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Research Article

Nursing–Pharmacy Collaboration in Early Identification and Prevention of Medication-Related Patient Deterioration in Hospitalized Adults

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Abstract:

Effective interprofessional collaboration between nurses and pharmacists is a critical strategy for enhancing patient safety and preventing medication-related deterioration in hospitalized adults. This synergistic partnership leverages the nurse's continuous bedside presence and holistic assessment skills—essential for detecting early, subtle signs of clinical decline—with the pharmacist's specialized expertise in pharmacotherapy, risk assessment, and medication regimen optimization. By moving beyond professional silos through structured mechanisms such as joint patient reviews, shared monitoring protocols, and collaborative quality improvement initiatives, this team-based approach facilitates the early identification of adverse drug events and proactive mitigation of pharmacological risks. This integrated model addresses a significant source of preventable patient harm, ultimately leading to improved clinical outcomes, reduced healthcare costs, and a more robust safety culture within hospital settings.

1. Introduction

The modern hospitalized adult patient is often a complex individual, presenting with multiple comorbidities, polypharmacy regimens, and heightened vulnerability to clinical decline. Within this high-stakes environment, medication-related problems (MRPs) represent a pervasive and significant threat to patient safety and outcomes. Medication-related patient deterioration (MRPD) is a critical and often preventable subset of hospital-acquired harm, encompassing adverse drug events (ADEs), therapeutic failures, and unintended consequences of pharmacotherapy that lead to or exacerbate physiological decline. This deterioration can be insidious, manifesting as subtle changes in vital signs, mental status, or laboratory values, or it can be rapid and catastrophic. The Institute of Medicine's seminal report, *To Err Is Human*, starkly illuminated the scale of medical error, with medications being a central contributor [1]. Decades later, despite advances in technology and protocolization, medication errors and ADEs remain a leading cause of iatrogenic injury, contributing to increased morbidity, mortality, length of stay, and healthcare costs [2, 3].

The traditional model of healthcare, characterized by professional silos and fragmented communication, is fundamentally ill-equipped to address the multifaceted nature of MRPD. Nurses, as the providers with continuous presence at the bedside, are the primary observers of patient status. They are uniquely positioned to detect the earliest signs of deterioration—a slight increase in heart rate, a change in respiratory pattern, new-onset confusion, or a subtle drop in urine output. However, the interpretation of these signs within the complex context of a patient's pharmacotherapy requires specialized pharmacological knowledge. Pharmacists, as the medication experts on the healthcare team, possess deep knowledge of pharmacodynamics, pharmacokinetics, drug interactions, and monitoring parameters. Yet, they often lack the immediate, real-time clinical data and contextual patient narrative that nurses provide.

This disconnect creates a dangerous gap in the patient safety net. A nurse may observe tachycardia but may not immediately connect it to a newly initiated medication like a beta-agonist or an anticholinergic drug. Conversely, a pharmacist reviewing a medication list may identify a potential drug-drug interaction but may be unaware of the patient's current clinical status or subtle symptoms that would confirm its manifestation. It is precisely at the intersection of these complementary skill sets that the most effective defense against MRPD is constructed. The collaboration between nursing and pharmacy is not merely a beneficial adjunct to care; it is an essential, synergistic partnership that transforms individual expertise into collective intelligence for proactive patient protection.

The concept of interprofessional collaboration (IPC) has been increasingly advocated as a cornerstone of high-quality, safe healthcare. The World Health Organization emphasizes that IPC is essential for overcoming the "negative trends in the health workforce" and for achieving coordinated, patient-centered care [4]. In the context of medication safety, effective collaboration moves beyond the outdated "order-entry and dispense" model towards a shared responsibility model for therapeutic outcomes. This involves joint surveillance, shared decision-making, and collaborative problem-solving. The evidence base supporting the impact of such collaboration is growing. Studies have demonstrated that integrated nurse-pharmacist models can significantly reduce medication errors, prevent ADEs, improve medication reconciliation accuracy, and enhance adherence to best-practice guidelines [5, 6].

Furthermore, the recognition and response to clinical deterioration have been systematized through tools like Early Warning Scores (EWS) or Rapid Response Systems (RRS). These systems are

designed to identify "the patient going sour" before a full cardiac or respiratory arrest occurs [7]. However, these systems are often physiologically focused and may not explicitly integrate medication-related triggers. A nurse's clinical suspicion, informed by pharmacological knowledge gained through collaboration with pharmacy, can activate these systems earlier and more accurately when the etiology is suspected to be iatrogenic. Similarly, pharmacist involvement in reviewing medications for patients triggering RRS calls or those on high-risk medications can uncover and mitigate the pharmacological contributors to decline [8].

2. Conceptual Framework: The Synergy Model for Medication Safety

The collaboration between nursing and pharmacy in safeguarding patients from medication-related harm is best understood through a lens of professional synergy. Synergy, in this context, is achieved when the combined effect of the collaboration is greater than the sum of the individual contributions of each profession. This synergy is not automatic; it requires a deliberate alignment of roles, communication channels, and shared mental models. The foundation of this model rests on the complementary but distinct domains of knowledge and practice inherent to each profession.

Nursing practice is anchored in holistic patient assessment, continuous monitoring, and the interpretation of clinical data within the context of the patient's lived experience and response to therapy. The nurse's domain is the *clinical manifestation*: the signs, symptoms, and behavioral cues exhibited by the patient. Their expertise lies in pattern recognition, vigilance, and the nurturing of a therapeutic relationship that often reveals crucial subjective information. For instance, a patient may report a "funny feeling" or a specific, localized discomfort that a nurse can investigate further, potentially linking it to a medication effect. This role as clinical surveillance sentinel is continuous and dynamic.

Pharmacy practice, conversely, is anchored in the science of pharmacotherapy. The pharmacist's domain is the *medication regimen*: its appropriateness, efficacy, safety, and potential for interaction or toxicity. Their expertise lies in analyzing pharmacokinetic profiles, understanding receptor-level effects, identifying latent risks in medication lists, and applying evidence-based guidelines to therapeutic decisions. The pharmacist's perspective is often more systemic and analytical, focusing on the biochemical and physiological pathways through which drugs exert their effects and cause harm.

The synergy occurs at the interface of these two domains. The nurse brings the "what is happening" to the patient, while the pharmacist contributes the "why it might be happening" from a pharmacological standpoint. Together, they co-construct a more accurate and actionable clinical picture. This collaborative diagnostic process transforms isolated observations into informed hypotheses. For example, a nurse's report of new-onset delirium in an elderly patient (clinical manifestation) combined with a pharmacist's review identifying three newly started anticholinergic medications (medication regimen) leads to a rapid, targeted intervention that a single profession might have missed or delayed. This conceptual framework moves beyond simple task delegation to one of integrated cognitive work, establishing a shared ownership over the patient's medication outcome [9, 10].

3. Epidemiology and Impact of Medication-Related Patient Deterioration

To appreciate the imperative for collaborative prevention, one must first understand the scope and consequences of medication-related patient deterioration (MRPD). MRPD encompasses a spectrum of events, from mild, self-limiting side effects to severe, life-threatening adverse drug reactions (ADRs). It is a significant contributor to unplanned intensive care unit (ICU) admissions, cardiopulmonary arrests, and prolonged hospitalizations. Estimates of the incidence of ADEs in hospitalized patients vary, but robust studies suggest they affect approximately 10-20% of inpatients, with a substantial proportion being preventable [11, 12]. A landmark study estimated that preventable ADEs incur additional hospital costs of thousands of dollars per event, contributing to a multi-billion-dollar annual burden on the healthcare system [13].

The clinical manifestations of MRPD are diverse and can mimic or exacerbate underlying disease processes. Cardiovascular deterioration may present as hypotension from antihypertensives or diuretics, hypertension from sympathomimetics, or arrhythmias from QT-prolonging drugs. Respiratory decline can be triggered by opioids or sedatives causing respiratory depression, or by drug-induced pulmonary toxicity. Neurological deterioration is common, ranging from sedation and delirium (e.g., from anticholinergics, benzodiazepines) to seizures or serotonin syndrome. Renal and hepatic function can be directly impaired by nephrotoxic or hepatotoxic

medications, while hematological decline can result from drug-induced bleeding or cytopenias.

The impact extends beyond the immediate physiological insult. MRPD erodes patient trust, contributes to functional decline—particularly in vulnerable older adults—and is a source of significant moral distress for healthcare providers who witness preventable harm. Furthermore, these events consume disproportionate resources, requiring diagnostic investigations, reversal agents, supportive care, and often transfer to higher-acuity units. The prevention of even a single case of severe MRPD, such as opioid-induced respiratory failure or antipsychotic-induced falls, justifies significant investment in collaborative safety strategies [14, 15]. Recognizing that a large fraction of this burden is attributable to system failures and communication gaps underscores the potential of interprofessional collaboration as a corrective mechanism.

4. The Nurse's Role: Bedside Surveillance and Clinical Judgment

The nurse's role in the early identification of MRPD is paramount and multifaceted. It extends far beyond the mechanical administration of medications to encompass sophisticated surveillance, assessment, and interpretation. This role is built on the principle of "knowing the patient," a deep understanding of the patient's baseline status, typical responses, and subtle cues that signal deviation [16].

The first pillar of this role is systematic and knowledgeable assessment. During routine vital sign checks and patient interactions, nurses are not merely collecting data; they are analyzing trends and contextualizing findings. A heart rate trending upward, a slight decrease in oxygen saturation, an increase in restlessness, or a change in the character of pain are all potential red flags. Crucially, nurses must be pharmacologically informed to ask the right questions. For a patient on digoxin, assessing for nausea, visual disturbances, and new arrhythmias is part of targeted surveillance. For a patient on intravenous vancomycin, monitoring for signs of "Red Man Syndrome" or changes in urine output is essential. This requires foundational pharmacology knowledge, which must be continually updated and reinforced through education and collaboration with pharmacy [17].

The second pillar is medication administration safety, which is a primary prevention activity. This includes the traditional "five rights" (right patient, drug, dose, route, time) but also involves a sixth and seventh "right": the right documentation and the right to refuse. Nurses perform crucial double-checks for high-alert medications, verify ambiguous orders, and assess patient readiness for administration (e.g., checking blood pressure before giving an antihypertensive). They also observe and document the patient's immediate response to a medication, which is invaluable real-world pharmacovigilance data.

The third pillar is patient education and engagement. Nurses empower patients to be partners in their own safety by educating them about their medications: what they are for, what side effects to expect and which to report immediately, and the importance of adherence. A patient who understands that new bruising should be reported while on enoxaparin, or that severe diarrhea on antibiotics could be *C. difficile*, becomes an active sensor in the safety system. The nurse facilitates this dialogue and ensures patient concerns are heard and acted upon.

Finally, the nurse acts as the integrator and communicator. They synthesize data from assessments, laboratory results, and patient reports into a coherent clinical story. When a potential MRPD is suspected, the nurse's role is to escalate concern effectively—to the prescribing physician, certainly, but also directly to the pharmacist. This communication must move beyond a simple task-oriented request ("please verify this dose") to a clinical inquiry ("my patient started levofloxacin yesterday and today is confused and has a new tremor; could this be related?"). This shift from transactional to collaborative communication is the bedrock of effective partnership [18].

5. The Pharmacist's Role: Medication Expertise and Proactive Risk Management

The clinical pharmacist's role has evolved dramatically from a primarily distributive function to an integrated, patient-centered role focused on optimizing therapeutic outcomes and minimizing risk. In the context of preventing MRPD, the pharmacist acts as a detective, analyst, and consultant, applying specialized knowledge to identify risks before they manifest and to decode problems when they occur [19].

A core activity is comprehensive medication review and reconciliation. Upon admission, transfer, and discharge, pharmacists work to ensure an accurate and complete medication list, a process notoriously prone to error. Discrepancies—omissions, duplications, incorrect doses, or unauthorized continuations—are a direct source of MRPD. Pharmacists resolve these discrepancies, often in consultation with nurses who may have information from the patient or family about home medication use. Beyond reconciliation, pharmacists perform in-

depth reviews of the entire medication regimen for appropriateness, considering diagnosis, renal/hepatic function, age, potential interactions, and evidence-based guidelines. They identify patients on "high-risk" medications (e.g., anticoagulants, insulin, opioids, sedatives, chemotherapeutic agents) who warrant intensified monitoring, often formalized through pharmacist-driven monitoring protocols [20].

Pharmacists are also instrumental in therapeutic drug monitoring (TDM) and dose adjustment. For medications with narrow therapeutic indices (e.g., vancomycin, aminoglycosides, warfarin, phenytoin), pharmacists interpret serum levels in the context of the patient's clinical status and organ function to recommend precise dose adjustments. They prevent toxicity from accumulation and therapeutic failure from suboptimal dosing. This requires close communication with nurses who collect the levels at the correct times and report relevant clinical observations.

Furthermore, pharmacists provide direct consultation and education to both the healthcare team and patients. They answer complex drug information questions from nurses and physicians, provide in-services on new medications or safety alerts, and contribute to the development of order sets and clinical pathways that embed safety into the prescribing process. At the bedside, they can conduct medication-focused patient interviews, uncovering adherence issues, unreported side effects, or use of over-the-counter products that may interact with hospital therapy. This direct patient contact complements the nurse's assessment and strengthens the therapeutic alliance [21].

Perhaps most critically for early identification, clinical pharmacists engaged in rounds—whether on general wards or in the ICU—bring pharmacological reasoning to the daily plan of care. They can prospectively identify that adding a sedating antihistamine to a regimen already including an opioid and a benzodiazepazine drastically increases fall and respiratory risk. They can recommend renal dose adjustments before a rise in creatinine is evident, preventing nephrotoxicity. This proactive, embedded presence transforms pharmacy from a reactive service to an integral component of the clinical decision-making team, directly intercepting errors and mitigating risks at their source [22].

6. Mechanisms of Collaborative Intervention

The synergy between nursing and pharmacy is operationalized through specific, structured mechanisms of collaboration. These mechanisms formalize the partnership and create reliable pathways for shared problem-solving. Their effectiveness lies in combining real-time clinical data with expert pharmacological analysis.

One of the most powerful collaborative mechanisms is **joint patient review and rounding**. In this model, a clinical pharmacist participates in nursing team huddles or walking rounds. The nurse presents the patient's overnight course, current status, and concerns. The pharmacist concurrently reviews the medication profile. This parallel processing allows for immediate cross-verification. The nurse's report of "increased agitation" triggers the pharmacist to scrutinize the chart for new psychoactive medications or interactions. Conversely, the pharmacist's note of a newly prescribed antibiotic with nephrotoxic potential prompts the nurse to intensify monitoring of intake, output, and renal function labs. Studies of interprofessional rounds, including pharmacists, have demonstrated reductions in ADEs and improved communication [23, 24].

Another key mechanism is the **collaborative development and use of monitoring protocols and triggers**. Nurses and pharmacists can jointly create and implement condition-specific or drug-specific monitoring flowsheets. For example, a protocol for patients on intravenous insulin or heparin might mandate nurse-recorded blood glucose or activated partial thromboplastin time (aPTT) values at specific intervals, with clear parameters for when to contact the pharmacist for dose adjustment. Similarly, they can establish "pharmacovigilance triggers"—clinical or laboratory findings that automatically prompt a pharmacist consult. Triggers could include a new order for an antidote (e.g., naloxone, flumazenil), a critically abnormal drug level, a sudden rise in creatinine, or a patient activating the hospital's rapid response system. This systemizes the collaboration, ensuring high-risk situations receive automatic, dual-profession attention [25, 26].

Shared documentation in the electronic health record (EHR) is a vital tool. When both professions document in accessible, interprofessional notes or designated medication management sections, it creates a shared mental model. A nurse can document a suspected adverse reaction in a prominent location, "flagging" it for pharmacy review. The pharmacist can then document their assessment and recommendations, which in turn informs the nurse's ongoing monitoring plan. This creates a transparent, continuous loop of communication that survives shift changes and provider rotations. The EHR can also facilitate this through shared dashboards or alerts that are co-designed by nursing and pharmacy informatics

specialists to highlight high-risk patients or required monitoring tasks [27].

Finally, **co-led quality improvement (QI) and education initiatives** cement the collaborative culture. Nurse-pharmacy committees focused on medication safety can analyze root causes of MRPD events, review near-misses, and design systemic fixes. For instance, after a series of falls related to newly initiated sleep aids, a joint committee might develop a new screening protocol for fall risk prior to ordering hypnotics and a nurse-pharmacist "time-out" before the first dose is administered. Furthermore, co-teaching in simulation labs or classroom settings—where a pharmacist explains the pharmacology of sepsis drugs while a nurse demonstrates the associated physical assessment—creates a powerful, integrated learning experience that breaks down silos and fosters mutual respect [28, 29].

7. High-Risk Populations and Scenarios

While all hospitalized adults are at risk, certain populations and clinical scenarios present amplified vulnerability to MRPD, demanding intensified nurse-pharmacist collaboration.

Older Adults with Multimorbidity and Polypharmacy: The aging process alters pharmacokinetics and pharmacodynamics, increasing sensitivity to medications. Older adults often have reduced renal and hepatic clearance, altered body composition, and frailty. They are frequently prescribed multiple medications (polypharmacy), which exponentially increases the risk of drug-disease and drug-drug interactions. A classic example is the prescription of an anticholinergic medication for bladder spasms in a patient with pre-existing mild cognitive impairment, leading to acute delirium. Here, the nurse's detection of acute confusion must be rapidly paired with the pharmacist's review to identify the likely offending agent from a long list. Collaborative deprescribing initiatives, where nurses monitor for the return of the original symptom while pharmacists guide safe discontinuation schedules, are essential in this population [30, 31].

Patients with Renal or Hepatic Impairment: Organ dysfunction drastically affects drug metabolism and elimination. A standard dose of a renally excreted drug like gabapentin or enoxaparin can lead to toxicity in a patient with acute kidney injury. Nurses monitoring for signs of neurotoxicity (drowsiness, ataxia) or bleeding must be acutely aware of the patient's estimated glomerular filtration rate (eGFR). Pharmacists are critical in recommending dose adjustments based on dynamic renal function and in selecting alternative agents. This requires daily collaboration: the pharmacist alerts the nursing team to a patient on a renally adjusted medication whose kidney function is declining, and the nurse increases surveillance for toxicity signals [32].

Critical Care Transitions (Admission, Transfer, Discharge): Transitions of care are high-risk periods for medication errors. During admission, incomplete medication histories lead to errors of omission. Nurses, often the first to take a history, and pharmacists, who verify and reconcile it, must work closely. At transfer from ICU to a general ward, the pharmacokinetics of drugs like sedatives or vasopressors change dramatically as the patient's status improves; failure to adjust doses can lead to over-sedation or hypotension. A collaborative "handoff" that includes both nursing and pharmacy representation ensures a safe transition. At discharge, the collaboration ensures the patient and family understand the new medication plan, preventing errors at home that could lead to readmission [33, 34].

Use of High-Alert Medications: Certain drug classes carry a heightened risk of causing significant harm if used in error. These include anticoagulants, insulins, opioids, sedatives, chemotherapeutic agents, and concentrated electrolytes. For these, structured collaboration is non-negotiable. For instance, with intravenous heparin, nurses monitor aPTT and for signs of bleeding, while pharmacists protocolize dosing and monitor for interacting medications. With patient-controlled analgesia (PCA) opioids, nurses assess pain scores, sedation levels, and respiratory rate, while pharmacists ensure pump programming is correct and review for concomitant CNS depressants. Standardized protocols, double-checks, and clear communication lines between the nurse at the bedside and the pharmacist are mandatory safety components [35, 36].

8. Barriers to Effective Collaboration

Despite its demonstrated benefits, the implementation of robust nursing-pharmacy collaboration faces significant systemic, cultural, and practical barriers.

Professional Silos and Hierarchical Structures: Deeply ingrained professional cultures and traditional hierarchies within healthcare can inhibit open communication. Nurses may feel reluctant to question a medication order or to "bother" the pharmacist with a clinical observation, while pharmacists may feel their recommendations to nurses or physicians are not welcomed. The historical separation of pharmacy as a department

rather than a clinical service can reinforce these silos. Overcoming this requires deliberate leadership efforts to flatten hierarchies, create shared goals, and foster psychological safety where all team members feel empowered to speak up [37].

Workload and Resource Constraints: Both nursing and pharmacy departments in hospitals are frequently understaffed and overburdened. Nurses may have high patient ratios, leaving limited time for in-depth medication review or collaborative huddles. Clinical pharmacists may be responsible for covering hundreds of patients, making proactive, comprehensive reviews for every patient impossible. In such environments, collaboration is often relegated to crisis management rather than proactive prevention. Sustainable models require adequate staffing and the strategic deployment of pharmacy technicians to handle distributive tasks, freeing pharmacists for clinical work [38].

Deficiencies in Interprofessional Education (IPE): Many healthcare professionals are trained in isolation, with minimal exposure to the roles, expertise, and language of other disciplines until they enter practice. Nurses may graduate with varying levels of pharmacology training, and pharmacists may have limited clinical assessment experience. This lack of foundational understanding of each other's competencies can lead to misconceptions and inefficient communication. Integrating IPE into undergraduate and postgraduate curricula, where students learn *with, from, and about* each other, is crucial for preparing a collaborative-ready workforce [39].

Technological and System Challenges: The electronic health record, while a potential facilitator, can also be a barrier if poorly designed. If pharmacy and nursing documentation are in separate, non-linked sections of the chart, information is fragmented. Alert fatigue from poorly designed clinical decision support systems can cause both nurses and pharmacists to override important warnings. Lack of integrated communication tools (e.g., secure messaging that connects the nurse directly to the covering pharmacist) forces reliance on inefficient methods like phone tag or paper notes. Technology must be designed with interdisciplinary workflow in mind to enable, not hinder, collaboration [40].

Strategies for Implementation and Sustainability

Building and sustaining an effective collaborative model requires a multi-faceted, intentional approach that addresses the aforementioned barriers.

Leadership and Organizational Culture Change: Hospital administration must champion interprofessional collaboration as a core strategic priority for patient safety. This involves allocating resources (staff, time, technology), establishing clear expectations for collaborative practice, and recognizing and rewarding successful teamwork. Leaders must model collaborative behavior and create forums for shared governance where nurses and pharmacists jointly design medication safety policies and procedures. A culture of "blameless" reporting for medication near-misses, analyzed by joint committees, fosters learning and system improvement [41].

Developing Structured Communication Tools and Protocols: Standardizing communication reduces ambiguity and saves time. Tools like SBAR (Situation, Background, Assessment, Recommendation) can be adapted for nurse-pharmacist interactions. Implementing structured interprofessional rounds or huddles, with a defined agenda and participation expectations, ensures collaboration happens routinely. Co-developing clinical pathways, order sets, and monitoring protocols ensures that safety is hardwired into everyday processes. For instance, a "renal safety bundle" could automatically generate a collaborative task for the nurse and pharmacist when a patient's eGFR drops below a certain threshold [42].

Investment in Technology and Informatics: The EHR should be optimized to support collaboration. This includes creating shared patient lists or dashboards that highlight high-risk medications and required monitoring, enabling seamless co-documentation in interprofessional progress notes, and integrating secure, role-based messaging systems. Clinical decision support alerts should be refined through nurse-pharmacist input to be specific, actionable, and non-disruptive, reducing alert fatigue. Barcode medication administration (BCMA) systems, when integrated with pharmacy profiles, provide a direct link between the nurse at the bedside and the medication record maintained by pharmacy [41].

Ongoing Interprofessional Education and Training: Education cannot stop at graduation. Hospitals must provide joint continuing education for nurses and pharmacists, focusing on high-risk areas like anticoagulation, pain management, or sepsis. Simulation-based training is particularly effective, allowing teams to practice managing a deteriorating patient due to a medication error in a safe environment, refining their communication and crisis resource management skills. Creating opportunities for shadowing or role exchange can build empathy and a deeper appreciation for each other's challenges and contributions [40].

9. Conclusion

The prevention of medication-related patient deterioration in hospitalized adults is a complex challenge that defies solution by any single healthcare discipline. The intricate interplay between a patient's dynamic clinical status and the potent agents of pharmacotherapy demands a dual-lens approach. Nursing brings the indispensable lens of continuous, holistic surveillance and clinical judgment, grounded in the reality of the patient's immediate experience. Pharmacy brings the equally indispensable lens of specialized pharmacological expertise, capable of predicting risk, decoding toxicity, and optimizing therapeutic regimens.

While significant barriers related to culture, resources, education, and technology exist, they are not insurmountable. The imperative for action is clear, grounded in the substantial human and economic cost of preventable medication-related harm. By investing in leadership, structured communication, supportive technology, and interprofessional learning, hospitals can cultivate an environment where nurses and pharmacists function as interdependent partners. In doing so, they will not only enhance their capacity to catch deterioration early but, more importantly, to prevent it from occurring in the first place. The ultimate beneficiary is the patient, who receives care that is safer, more effective, and truly reflective of a unified healthcare team's collective expertise.

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