obstacles, and obtain support from other team members to accomplish a specific project or objective.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

6.1. Interdepartmental Communication

Interdepartmental communication constitutes the backbone of efficient collaboration in healthcare organizations. Effective collaboration between administration, secretaries and records staff therefore relies on strategies that encourage communication between these units. The goal of the present study is to identify interdepartmental communication and team-based approaches to foster efficient collaboration among these professionals. Among healthcare workers, administrative and clerical employees such as records staff and secretaries constitute teams that can and should work closely to comply with healthcare quality standards. They therefore constitute a major part of the solution. Computerized systems allow patient information to be entered once and shared in real time across units, clarifying outstanding orders and reducing duplication. Electronic health records (EHR) link healthcare workers for improved communication among nurses, physicians and administration personnel, allowing code levels and health concerns to be designated or changed. Collaboration among these teams minimizes duplication and deletions within policy and procedure frameworks and serves as a first barrier to the preventable medical mistakes that continue to impede progress in management and quality improvement. Promoting collaborative teamwork still requires interprofessional education, communication training and well-designed technology. Identification of existing best practices and establishment of relevant workshops pave the way for workshops, and development of indicators to assess collaboration generates realistic road maps for improvement. Workshops should address practical applications for collaboration and foster communication to support teamwork. Important roles for administration, secretaries and records staff that form the basis for workshops illustrate collaboration opportunities. Coordination and collaboration of work among these teams therefore requires initiatives that identify relevant best practices, develop and deliver training workshops and measure progress with collaboration indicators. Continuous professional education is a major asset for skilled application of these indicators. Good practices for intensive care units constitute the major theme of training and provisional evaluation, with an attitude of continuous learning focused on knowledge construction. Collaboration among administrative and clerical teams is therefore essential to reduce medical errors in healthcare institutions. Such collaboration relies on interdepartmental communication and team-based strategies to ensure efficient information transfer among administration, secretaries and records personnel (Fukami et al., 2020).

6.2. Team-Based Approaches

Collaboration in healthcare facilities involves the joint action of administrative personnel, secretaries, and records staff to achieve agreed-upon goals. Efficient collaboration among these groups is a promising approach to reducing the medical errors that jeopardize patient health and safety. Medical errors are mistakes in care provision that lead to serious injury or

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

death. Investigations show that such errors account for approximately 251,000 deaths per year, positioning them as the third-leading cause of death behind heart disease and cancer, and substantially ahead of traffic fatalities and AIDS. More important, the frequency with which they occur is on the rise. Deadly, preventable errors arise because of mistakes or oversights by administrative, secretarial, and records staff as well as medical personnel.

7. Technology in Collaboration

Health informatics enhances medical record accuracy—an essential facet of interdepartmental collaboration for the administration, secretaries, and records staff. Information and communication technologies underpin various administrative and clerical activities, including management of correspondence, the coordination of appointments and meetings, provision of required forms, facilitation of records access and maintenance, and support for registration and admissions processes. Maintenance of patient records is a shared endeavor among medical personnel, records staff, administration, and secretaries, with system capabilities varying widely; the implementation of electronic health records (EHRs) may generate increased clerical workloads for secretaries and administrative officers unless supplemented with appropriate support mechanisms. Modern communication systems assist with correspondence, and computerised communication platforms promote co-ordination by facilitating timely sharing of clinical and non-clinical information.

Co-ordinated and co-operative interdepartmental working practices, founded on effective communication at all organisational levels, characterise a functional team-approach involving the administration, secretaries, and records staff. The adoption of EHRs and computer-supported communication technologies supports the information-based interactions among these groups, as illustrated by the preceding discussion of their respective roles and responsibilities (Tolulope Oluokun, 2018).

7.1. Electronic Health Records (EHR)

Electronic health records (EHRs) are instrumental in the collection, organisation, interpretation, preservation and transmission of the results of patient care activities. They provide a platform for the rapid sharing and availability of information and for increased opportunities of communication among care professionals. EHR systems are also reliable sources of clinical information for performance measurement, auditing and research. This points to the recognition that patient data needs to be shared and communicated among users of EHR systems across diverse specialities and work units working on the same patients and involving a multiplicity of functions and roles.

Hospitals need to be able to examine the influence of systems on the structure and conduct of interaction patterns and the overall effect on collaboration. Monitoring this becomes vitally important even as implementations and expansions of EHR systems continue rapidly, with

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

system designs increasingly based on interaction and communication requirements to facilitate collaboration in patient care provision across numerous organisational boundaries. Experience has also shown that collaboration is highly fragile and difficult to achieve. Many qualitative studies have indicated that across healthcare contexts, the use of EHR systems is accompanied by a loss of informal communication and face-to-face contact—a key resource in collaboration—, which is not entirely compensated for by the EHR. EHR systems often shape the organisation of work, where they encourage more work-at-desk behaviour, favour the spread of work that can be carried out in isolation and reduce opportunities for informal communication and collaboration (F. J. Vos et al., 2020).

7.2. Communication Tools and Software

Adequate communication among administration, secretaries, and records staff has been identified as an effective approach for reducing the incidence of medical errors (C Wu et al., 2012). The widespread introduction of electronic health record (EHR) systems has created a greater need for efficient communication and collaboration to support the documentation and exchange of patient data (Xin Nie et al., 2023). Communication tools developed to facilitate collaboration typically provide capabilities to enable rapid, real-time communication; support multiway discussions involving a group of participants; and integrate with other hospital systems to enable seamless access to relevant patient information. Team training and organization-wide workshops have also been demonstrated to enhance hospital-wide communication and interaction between different teams (Fukami et al., 2020).

8. Training and Development

Collaboration serves as a key means to prevent medical errors across administration, secretaries, and records staff. Medical errors represent failures to execute a planned action as intended or the use of an incorrect plan to achieve an objective. These adverse events frequently result in undesired patient harm ranging from negligible to fatal. Each of these three professional segments contributes significantly to potential errors within its own domain; thus, their unified efforts maximize mitigation. Implementation of collaboration enables attainment of a more thorough, more efficient, and, consequently, more comprehensive oversight of the sanitary environment. It also facilitates early detection of minor issues that could develop into significant problems if overlooked. Sharing of expertise lowers reliance on newly acquired knowledge and diminishes the likelihood of misinterpretation of policies. (Sorana Truta et al., 2018)

Efficiency of collaboration hinges on compliance with guidelines governing interaction within each professional group. Administration policies allocate responsibilities between the segments, which should coordinate accordingly because all are broadly accountable for patient safety. Beyond policy, division of duties imposes requirements on both the scope and

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

phases of collaboration, restricting the range of participants and life-cycle stages concerned. Efficient collaboration therefore transpires interdepartmentally during the front line of direct regulation execution. Within these parameters, availability of contemporary communication technology greatly favors effort. Selection of the method and place of communication depends on the nature of the message, (Fukami et al., 2020)

While the advantages of efficient collaboration are widely recognized, inspection indicates that promotion of such cooperation is decidedly overlooked in practice. Response to unexpected events often entails collective resolution, yet efforts directed at establishing continuous collaboration appear sparse. Training and professional development constitute the primary source of knowledge in this area. Provision of a suitable program for allied personnel guarantees maintenance of essential level of understanding and expertise. (Musunur et al., 2020) The approach is typically multifold, combining various methods to effectively deliver requisite information. Workshops address different materials in sequence, ensuring coverage of all topics. Series length correlates with the dependent stages of collaboration, enshrining continuity. Implementation aims to reduce time required to secure needed information, thereby simultaneously minimizing the total duration of coaction. Modules integrate between sessions to retain awareness of preceding concepts and prevent necessary repetition during subsequent meetings. Face-to-face exchange enables effective consultation on specific details. Continuing education guarantees the opportunity to constantly refresh knowledge.

8.1. Workshops and Seminars

Opportunities for healthcare staff to build the communication, coordination, and collaboration skills strategically needed to increase efficiency and decrease the potential for medical errors have been identified in a variety of workshops and seminars on the topic. Communication errors are a leading cause of adverse events in healthcare. Teamwork and communication improvements correlate with increased patient safety and fewer adverse events (Fukami et al., 2020). Team training for all employees reduced adverse events for patients. Quality improvement is continuous, and efforts to improve the effectiveness of medical teams will continue. Presented material in workshop settings stresses the fundamental nature of interdepartmental communication and a team approach to working and problem-solving. Opportunities to develop these skills could increasingly take place in workshops, seminars, and other structured activities that unite administration, secretaries, and records staff in a sustained and focused effort to collaborate more efficiently. Most resident training occurs in work-based learning while providing patient care, and didactic training on utilizing communication skills within the electronic health record (EHR) is limited. A focus on communication skills around the EHR can increase clinical efficiency while maintaining quality (Skelly et al., 2020). The workshops include self-contained tools that facilitate learner participation and encourage retention. They present a scripted approach to teach efficiency

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

and good patient communication in any clinical situation involving the EHR. The aim is to provide a structured, comprehensive approach that addresses key communication strategies and clinic efficiency. The target audience includes resident physicians, fellows, faculty, and physician extenders practicing in primary care settings with an EHR.

8.2. Continuous Education Programs

While technology plays a critical role in fostering collaboration, human capital remains the cornerstone (Irajpour et al., 2019). Workshops on communication, decision-making, and trust-building support collaboration. Moreover, training programs that inform personnel about other roles clarify responsibilities, promote respect, and prevent professional silos. Similarly, continuous education programs maintain collaboration by reinforcing connections and keeping collaboration-related knowledge and skills current (Musunur et al., 2020).

9. Case Studies

Documented examples of medical errors abound and convey an urgent need for change. Analysis of 1,200 case studies identified fourteen root causes of medical error and strategies to reduce risk in each venue . Elevator shaft entrapments and falls due to the absence of appropriate alarms remain an issue in hospitals worldwide . Equipment locking securely to a patient's bed frame and/or walls is imperative when elevators and beds are involved in idling or moving . Successful pre-operation planning continues to impact the management of risk globally, where ineffective communication is a top contributor to medical errors . A surge might be required, especially for those new to complex care, so a concentration on such experiences is a necessary part of trauma management . Cataract records may remain inaccurate for some individuals due to information still being sourced from handwritten charts rather than digital records. The number of reporting systems occurring in hospitals worldwide has been congenital, with the resulting limited benefit (G Anderson, 2007). Strict policies and legislation must combine with any plans to improve safety in any healthcare environment . Where adoption rates are necessary to minimize medical error, a major LIMITATION involves missing clinical decisions, which can impact the quality of care delivered to patients .

9.1. Successful Collaborations in Healthcare

Citizens expect their healthcare agencies to provide safe, affordable, and timely services. However, the complex nature of healthcare creates a risk of medical error and victimization (Lin et al., 2020). Medical errors can occur even with competent and diligent medical practitioners, particularly in busy, stressful environments. Up to 17% of adverse events arise from human error, and up to 32% of adverse drug events are preventable (G Anderson, 2007). Collaborative efforts involving administration, secretaries, and records staff are therefore essential to reduce medical errors.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

Medical errors are failures to complete a planned action as intended or the use of a wrong plan to achieve an aim. They include inappropriate use or delivery of services and preventable adverse events. Examples include misdiagnosis, failure to monitor a drug's side effects, inappropriate treatment, and failure to order a diagnostic test when clinically indicated. In a study of 31.5 million hospital patients, 4% experienced adverse events. Hospitalized patients have a 1 in 300 chance of dying from a preventable medical error.

9.2. Lessons Learned from Failures

Healthcare professionals widely accept the assumption that medical practitioners will provide safe and competent care. Yet, evidence suggests that American patients harbor considerable concerns about the quality of care they receive (G Anderson, 2007). Medical error refers to a preventable adverse effect of care that may manifest as a failure to complete a planned action, the use of an incorrect plan to achieve an aim, or a deviation from specified practice standards. Errors can be categorized into several types, including diagnostic errors, treatment errors, preventive errors, communication errors, and others. Statistics showed that the annual number of deaths attributable to error in the United States exceeds those due to breast cancer, AIDS, or motor vehicle crashes, positioning errors as the eighth leading cause of death. Due to the synergistic impact of hospital and clinic administration, secretaries, and records staff, an investigation was conducted to explore how these stakeholders can collaborate efficiently to reduce medical errors.

10. Measuring Success

Measures of success for collaborative efforts among administration, secretaries, and records staff, in reducing medical errors, include key performance indicators, data error counts, and reports of breakdowns in communication or information flow. Indicators such as patient readmission rates, unexpected hospital complications, patient complaints, and positive patient feedback constitute additional metrics for evaluation. A healthcare system characterized by high-quality communication among these groups is more likely to deliver care that meets or exceeds patient expectations and satisfactorily addresses their needs, thereby reducing incidents and events associated with safety errors (G Anderson, 2007).

10.1. Key Performance Indicators (KPIs)

Key performance indicators (KPIs) are used as tools to align organisational activities with stated goals and objectives for management and for wider stakeholder groups (Burlea-Schiopoiu & Ferhati, 2020). KPIs may exist for a cluster of organisations or for an individual organisation, for example in public healthcare entities in Romania in investigating reliability and sustainability models for various dimensions of healthcare provisions. A KPI information system ensures timely collection, preparation, and analysis of KPIs for ongoing measures of sustainability. The techniques of data mining can be differentiated by their key descriptive

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

and predictive analytical requirements and appropriate operational definitions of KPIs are required to provide clear, objective, and complete representations of performance. KPI model analysis can aid in clarifying commitments and obligations, reduce inefficiencies in the public sector, and contribute a model of good practices for the healthcare sector.Key performance indicators (KPIs) are important management tools that allow professionals to use indicators to plan, make decisions, and respond immediately, even in uncertain and highly complex environments (Oliver et al., 2020). At the very beginning of the coronavirus disease 2019 (COVID-19) pandemic, rapid changes in healthcare systems underscored the need for continuous monitoring of KPIs to improve understanding of the impact on the point-of-care testing (POCT) network and provide guidance to prepare for new waves of the virus. The use of continuous surveillance with the current KPIs enables the implementation of action plans to ensure the quality of the network and assess whether additional indicators are required to gather more information about this situation.Based on the ISO 22870 standard, POCT networks the unit of analysis in examining the management of an accredited POCT network bears witness to the need for other KPIs not monitored elsewhere. Some of these additional indicators are mainly focused on ensuring control of the extra-analytical phases, such as monitoring of patient registration in the banner system and quality control for each kit or reagent lot, which were indirectly impacted by the COVID-19 pandemic. Both indicators require coordination from the various organisations involved to introduce joint corrective actions or adjustments and such synergies highlight the added value of the centralisation of the management of the POCT network. The critical aspect of adequate control of the analytical phase yet remains, highlighting the importance of choice and role of this type of indicator. The need to continuously assess the suitability of KPIs over time is emphasised for accredited POCT.

10.2. Patient Feedback and Satisfaction

Administering to patient experience through surveys, monitoring e-mails, and patient complaint reporting systems are common methods for gauging patient satisfaction and are used widely at some academic medical centres (L. Hincapie et al., 2016). According to the National Academy of Medicine, about half of medical errors (defined as failure to complete a planned action as intended or use of an incorrect plan to achieve a goal) are attributable to miscommunication. Communication errors can be costly and place the financial health of an institution at serious risk, as well as cause unnecessary patient suffering and delays in treatment (L Street et al., 2020). Thus, collaboration among Administration, secretarial staff, and records personnel is still far from optimal in many organisations. Success depends largely on the willingness of key people within the institution to communicate clearly with each other, preferably in a team approach. Other factors influencing collaborative working include the handling of information and the extent of ready access to relevant data.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

11. Challenges to Collaboration

Cultural differences and limited resources present frequent obstacles to fostering collaboration among administration, secretaries, and records staff in healthcare settings (F. J. Vos et al., 2020). The inherent diversity in habits and organizational cultures can impede the development of an environment conducive to teamwork, thereby complicating the application of collaborative approaches aimed at reducing medical errors. In addition, budgetary and infrastructure constraints frequently restrict training and development opportunities necessary for cultivating essential teamwork abilities, thereby jeopardizing the maintenance of collaborative arrangements. Addressing such challenges requires a comprehensive response that incorporates resource allocation, cultural sensitivity, and continuous education, underscoring the need for systemic support to realize the potential benefits of collaborative practices in error reduction.

11.1. Cultural Barriers

Workplace culture profoundly shapes social interactions, communication styles, and shared perceptions of appropriate conduct (Alhur et al., 2024). Professionals from distinct backgrounds often adhere to their own communication standards, which can impede cooperation and increase the potential for errors. In particular, medical staff frequently express frustration when colleagues from other disciplines do not conform to expected norms. Although members of a particular occupational discipline tend to share overarching understandings of workplace culture, variations between individual organizations may affect these shared perceptions. Misunderstandings arising from cultural differences thus represent a significant source of dissatisfaction and can compromise the effectiveness of collaborative workflows and the sustainability of inter-sector partnerships. Successful organizations address this issue by deliberately cultivating a culture that accommodates diverse communication perspectives, thereby minimizing potential barriers to collaboration.

11.2. Resource Limitations

Limitations in both human and technological resources constitute a substantial barrier to effective collaboration within healthcare settings. Shortages in personnel and inadequacies in hardware and software infrastructure compromise the capacity of administrative and clerical staff to maintain accurate and secure medical records. For example, an insufficient number of records staff members decreases the likelihood of diligently verifying patient information, thereby increasing the potential for errors (F. J. Vos et al., 2020). In parallel, limited access to essential technological tools restricts the ability to store and manage data securely and efficiently, further augmenting the risk. As such constraints persist, the probability of medical errors rises, underscoring the importance of addressing resource-related challenges to enhance safety and reliability in healthcare delivery.

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

12. Future Directions

Future Directions for Collaborative Efforts in Minimizing Medical Errors

The ongoing quest to enhance patient safety necessitates continuous refinement of collaborative strategies among healthcare administration, secretaries, and records personnel. Emerging practices envisage the integration of artificial intelligence-driven analytics to anticipate and preempt administrative oversights. Portals that facilitate transparent communication with patients are poised to complement traditional records management, thereby offering an additional safeguard against documentation inaccuracies. Policy frameworks must correspondingly evolve to incentivize such innovations and to galvanize sustained organizational commitment to integrated safety measures (G Anderson, 2007).

12.1. Innovative Practices

Medical errors have become a significant concern in healthcare management, resulting in lost faith in experts and increased liability risks. This study examines effective collaboration methods among administration, secretaries, and records staff to reduce such errors. The healthcare industry places emphasis on providing services that offer value to patients, encouraging industry employees to pursue living wages and receive training for the latest skills and technologies. Further responsibilities include following safety guidelines, attending ongoing education sessions, and staying current with compliance standards. The increasing application of safety, quality assurance, and employee engagement programs in healthcare organizations increases the likelihood of alignment difficulties due to thought disconnection. The healthcare industry specifically emphasizes career development and advancement opportunities, making proper collaboration among administration, secretaries, and records staff crucial for smooth operation and error minimization.

582,000 people die annually in the United States due to medical errors—the third leading cause of death (G Anderson, 2007). Medical errors comprise preventable adverse effects that lead to patient injury or death. Several types of medical errors exist, including diagnostic, treatment, preventive, and others. An efficient collaboration approach ensures smooth healthcare delivery, minimizing patient errors, and reduces staff conflicts. Consequently, medical errors must become a priority issue. Medical errors stem from the complexity of integrated political, organizational, interpersonal, and individual acts determining decision-making quality—and governance is a central element.

12.2. Policy Recommendations

For long, hospitals have tended to focus on voluntary error-reporting systems and clinicians reporting errors, both of which have little long-term impact. Error reporting is only useful if the data are used for correction, and even though 78% of hospitals believe a non-punitive error reporting system is needed, only 26% actually have one of these systems. Voluntary

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

error reports capture only 5–10% of the total medical errors because of provider competition, lack of trust, lack of cooperation, differences in ownership of data, concern over privacy, and the longstanding culture of medicine in which providers enjoy professional autonomy, are protected by the hierarchical arrangements, and have relatively little accountability. Despite much effort, much less than 10% of US hospitals have fully implemented healthcare IT systems, and many do not plan to. The benefit-to-cost ratio is recognized as a major factor inhibiting implementation—US$ 500,000 to US$ 1 million for an estimated 60-bed community hospital (G Anderson, 2007).

13. Conclusion

From one angle, medical error can be thought of as a medical judgment, i.e., an act of omission or commission, a planned, deliberate, or purposeful deviation from a generally accepted, usually sound, medical or surgical plan. (G Anderson, 2007) The term can also be used to describe: any unintended act (either of omission or commission) or one that does not achieve its intended outcome; a problem in the plan of care or failure of a planned action to be completed as intended; a practice or a system that leads to an unintended result; and a deviation from the process of care that may or may not cause harm to the patient. Irrespective of the definition used by different organizations, medical errors encompass a broad range of events that may result in an adverse event or a preventable adverse event. Across studies, approximately 44,000 to 98,000 Americans die each year as a result of medical errors, many of which are preventable.

An efficient collaboration enables Administration, Secretaries, and Records staff in the largest specialty healthcare institution to ensure collaboration and reduce medical errors. Cooperation and collaboration promote understanding and acceptance. Collaboration and cooperation increase synergy, the power of a group to perform many times greater than the sum of individual effort. Collaboration is a team and people approach can make a difference if each individual in a team or organization realizes that they are part of the collaborative effort and that their individual action or action can undermine the effects of collaboration.

References:

1. Scharein, P. & Trendelenburg, M. (2013). Critical incidents in a tertiary care clinic for internal medicine. ncbi.nlm.nih.gov
2. G Anderson, J. (2007). Regional Patient Safety Initiatives: The Missing Element of Organizational Change. [PDF]
3. Ahsani-Estahbanati, E., Sergeevich Gordeev, V., & Doshmangir, L. (2022). Interventions to reduce the incidence of medical error and its financial burden in health care systems: A systematic review of systematic reviews. ncbi.nlm.nih.gov

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

4. Akiyama, N., Akiyama, T., Hayashida, K., Shiroiwa, T., & Koeda, K. (2020). Incident reports involving hospital administrative staff: analysis of data from the Japan Council for Quality Health care nationwide database. ncbi.nlm.nih.gov
5. Fukami, T., Uemura, M., Terai, M., & Nagao, Y. (2020). Enhanced hospital-wide communication and interaction by team training to improve patient safety. ncbi.nlm.nih.gov
6. Didonato, A. (2018). Utilizing Relational Coordination Theory To Evaluate And Improve Interdisciplinary Communication During Emergency Cesarean Sections: A Quality Improvement Project. [PDF]
7. Adane, K., Muluye, D., & Abebe, M. (2013). Processing medical data: a systematic review. ncbi.nlm.nih.gov
8. Naamneh, R. & Bodas, M. (2024). The effect of electronic medical records on medication errors, workload, and medical information availability among qualified nurses in Israel– a cross sectional study. ncbi.nlm.nih.gov
9. Robin Carmichael, T. (2017). Barriers to medical error reporting and disclosure by doctors: a bioethical evaluation. [PDF]
10. Tolulope Oluokun, O. (2018). Strategies to Mitigate Information Technology Discrepancies in Health Care Organizations. [PDF]
11. F. J. Vos, J., Boonstra, A., Kooistra, A., Seelen, M., & van Offenbeek, M. (2020). The influence of electronic health record use on collaboration among medical specialties. ncbi.nlm.nih.gov
12. C Wu, R., Lo, V., Rossos, P., Kuziemsky, C., J O'Leary, K., A Cafazzo, J., Reeves, S., M Wong, B., & Morra, D. (2012). Improving Hospital Care and Collaborative Communications for the 21st Century: Key Recommendations for General Internal Medicine. ncbi.nlm.nih.gov
13. Xin Nie, J., Heidebrecht, C., Zettler, A., Pearce, J., Cunha, R., Quan, S., Mansfield, E., & Tang, T. (2023). The Perceived Ease of Use and Perceived Usefulness of a Web-Based Interprofessional Communication and Collaboration Platform in the Hospital Setting: Interview Study With Health Care Providers. ncbi.nlm.nih.gov
14. Sorana Truta, T., Marius Böriu, C., Copotoiu, S. M., Petrisor, M., Turucz, E., Vatau, D., & Lazarovici, M. (2018). Improving nontechnical skills of an interprofessional emergency medical team through a one day crisis resource management training. [PDF]
15. Musunur, S., Waineo, E., Walton, E., Deeds, K., & Levine, D. (2020). When Bad Things Happen: Training Medical Students to Anticipate the Aftermath of Medical Errors. ncbi.nlm.nih.gov
16. Skelly, K., Shen, W., Wilbur, J., Thoma, K., Endres, J., Lynch, A., Gaglioti, A., & Rosenbaum, M. (2020). A Curriculum for Teaching Clinical Efficiency Focusing on

Power System Technology
ISSN:1000-3673
Received: 16-06-2024 Revised: 05-07-2024 Accepted: 22-08-2024

Specific Communication Skills While Maximizing the Electronic Health Record. ncbi.nlm.nih.gov
17. Irajpour, A., Farzi, S., Saghaei, M., & Ravaghi, H. (2019). Effect of interprofessional education of medication safety program on the medication error of physicians and nurses in the intensive care units. ncbi.nlm.nih.gov
18. Lin, H. J., Ko, Y. L., Liu, C. F., Chen, C. J., & Lin, J. J. (2020). Developing and Evaluating A One-Stop Patient-Centered Interprofessional Collaboration Platform in Taiwan. ncbi.nlm.nih.gov
19. Burlea-Schiopoiu, A. & Ferhati, K. (2020). The Managerial Implications of the Key Performance Indicators in Healthcare Sector: A Cluster Analysis. ncbi.nlm.nih.gov
20. Oliver, P., Fernandez-Calle, P., Mora, R., Diaz-Garzon, J., Prieto, D., Manzano, M., Dominguez, I., & Buño, A. (2020). Real-world use of key performance indicators for point-of-Care Testing network accredited by ISO 22870. ncbi.nlm.nih.gov
21. L. Hincapie, A., Slack, M., C. Malone, D., J. MacKinnon, N., & L. Warholak, T. (2016). Relationship Between Patients' Perceptions of Care Quality and Health Care Errors in 11 Countries: A Secondary Data Analysis. ncbi.nlm.nih.gov
22. L Street, R., V Petrocelli, J., Amroze, A., Bergelt, C., Murphy, M., Michael Wieting, J., & M Mazor, K. (2020). How Communication “Failed” or “Saved the Day”: Counterfactual Accounts of Medical Errors. ncbi.nlm.nih.gov
23. Alhur, A., A Alhur, A., Al-Rowais, D., Asiri, S., Muslim, H., Alotaibi, D., Al-Rowais, B., Alotaibi, F., Al-Hussayein, S., Alamri, A., Faya, B., Rashoud, W., Alshahrani, R., Alsumait, N., & Alqhtani, H. (2024). Enhancing Patient Safety Through Effective Interprofessional Communication: A Focus on Medication Error Prevention. ncbi.nlm.nih.gov