

INTEGRATING CLINICAL REASONING INTO INTENTIONAL ROUNDING: A SYSTEMATIC REVIEW OF NURSING INTERVENTIONS AND OUTCOMES

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ABSTRAK

Intentional rounding (IR) merupakan intervensi keperawatan terstruktur untuk meningkatkan pemantauan pasien dan keselamatan melalui kunjungan bedside secara berkala. Namun, efektivitasnya masih diperdebatkan, terutama terkait penerapan penalaran klinis dalam pelaksanaannya. Tinjauan sistematis ini bertujuan mensintesis bukti mengenai intervensi dan luaran IR dengan menekankan integrasi penalaran klinis dalam praktik keperawatan. Tinjauan sistematis dilakukan berdasarkan pedoman PRISMA 2020. Pencarian dilakukan pada MEDLINE/PubMed, CINAHL, EMBASE, dan Scopus untuk periode Januari 2016–Juli 2026. Dari 175 rekaman, 32 duplikat dihapus, 143 studi disaring, dan 5 studi memenuhi

kriteria inklusi. Karena heterogenitas metodologis, dilakukan sintesis naratif. IR menunjukkan manfaat terhadap keselamatan pasien, terutama penurunan kejadian jatuh. Namun, pengaruh terhadap ulkus tekan dan penggunaan bel panggil tidak signifikan. Ditemukan kesenjangan antara kepatuhan dokumentasi dan fidelitas klinis, dengan risiko praktik *tick-box* akibat beban kerja dan dokumentasi. Kualitas komunikasi dan keterlibatan kognitif perawat menjadi faktor penting dalam efektivitas IR. IR berpotensi meningkatkan keselamatan pasien, tetapi efektivitasnya memerlukan integrasi penalaran klinis, komunikasi berkualitas, dukungan organisasi, serta pengurangan beban dokumentasi.

ABSTRACT

Intentional rounding (IR) is a structured nursing intervention designed to enhance patient monitoring and safety through periodic bedside visits. However, its effectiveness remains a subject of debate, particularly regarding the application of clinical reasoning during implementation. This systematic review aims to synthesize evidence concerning IR interventions and outcomes, emphasizing the integration of clinical reasoning into nursing practice. The review was conducted in accordance with PRISMA 2020 guidelines. Searches were performed across MEDLINE/PubMed, CINAHL, EMBASE, and Scopus for the period of January 2016 to July 2026. Of 175 records identified, 32 duplicates were removed, 143 studies were screened, and five studies met the inclusion criteria. Due to methodological heterogeneity, a narrative synthesis was conducted. IR demonstrated benefits for patient safety, notably a reduction in fall incidents; however, its impact on pressure ulcers and call bell usage was not significant. A gap was identified between documentation compliance and clinical fidelity, highlighting a risk of "tick-box" practice driven by workload and documentation demands. The quality of communication and nurses' cognitive engagement emerged as critical factors in IR effectiveness. While IR has the potential to improve patient safety, its

effectiveness relies on the integration of clinical reasoning, high-quality communication, organizational support, and a reduction in documentation burden.

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INTRODUCTION

The delivery of high-quality, patient-centered nursing care in acute hospital settings remains a fundamental priority for healthcare systems worldwide. Intentional rounding (IR), also referred to as hourly rounding, purposeful rounding, or comfort rounding, has emerged as a structured nursing intervention designed to systematically address patients' fundamental care needs through regular, scheduled bedside checks (Bayram et al., 2022; East et al., 2020; Kirk & Kane, 2016; Ryan et al., 2020). This practice involves nurses conducting one to two hourly checks with every patient using a standardized protocol, typically addressing the "4Ps": pain, positioning, personal needs (potty), and proximity of personal items (Ryan et al., 2018; Shin & Park, 2018; Sims et al., 2018). The implementation of IR gained significant momentum following the Mid Staffordshire NHS Foundation Trust public inquiry in the United Kingdom, which identified serious failures in the quality of basic care and recommended that patients should have more regular, organized visits from nursing staff (Harris et al., 2019; Leamy et al., 2023).

Despite the widespread adoption of IR across healthcare systems in the United States, United Kingdom, Australia, and other countries (Leamy et al., 2023; Ryan et al., 2022), the evidence base supporting its effectiveness remains contested and methodologically heterogeneous. Systematic reviews and integrative literature reviews have documented positive outcomes associated with IR implementation, including improvements in patient satisfaction, reductions in patient falls, decreased pressure ulcer incidence, and reduced call bell usage. However, the quality of available evidence has been characterized as generally low, with studies predominantly employing pragmatic quality improvement designs rather than rigorous experimental approaches (Bayram et al., 2022). A realist evaluation conducted across English NHS trusts found that the effectiveness of IR, as currently implemented and adapted, is very weak and falls short of theoretically informed mechanisms (Harris et al., 2019; Leamy et al., 2023).

The theoretical underpinnings of IR suggest that when implemented comprehensively and consistently, it should improve healthcare quality and satisfaction by embedding regular patient contact into daily routine practice, thereby giving nurses "allocated time to care". The documentation of IR checks is intended to increase accountability and raise fundamental standards of care, while more frequent nurse-patient

contact should improve relationships and increase awareness of patient comfort and safety needs. Furthermore, IR is theorized to enable nurses to anticipate patient needs and take pre-emptive action, facilitate teamwork and communication, and empower patients to ask for what they need to maintain their comfort and well-being (Blakeney et al., 2023; Sims et al., 2018). However, empirical testing of these propositions has yielded inconclusive results, with only partial evidence supporting mechanisms related to consistency, comprehensiveness, and accountability (Harris et al., 2019; Leamy et al., 2023)

Clinical reasoning represents a critical cognitive process through which nurses make clinical judgments by selecting from alternatives, weighing evidence, using intuition, and recognizing patterns to deliver safe, effective patient care (Sanson et al., 2022). The integration of clinical reasoning into structured nursing interventions such as IR has the potential to transform routine rounding from a task-oriented checklist activity into a cognitively engaged, patient-responsive practice. This integration addresses concerns raised in the literature that IR may oversimplify nursing, privilege a transactional and prescriptive approach over relational nursing care, and prioritize accountability and risk management above individual responsive care. Nurses have expressed ambivalence about IR, with some perceiving it as an additional, unnecessary task that devalues nursing work, while others recognize its benefits for patient safety and satisfaction (Ryan et al., 2018; Sims et al., 2018).

The successful implementation of IR is influenced by multiple contextual factors, including leadership support, staff engagement, education and training, workload and staffing levels, ward layout, and organizational culture. Studies have identified that the willingness of nurses to accept IR is critical for engagement and success, and that staff understanding and practices significantly influence the successful implementation and adherence to IR interventions (East et al., 2020). Furthermore, the effectiveness of IR varies across different clinical settings, with some evidence suggesting that it may not be suitable for all environments, such as emergency departments. The documentation burden associated with IR has been identified as problematic for nursing staff, potentially detracting from direct patient care activities (Maddigan et al., 2019).

Recent scholarship has called for greater conceptual clarity regarding the terminology, purposes, and features of rounding interventions in nursing. The field has been characterized by poor definitional clarity, with various labels used interchangeably to describe similar interventions, including intentional rounding, hourly rounding, proactive patient rounds, comfort rounds, and rounds with intent to care (Hetherton et al., 2024). This terminological inconsistency has complicated efforts to synthesize evidence and establish

clear guidelines for practice. Additionally, the purposes of rounding have been conceptualized into three main categories: preparing the care by ensuring an effective care plan, team, and environment; delivering tailored and timely nursing care; and promoting the quality of care (Bayram et al., 2023).

The integration of clinical reasoning into IR represents an evolution of the intervention that moves beyond scripted, task-focused approaches toward a more sophisticated model of nursing practice that emphasizes critical thinking, individualized assessment, and responsive care delivery. This approach aligns with contemporary nursing education frameworks that emphasize clinical judgment as a core competency and recognizes that effective nursing care requires the synthesis of theoretical knowledge with practical wisdom. By embedding clinical reasoning processes within the structure of IR, nurses may be better equipped to identify subtle changes in patient condition, anticipate complications, and intervene proactively to prevent adverse outcomes (Ryan et al., 2020). This systematic review aims to synthesize the available evidence on nursing interventions and outcomes associated with IR, with particular attention to the integration of clinical reasoning processes.

LITERATURE REVIEW

Intentional Rounding

Intentional rounding (IR), also known as hourly rounding, purposeful rounding, or comfort rounding, represents a structured nursing intervention designed to systematically address patients' fundamental care needs through regular, scheduled bedside checks. This practice involves nurses conducting one to two hourly checks with every patient using a standardized protocol, typically addressing the "4Ps": pain, positioning, personal needs (potty), and proximity of personal items. The implementation of IR gained significant momentum following the Mid Staffordshire NHS Foundation Trust public inquiry in the United Kingdom, which identified serious failures in the quality of basic care and recommended that patients should have more regular, organized visits from nursing staff (Bayram et al., 2022, 2023).

Despite widespread adoption across healthcare systems in the United States, United Kingdom, Australia, and other countries, the evidence base supporting IR effectiveness remains contested and methodologically heterogeneous. A national survey in England demonstrated that 97% of NHS trusts had implemented intentional rounding in some form reflecting its pervasive adoption despite ongoing debates about its efficacy (Sims et al., 2018).

The theoretical foundations of IR suggest that when implemented comprehensively and consistently, it should improve healthcare quality and satisfaction by embedding regular patient contact into daily routine practice, thereby giving nurses "allocated time to care"(Bayram et al., 2022). A realist synthesis identified eight a priori propositions underpinning IR: (1) comprehensive and consistent implementation improves healthcare quality; (2) embedding IR into daily routine provides allocated time to care; (3) documenting IR checks increases accountability; (4) more frequent nurse-patient contact improves relationships; (5) increased nurse visibility promotes vigilance; (6) frequent contact enables anticipation of patient needs; (7) IR documentation facilitates teamwork and communication; and (8) IR empowers patients to ask for what they need (Bayram et al., 2023).

However, empirical testing of these propositions has yielded inconclusive results. A realist evaluation conducted across English NHS trusts found that only two of the original eight mechanisms were partially activated (consistency and comprehensiveness, and accountability), with evidence for two mechanisms being inconclusive (visibility of nurses and anticipation), minimal evidence for one mechanism (multidisciplinary teamwork and communication), and no evidence for the remaining three (allocated time to care, nurse-patient relationships and communication, and patient empowerment). This evaluation demonstrated that the effectiveness of IR, as currently implemented and adapted in England, is very weak and falls short of theoretically informed mechanisms (Shin & Park, 2018; Sims et al., 2018).

Evidence on Patient Outcomes

Systematic reviews and integrative literature reviews have documented positive outcomes associated with IR implementation, including improvements in patient satisfaction, reductions in patient falls, decreased pressure ulcer incidence, and reduced call bell usage (Leamy et al., 2023; Ryan et al., 2018). A scoping review examining sixteen studies found that four studies reported a significant reduction in falls, three reported a decrease in pressure injuries, and two studies reported a reduction in call bell usage (Harris et al., 2019). A cluster-randomized controlled study in internal medicine units found that the intervention group had a lower risk of falls (adjusted incidence rate ratio 0.14; 95% confidence interval, 0.02–0.78; $p = 0.03$), supporting the usefulness of IR in complex and vulnerable populations (Ryan et al., 2022).

However, the quality of available evidence has been characterized as generally low, with studies predominantly employing pragmatic quality improvement designs rather than rigorous experimental approaches. A systematic mixed-method review concluded that

the evidence on IR is mixed and suggested that the introduction of IR should be accompanied by a protocol for robust evaluation to measure the impact of this process change. The diversity of methods employed and methodological limitations in many studies contribute to weak evidence of the effectiveness of IR on patient outcomes (Harris et al., 2019; Leamy et al., 2023).

Multiple studies have reported improvements in patient satisfaction following IR implementation. Research in a rural Australian setting found that both nurses and patients positively rated satisfaction with all aspects of nursing care provided and received through IR (Ryan et al., 2018). Patient satisfaction was predicted by the ability to see a nurse when needed, the provision of pain relief when needed, feeling comfortable and safe, and the perception that nurses were interested in their feelings about their care (Ryan et al., 2018). A study examining intentional nursing rounds based on the care model proposed that such rounds were effective in improving perception of quality nursing care and patients' satisfaction with nursing care (Kirk & Kane, 2016).

Nurse Manager Intentional Rounding (NMIR) has also demonstrated positive effects on patient satisfaction. A systematic review of seven studies found that five studies reported that the satisfaction scores of patients who received rounding were significantly higher than that perceived by patients not receiving rounding. Additionally, two studies documented significant improvements in other aspects of quality of care, including information accessibility, discharge instructions, and coordination of care after discharge (East et al., 2020).

Clinical Reasoning in Nursing Practice

Clinical reasoning represents a critical cognitive process through which nurses make clinical judgments by selecting from alternatives, weighing evidence, using intuition, and recognizing patterns to deliver safe, effective patient care. The integration of clinical reasoning into structured nursing interventions such as IR has the potential to transform routine rounding from a task-oriented checklist activity into a cognitively engaged, patient-responsive practice. Research on nursing-sensitive quality indicators has emphasized the importance of clinical judgment and decision-making in nursing practice (Flowers et al., 2016). The development of nursing-sensitive quality indicators based on the Donabedian structure-process-outcome model provides frameworks for evaluating nursing care quality (Hetherington et al., 2024). These indicators are defined as tools for evaluating the processes and outcomes of nursing services, providing quantitative assessment and monitoring of nursing management, clinical practice, and other factors that influence patient outcomes (Bayram et al., 2023) .

Quality Improvement and Nursing Outcomes

The measurement of nursing-sensitive outcomes is essential for evaluating the quality of nursing care. A scoping review exploring nursing research priorities based on nurse-sensitive indicators identified patient fall, medication error, patient satisfaction, catheter-associated infection, pain, pressure ulcer, and appropriate levels of nursing skill mix as frequently cited indicators. The review found that patient-centeredness, patient safety, a healthy work environment, and nursing informatics systems are significant research dimensions (Bayram et al., 2022).

The development of nursing-sensitive quality indicators for specific clinical contexts has been undertaken using Delphi consensus methods. Studies have developed indicators for various settings including acute care, emergency departments. These indicators typically encompass structure, process, and outcome dimensions based on Donabedian's framework (Bayram et al., 2023; Hetherton et al., 2024).

Several significant gaps exist in the current evidence base for IR. First, there is a need for robust studies to explore the acceptability and feasibility of rounding protocols that can be implemented in different clinical settings. Second, promoting IR without solid evidence of its acceptability, feasibility, and suitability in different clinical settings could compromise nurses' ability to provide safe care. Third, the integration of clinical reasoning into IR has not been systematically examined. While IR provides a structure for regular patient contact, the cognitive processes nurses employ during these interactions and how these can be enhanced through clinical reasoning education remain underexplored. Fourth, the relationship between IR and nursing education, particularly for pre-registration nursing students, requires further investigation. Recent literature reviews found that patient safety outcomes and staff perspectives had been explored predominantly, yet the perspectives of pre-registration nursing students were unexplored (Harris et al., 2019).

METHOD

This systematic review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. A rigorous and systematic database screening process was used to map the empirical evidence regarding the integration of clinical reasoning into intentional nursing rounding. A formal review protocol was prepared before study selection to promote methodological transparency and minimize potential bias. The review focused on empirical evidence concerning structured bedside rounding and its relationship with nurses' clinical

reasoning, clinical judgment, decision-making, communication, and patient safety outcomes.

Studies were selected according to predefined eligibility criteria structured using the Population, Intervention, Comparison, and Outcomes (PICO) framework. The population comprised practicing registered nurses working in acute care or inpatient hospital wards, including medical-surgical, geriatric, and critical care units. Studies focusing exclusively on undergraduate nursing students in prelicensure placements, Certified Nursing Assistants, or non-acute settings such as nursing homes and skilled nursing facilities were excluded. The intervention consisted of structured bedside rounding protocols, including intentional rounding, purposeful rounding, or hourly rounding. Non-bedside or educational models, such as academic teaching rounds, think-aloud student rounds, and manager-led administrative rounds, were excluded. Comparators included standard care, routine unstructured bedside rounding, or pre-intervention clinical baselines.

The primary outcomes of interest were nursing cognitive outcomes, including measured or observed clinical reasoning, critical thinking, clinical judgment, and clinical decision-making during rounds. Secondary outcomes included process-level indicators, such as protocol compliance, intervention fidelity, and documentation patterns, as well as patient safety outcomes, including accidental falls and call-light responsiveness, when these outcomes were explicitly associated with nurses' clinical judgment or communication. Eligible study designs included randomized controlled trials, cluster-randomized controlled trials, quasi-experimental studies, cohort studies, and qualitative or mixed-methods case studies. Literature reviews, protocol papers, and opinion pieces were excluded from the review.

A systematic literature search was conducted in four electronic databases: MEDLINE via PubMed, CINAHL via EBSCOhost, EMBASE, and Scopus. Searches covered the period from January 2016 to July 2026 and were restricted to studies published in English. Three search strategies were applied using combinations of the terms "intentional rounding," "purposeful rounding," and "hourly rounding" with nursing-related terms and concepts related to clinical reasoning, critical thinking, clinical judgment, clinical decision-making, acute care, hospital, inpatient settings, and empirical study designs. The search strategy was designed to identify empirical studies examining the relationship between structured nursing rounds and cognitive or clinical outcomes among practicing nurses.

Study selection followed a PRISMA-based screening process. The electronic search identified 175 records, of which 32 duplicates, including blank record templates, were removed, leaving 143 unique records for title and abstract screening by two independent

reviewers. Subsequently, 138 records were excluded because they did not meet the predefined PICO criteria, including inappropriate interventions, populations, or the absence of relevant nursing cognitive outcomes. Five full-text studies were therefore included in the final synthesis: Randell et al. (2024), Di Massimo et al. (2022), Leamy et al. (2023), Gliner et al. (2022), and Daniels (2016). Disagreements between reviewers were resolved through discussion and consensus. Two reviewers independently assessed the risk of bias using design-specific validated tools. Due to substantial methodological and intervention heterogeneity across the included studies, a meta-analysis was considered clinically and statistically inappropriate. Therefore, a narrative synthesis was conducted, categorizing studies according to the role of rounding as a structured process, clinical outcomes, and its effects on nurses' clinical reasoning, communication, and cognitive engagement. Study characteristics and findings were descriptively tabulated to facilitate comparison.

RESULTS

The systematic search of bibliographic databases (MEDLINE via PubMed, CINAHL via EBSCOhost, EMBASE, and Scopus) yielded a total of 175 records across the searched segments. After a rigorous deduplication process, 32 duplicate records were removed, leaving 143 unique records for title and abstract screening. During the abstract screening stage, 138 records were excluded because they did not meet the predefined Population, Intervention, Comparator, and Outcome (PICO) criteria (e.g., studies focusing on prelicensure students, non-acute care settings, or lacking direct measures of nursing clinical judgment and rounding interventions).

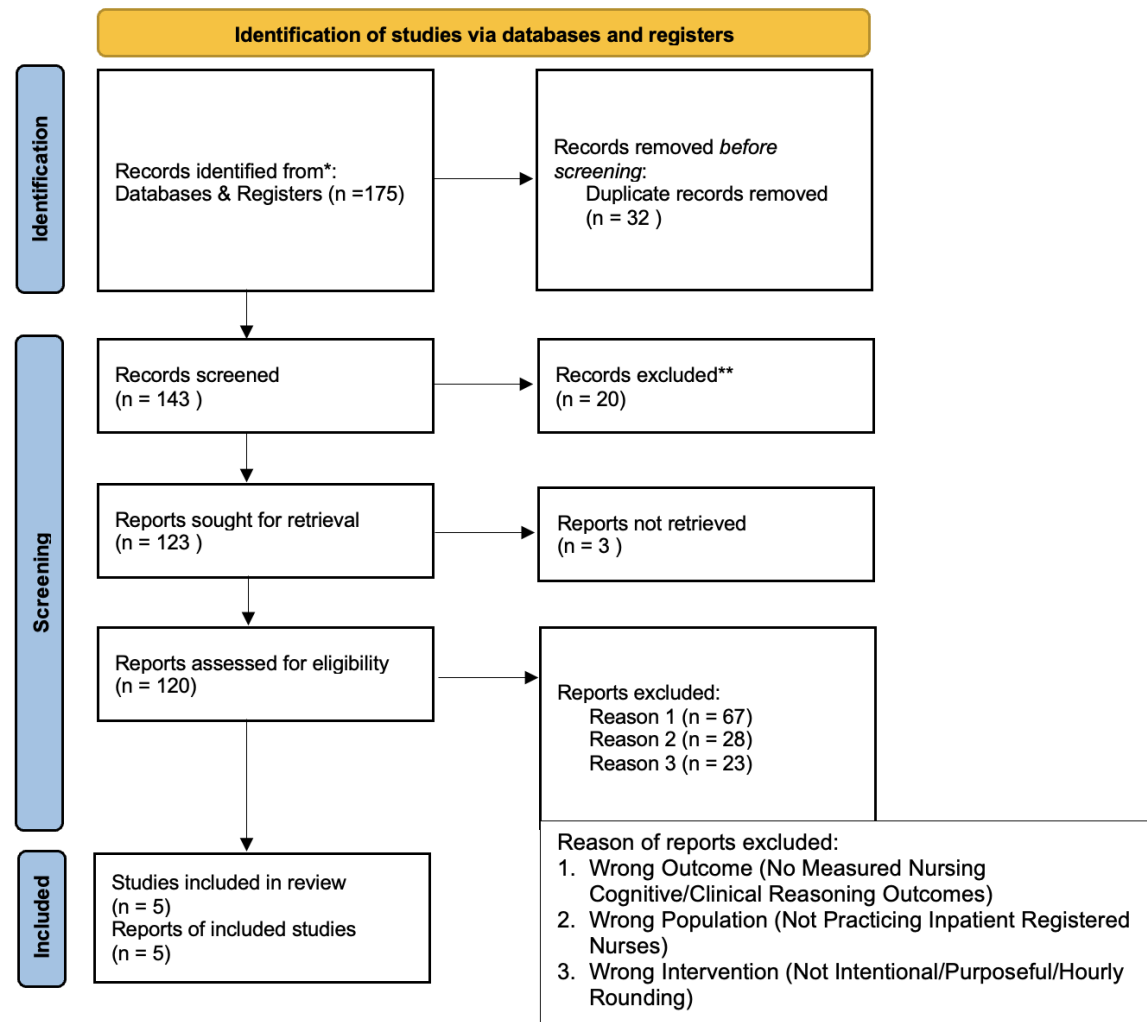


Figure 1. PRISMA 2020 flow diagram

Table 1. Characteristics of the Included Studies (N = 5)

Study (Author, Year, Country)	Study Design & Methodology	Sample & Setting	Rounding Intervention Details	Primary & Secondary Outcomes
Di Massimo et al. (2022) (<i>INTENTO Study Group</i>) Italy	Cluster-Randomized Controlled Trial (Cluster-RCT) Wards randomly assigned (1:1) to either Intentional Rounding (IR) or Standard of Care (SoC).	779 patients analyzed in the modified Intention-to-Treat (mITT) population (hospitalized 10 days) across 26 internal medicine wards.	Proactive rounds performed every 2 hours (24/7), alternating between registered nurses (RNs) and nursing assistants. Structured around the "4Ps" framework: Positioning, Personal needs, Pain (0-10 scale), and Possessions. Night rounds consisted of murnis	Primary: Cumulative incidence of patient falls and new pressure ulcers. Secondary: Number of bell calls, patient satisfaction, and nurses' critical thinking.

			visual checks.	safety	
Leamy et al. (2023) United Kingdom	Multi-Method Realist Evaluation Mixed-methods design comprising: 1) Realist synthesis theory development. 2) National survey of NHS Trusts. 3) Case studies.	108 stakeholder interviews (including 17 managers, 33 front-line nurses), shadowing of 39 ward nurses over 240 rounds (188 hours of direct observation) across 6 acute and older-person hospital wards.	Timed, bedside following a standardized rounding protocol (typically hourly).	planned checks a protocol documentation compliance, and clinical fidelity to the original Studer Group protocol.	Activation of 8 original realist mechanisms, protocol documentation compliance, and clinical fidelity to the original Studer Group protocol.
Randell et al. (2024) United Kingdom	Realist Review and Multi-Site Case Study Multi-method design including stakeholder theory testing via qualitative interviews, observations, and clinical record audits.	50 staff interviews, 31 patient/carer interviews, and 60 patient record reviews across 3 acute NHS Trusts (one orthopedic ward and one older person ward at each site).	Structured bedside safety checks and multifactorial falls risk assessments tailored to individual patient risk profiles.		Implementation contexts, ward-level facilitation (EHR documentation), shared multidisciplinary responsibility, leadership, and patient participation.
Gliner et al. (2022) United States	Secondary Database Regression Analysis Quantitative modeling using Poisson regression to assess the association between rounding frequency, patient experience, and safety outcomes.	Comprehensive inpatient billing, safety, and satisfaction datasets from 31 military medical treatment facilities (acute medical-surgical wards) evaluated over a 2-year period.	Structured bedside hourly nursing rounds paired with nurse-patient communication.		Rate of accidental patient falls per 1,000 patient days.
Daniels (2016) United States	Evidence-Based Practice Implementation Project Action-research implementation project utilizing the Joanna Briggs Institute (JBI) Practical Application of Clinical Evidence System (PACES) and Getting Research into Practice (GRiP) frameworks.	Practicing staff nurses and patients hospitalized in acute care medical-surgical units.	Implementation of "purposeful and timely nursing rounds" utilizing a structured bedside checking protocol.		Baseline and post-intervention compliance with evidence-based criteria, staff nurses' best-practice clinical knowledge, fall rates, and patient satisfaction scores.

Clinical Safety and Patient Outcomes

The quantitative evidence demonstrated that structured, proactive clinical rounding has a highly significant impact on reducing accidental patient falls. In the cluster-RCT by Di Massimo et al. (2022), patients assisted with intentional rounding (IR) had a statistically significant lower risk of falls compared to those receiving standard care, with a negative binomial model adjusted incidence rate ratio (IRR) of 0.14 (95% Confidence Interval [CI], 0.02–0.78; $p = 0.03$). On a larger scale, Gliner et al. (2022) associated the consistent execution of hourly nursing rounds with a greater than 21% reduction in patient fall rates across 31 military hospitals.

However, rounding did not yield a statistically significant effect on other clinical safety indicators. Di Massimo et al. (2022) reported no statistical differences in the occurrence of new pressure ulcers (adjusted IRR 1.00; 95% CI, 0.26–3.60; $p = 0.98$) or the composite endpoint of falls and pressure ulcers combined (adjusted IRR 0.50; 95% CI, 0.15–1.67; $p = 0.26$). This indicates that tissue-integrity outcomes are less sensitive to routine hourly presence than ambulatory outcomes like falls.

Regarding administrative and patient experience outcomes, Di Massimo et al. (2022) reported no statistically significant difference in the mean number of bell calls per patient between the IR group (15.4 ± 24.1) and the control group (13.7 ± 20.5 ; $p = 0.38$). However, patient satisfaction was consistently high in both groups. The average patient satisfaction score was 13.25 ± 1.72 (out of a maximum of 14) in the IR group and 12.17 ± 1.87 in the standard of care group ($p = 0.87$), which meant the margin for statistical improvement was limited.

In the realist evaluation by Leamy et al. (2023), while intentional rounding was associated with improved patient satisfaction and reassurance that basic care was being delivered, it was often difficult to observe as a discrete activity because nurses routinely completed rounding tasks alongside other clinical interventions.

Rounding Fidelity and Documentation Patterns

A major finding across the realist and implementation studies was the discrepancy between high rates of administrative documentation and low clinical fidelity to the intended rounding protocols. Leamy et al. (2023) observed that although 86% of intentional rounding interactions were documented in patient records, actual clinical fidelity to the original Studer Group protocol was generally low. The protocol requires proactive and structured assessment of pain, personal needs, position, and placement of personal items, commonly referred to as the 4Ps/5Ps. Similarly, Randell et al. (2024) corroborated this

finding through a multi-site case study, demonstrating that although falls risk assessments and rounding activities were consistently documented, substantial ward-level workload and time pressures frequently reduced these assessments to a routine “tick-box” exercise. In contrast, Daniels (2016), through a Joanna Briggs Institute (JBI) evidence-based practice implementation project, demonstrated that structured audit and feedback tools could successfully improve staff nurses’ compliance with rounding schedules and protocols. However, the findings also emphasized that ongoing education and reinforcement were necessary to sustain these improvements over time.

Impact of Rounding on Nursing Cognition and Communication

The included studies highlighted that the safety efficacy of rounding is heavily mediated by nurse's active cognition and communicative quality. Gliner et al. (2022) revealed that poorly rated nurse communication was linked with a staggering 8.6-fold increase in patient fall rates. This statistical association highlights that physical rounding without active, high-quality cognitive communication fails as a safety barrier. Furthermore, the implementation of structured rounding was found to influence nurse's decision-making environment. In the trial by Di Massimo et al. (2022), the researchers originally planned to evaluate the impact of intentional rounding on nurses' critical thinking and clinical decision-making using a validated questionnaire. However, the onset of the COVID-19 pandemic forced the premature closure of recruitment and prevented the evaluation of nurse critical thinking. The Steering Committee determined that the extremely complex, high-pressure professional conditions during the pandemic would unacceptably compromise the reliability of any survey-based cognitive results.

DISCUSSION

The "Tick-Box" Dilemma: Compliance versus Autonomous Clinical Reasoning

The synthesis of the primary evidence highlights a fundamental, systemic tension in acute care nursing: the conflict between administrative-driven "tick-box" compliance and active bedside clinical reasoning. When intentional rounding is mandated as a rigid, highly standardized checklist, it runs the risk of suppressing nurse's cognitive autonomy. As documented by the realist evaluation of Leamy et al. (2023), there was widespread ambivalence and concern among frontline staff that intentional rounding oversimplifies nursing expertise. By imposing a rigid, transactional protocol, organizations privilege a prescriptive, standardized approach over relational, responsive, and individualized nursing care.

Under acute time and workload pressures, nurse frequently engage in defensive charting practices, where completing the electronic health record (EHR) audit trail to demonstrate risk management takes precedence over deep clinical thinking and patient engagement. This is highly consistent with the findings of Randell et al. (2024), who noted that while assessments were consistently documented, workload pressures reduced the rounding protocol to a tick-box exercise. This defensive posture shifts the nurse's role from proactive clinical surveillance to bureaucratic compliance, undermining the very essence of "intentional" rounding.

Rounding as Cognitive Scaffolding for Bedside Surveillance

To prevent rounding from degenerating into a low-value, repetitive ritual, healthcare organizations must reframe these protocols as "cognitive scaffolding" rather than rigid bureaucratic mandates. In complex, chaotic acute care environments, nurses – especially novice clinicians – are highly vulnerable to cognitive overload, which directly compromises their situational awareness and risk recognition.

A structured rounding framework (addressing pain, potty, position, and possessions) acts as an externalized cognitive aid that reduces cognitive load, helping nurse organize their bedside observations systematically.

The JBI implementation project by Daniels (2016) demonstrated that when rounding is paired with targeted education that explains the clinical rationale behind each check, it successfully improves nurse's best practice knowledge.

Furthermore, Gliner et al. (2022) proved that rounding only succeeds in reducing falls when accompanied by high-quality communication, showing that poorly rated communication increases fall risks 8.6-fold. This confirms that rounding must not be treated as a passive physical task, but as an interactive, cognitively active clinical assessment.

Organizational Facilitators and Multidisciplinary Collaboration

For clinical reasoning to be successfully integrated into bedside rounding, hospital policies must address organizational barriers that constrain nurses' cognitive capacity and limit their ability to provide individualized patient care. Randell et al. (2024) identified several important organizational limitations in acute care settings. First, the lack of shared responsibility for patient safety and supervision placed a disproportionate burden on nursing staff, substantially limiting the time available for nurses to explain falls risks to patients and conduct thorough clinical assessments and reasoning. Second, a disconnect between frontline resources and decision-making authority was identified; although wards had designated "falls link practitioners," the authority to allocate safety resources remained with senior nursing managers, thereby limiting rapid action at the frontline. Addressing

these barriers requires healthcare organizations to reform electronic health record (EHR) templates to reduce documentation burden and minimize unnecessary “safety clutter.” Furthermore, patient safety should be reframed as a shared multidisciplinary responsibility rather than solely a nursing task. Such an organizational approach may reduce workload pressures and create greater capacity for nurses to apply professional clinical judgment, engage in meaningful patient communication, and conduct comprehensive clinical reasoning during bedside rounding.

Limitations of the Evidence

Several methodological limitations of the evidence must be noted within this systematic review. First, significant methodological heterogeneity exists among the included studies, which span a wide range of designs—including a cluster-randomized controlled trial, multi-center realist evaluations, and secondary database regressions—thereby precluding a quantitative meta-analysis. Second, there is a distinct lack of direct, validated quantitative measures evaluating practicing nurses' clinical reasoning or critical thinking specifically during the execution of rounding protocols. Most notably, in the nation-based trial by Di Massimo et al. (2022), the planned evaluation of nurses' critical thinking following the implementation of intentional rounding could not be completed. This was due to the extreme clinical disruptions and emergencies of the pandemic state, representing a significant missed opportunity in the highest-quality experimental literature to date.

Implications for Practice, Policy, and Future Research

These findings have direct implications for practice, policy, and future research. First, hospitals should transition from commercial, highly rigid rounding models to clinical-reasoning-embedded rounding, wherein nurses are empowered with the clinical autonomy to adjust the frequency and focus of checks based on the patient's dynamic risk profile. Second, quality management policies should move away from merely tracking documentation completion rates, which often reduce assessments to a low-value “tick-box” exercise under severe workload pressures. Instead, clinical audits should focus on qualitative indicators, such as the quality of nurse-patient communication and risk-identification patterns. Finally, healthcare institutions must pursue EHR and documentation reform to streamline digital rounding flowsheets, reducing the excessive administrative burden and preventing cognitive fatigue among frontline nurses.

Recommendations for Future Research

Consequently, there is an urgent need for rigorous, prospective empirical studies that explicitly measure nurses' cognitive outcomes. Future research should aim to complete the

work disrupted by the pandemic by utilizing validated scales, such as the Clinical Decision Making in Nursing Scale (CDMNS) or situational awareness metrics, to evaluate nurses' decision-making before and after rounding implementations. Furthermore, researchers must investigate how advanced digital clinical decision support systems can be integrated into rounding protocols to support nurses' bedside surveillance without increasing administrative clutter or safety clutter. Lastly, future studies should examine how structured rounding can be effectively utilized as developmental scaffolding within transition-to-practice and onboarding programs for newly graduated registered nurses.

CONCLUSION

This systematic review provides a rigorous synthesis of the clinical, process, and cognitive outcomes of structured bedside rounding in acute care settings, demonstrating both the clear clinical benefits of proactive patient surveillance and the severe administrative challenges that threaten its long-term viability. The high-grade quantitative evidence included in this review confirms that when implemented consistently, intentional and hourly rounding significantly mitigates ambulatory patient risks, driving down accidental fall rates by over 21% in large-scale database models and up to 86% in multi-center clinical trials. However, these clinical safety outcomes do not extend to more complex, tissue-integrity issues such as pressure ulcers. This underscores a vital boundary in nursing practice: routine, scheduled bedside visits are highly effective for anticipating and meeting basic mobility and proximity needs, but they cannot replace highly individualized, specialized clinical interventions for multi-system patient complications.

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