

# WARD ROUND MODELS

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## QUESTION

Models for modern ward rounds. Considering structure, innovation, people and technology.

## SEARCH LIMITS

English-language, last 5 years.

## SEARCH METHODOLOGY

A systematic search was conducted for literature and results were screened using [Covidence](#). See the Appendix for the PRISMA chart, search terms, and Medline search strategy.

## DATABASES SEARCHED

- Medline – index of peer reviewed articles across health sciences and medicine.
- Embase – index of biomed and pharmacological peer reviewed journal articles.
- Emcare – index of nursing, allied health, critical-care medicine and more.
- Grey literature – Google, Google Scholar, Trip database, Biomed Central Proceedings.

## LITERATURE RESULTS

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## GENERAL RESOURCES

### ONLINE RESOURCES (GREY LITERATURE)

Royal College of Physicians & Royal College of Nursing. (2021). **Modern ward rounds: Good practice for multidisciplinary inpatient review.** [Web link](#)

- Ward rounds are the focal point for a hospital's multidisciplinary teams to undertake assessments and care planning with their patients. Coordination of assessments, plans and communication is essential for effective and efficient care

The Economist. (2020). **Case study: Virtual hospital ward rounds.** [Web link](#)

- Virtual rounding allows a broader range of specialists and support staff to consult on patient care remotely. The technology also allows families to dial in to rounds remotely, helping them to improve their understanding of a relative's condition and see them in cases where face-to-face visits are not possible.

NICE. (2018). Chapter 28 Structured ward rounds. [Web link](#).

- Ward rounds are common practice in hospitals across the UK, but they vary in their method, membership and execution. The guideline committee wanted to find out if one method was more effective than others, or if their use has more impact on one patient population over another.

Royal College of Physicians. (2015). **Acute care toolkit 4: Delivering a 12-hour, 7-day consultant presence on the acute medical unit.** [Web link](#)

- Evidence that patients admitted at weekends have poorer outcomes than those admitted on weekdays, and that patient mortality is higher at weekends, led to the Royal College of Physicians and the Society of Acute Medicine (SAM) recommending that a consultant physician – dedicated to the care of acutely ill patients – should be available on site to review patients for at least 12 hours a day, every day.

Academy of Medical Royal Colleges. (2012). **Seven day consultant present care.** [Web link](#)

- The Academy of Medical Royal Colleges has developed three patient-centred standards to deliver consistent inpatient care irrespective of the day of the week. These standards reflect the importance of daily consultant review, and the consequent actions, to ensure progression of the patient’s care pathway.

## PEER-REVIEWED LITERATURE - IN REVERSE CHRONOLOGICAL ORDER

Articles are grouped by theme:

- Virtual Rounds
- Hybrid Approaches
- Timing & Frequency
- EMR Driven Innovations
- eTools, Apps & Ai
- Structured Interdisciplinary Beside Rounding (SIBR)
- Interprofessional Collaboration
- Cross Specialty Rounds
- Family Centred Rounds
- Leadership

*Each article summary contains excerpts from the abstract and an online link.*

## VIRTUAL ROUNDS

Everhart, et al. (2023). **Tele-critical care pharmacist interventions during virtual rounds at a small urban hospital.** *Critical Care Medicine*, 51(1 Supplement), 134. [Article link](#)

As recommended by the 2020 position paper on critical care pharmacy services, telemedicine is an option for providing comprehensive medication management if bedside pharmacists are not available. As demonstrated, TCC pharmacists participating in virtual rounds provided comprehensive medication management and influenced medication therapy. Future directions include presentation to pharmacy and critical care leadership to support clinical pharmacist practitioner status and additional TCC pharmacists.

Boland & Dratcu. (2022). **COVID-19 and the emergence of inpatient tele-ward rounds.** *European Psychiatry*, 65(Supplement 1), S170. [Article link](#)

Within psychiatry, there has been a surge of research and guidelines into the use of video-teleconferencing to replace face to face consultations across clinical settings. Clinical ward

rounds are central to inpatient psychiatric care yet little guidance is available on how best to integrate telemedicine into the multidisciplinary work of inpatient psychiatry. The routine use of newer technology in psychiatry ward rounds is unlikely to succeed on the basis of improvisation, particularly given the stream of technical innovations in telemedicine, and the multifarious quality of social interactions in our clinical setting. Staff training and the development of an adapted etiquette and code of communication are both essential. Patient participation in future developments will also help ensure tele-ward rounds continue to meet the standards of high quality inpatient psychiatric care beyond the COVID-19 pandemic.

Wells, et al. (2022). **Successful implementation of round-the-clock care in a virtual ward during the COVID-19 pandemic.** British Journal of Nursing. 31(20):1040-1044, 2022 Nov 10. [Web link](#)  
The COVID-19 pandemic led to unprecedented demand on NHS infrastructure. Virtual wards (VW) were created in response, using technology to monitor patients remotely. Their implementation required new systems of staffing, escalation, risk management and information governance. The Norfolk and Norwich University Hospitals Foundation Trust offered an example of a highly successful VW. It cared for 852 patients in its first year of operation, providing 24/7 nursing cover, supported by pharmacists and junior doctors, daily consultant-led ward rounds and virtual visits. The remote care platform collected continuous vital sign observations and generated custom alarms. The care team triaged, then escalated to nurse-specialists or consultants as required. Patients reported increased confidence and relief at earlier discharge. Challenges included developing awareness of the new service, overcoming concerns around increased workload and transitioning from emergency to long-term funding.

Samide, et al (2022). **Feasibility and Acceptability of Virtual Rounds on an Academic Inpatient Pediatric Unit.** Hospital pediatrics, 12(12), 1081-1090. [Web link](#)  
Virtual rounds enable remote participation in bedside clinical encounters. Their effects on education remain poorly characterized and limited by lack of foundational evidence establishing that this approach is welcomed among learners and educators. We assessed technical feasibility and acceptability of incorporating video conferencing into daily work rounds of pediatric residents and attending physicians. We found that virtual participation in rounds was technically feasible and maintained educational value and engagement for residents in the majority of encounters, without sacrificing efficiency. Even as restrictions from the coronavirus disease 2019 pandemic are lifted, this rounding model has many important applications, including increasing educational opportunities for remote learners and making multidisciplinary rounds more accessible.

Becker, et al. (2021). **Virtual Team Rounding: A Cross-Specialty Inpatient Care Staffing Program to Manage COVID-19 Surges.** Academic medicine : journal of the Association of American Medical Colleges, 96(12), 1717-1721. [Article link](#)  
In March 2020, as the COVID-19 surge began, an interdisciplinary group of administrators, providers, and trainees at Brigham and Women's Hospital created an inpatient virtual staffing model called the Virtual Team Rounding Program (VTRP). The VTRP trained and deployed a diverse set of providers across specialties as "virtual rounders" to support inpatient teams by joining and participating in rounds via videoconference and completing documentation tasks during and after rounds. VTRP leadership collaboratively and iteratively developed best practices for challenges encountered during implementation. Virtual rounding provides a valuable extension of inpatient teams to manage COVID-19 surges. Future work will quantitatively and qualitatively assess the impact of the VTRP on inpatient provider satisfaction and well-being, virtual rounders' experiences, and patient care outcomes.

## HYBRID APPROACHES

Gross, et al. (2022) **Perception of physicians and nursing staff members regarding outside versus bedside ward rounds: Ancillary analysis of the randomised BEDSIDE-OUTSIDE trial.** Swiss Medical Weekly. 152(3-4) (no pagination), Article Number: w30112. 17 Jan 2022. [Article link](#)  
Within this ancillary project of a large multicentre randomised controlled trial, we prospectively conducted a survey of medical and nursing staff members participating in the weekly consultant ward rounds in the internal medicine division of three Swiss teaching hospitals between July 2017 and October 2019. Participants were asked about their preferences on outside versus bedside ward rounds. While bedside ward rounds are considered more patient centred and are preferred by the nursing staff, physicians prefer outside the room presentation of patients during ward rounds because of the perceived better discussion of sensitive topics, better time management and less staff discomfort.

Bavare, et al (2021). **Virtual Communication Embedded Bedside ICU Rounds: A Hybrid Rounds Practice Adapted to the Coronavirus Pandemic.** Pediatric critical care medicine, 22(8), e427-e436. [Article link](#)

We examined how hybrid rounds with virtual communication added to in-person rounds could facilitate social distancing while maintaining patient-centered care. Following a needs assessment survey and pilot trials, multiple technological solutions were implemented in a series of plan-do-study-act cycles. Hybrid rounds model was deployed where a videoconference platform was used to establish communication between the bedside personnel (nurse, patient/family, and partial ICU team) with remotely located remaining ICU team, ancillary, and consultant providers. Hybrid rounds employed during pandemic facilitated social distancing while retaining patient-centered multidisciplinary ICU rounds but compromised teaching during rounds. A change to ingrained rounding habits needs team commitment and ongoing optimization. The hybrid rounds model has potential for generalizability to other settings.

Schmidt, et al. (2019). **Bridging the barriers for better team-based patient care by incorporating nicu radiology tele-rounds.** Pediatric Radiology, 49(Supplement 1), S77. [Article link](#)

Pediatric radiologists have provided valuable daily on-site consultation for two separate neonatal intensive care units (NICU), located at the university hospital (UH) and the public county hospital. This historically required travel to three separate physical locations throughout the day. While the pediatric radiology department's goal was to maintain the high level of service, availability, and communication with the neonatology team, concerns regarding time and movement energy waste due to travel threatened to make this untenable. A reliable process for conducting patient care rounds with participants physically located in different institutions across the medical campus was established using a web-based teleconferencing tool. We demonstrated the ability to provide a similar level of quality of communication, ability to entertain dialogue regarding exams, and timeliness of rounds and a significant increase in satisfaction after implementation across all metrics.

## TIMING & FREQUENCY

Kher, et al (2021). **Late-afternoon communication and patient planning (CAPP) rounds: an intervention to allow early patient discharges.** Hospital practice (1995), 49(1), 56-61. [Web link](#)  
Measure effect of late-afternoon communication and patient planning (CAPP) rounds to increase early electronic discharge orders (EDO). We implemented late-afternoon CAPP rounds to identify patients who could have morning discharge the subsequent day. This is a before-after study of a quality improvement intervention. Primary measures of intervention effectiveness were percentage of patients who received EDO by 11 am and patients discharged by noon. Additional measure of

effectiveness were percent of patients admitted to the correct ward, emergency department (ED)-to-ward transfer time compared between intervention and nonintervention periods. **CONCLUSION:** Afternoon CAPP rounds to identify early patient discharges the following day led to increase in EDO entered by 11 am and discharges by noon without an adverse change in readmission rates and LOS.

Terao, et al. (2021). **Tuck-In Rounds: A Standardized Evening Rounding Process to Improve Communication and Care Coordination.** *Pediatric Blood and Cancer*, 68(SUPPL 5). [Article link](#)

At our institution, the cross covering medical teams and nurses routinely participate in night rounds. Prior to this effort, the content and structure of these rounds were not standardized and has led to lack of awareness of contingency plans, multiple follow-up conversations, and preventable errors. Our team sought to improve the quality of overnight patient care by targeting nurse to provider communication processes. The specific aim was to increase contingency plan discussion during night rounds from 20% to 80% in 1 year without increasing average time spent. Using QI methodologies, we successfully increased contingency plan discussion during night rounds without increasing time spent per patient. The revised process sets an expectation for the night shift: developing a clear plan for detecting and responding to patient deterioration. Further efforts are on-going to incorporate this standardized rounding process to new employee orientation.

Deighton, et al. (2021). **Investigating consultant-led virtual review as a model for implementing 7-day cardiology services in UK clinical practice.** *Future Healthcare Journal*. 8(3):e666-e670, 2021 Nov. [Article link](#)

Disparities between weekend and weekday care, termed 'the weekend effect', have led to a UK government pledge to provide 7-day services. Despite this, poor outcomes have led to criticism of the programme. This study consequently sought to evaluate consultant-led virtual review as a model for 7-day cardiology services. Over 4 weekends, cardiology patients underwent virtual review alongside in-person teams. Outcomes included length of stay, same-day discharge and 30-day mortality rates, as well as duration of ward rounds and change in patient management. By demonstrating comparable outcomes compared with conventional review, as well as high acceptability, this study identified virtual review as an effective substitute for in-person care.

McCarthy, et al. (2020). **Increasing consultant weekend presence within general medicine (Medical Units) leads to improved patient care and increased savings.** *Internal Medicine Journal*. RACGP Congress, 2020. Melbourne, VIC Australia. 50(Supplement 1) (pp 28-29). [Article link](#)

A few small studies worldwide showed a range of benefits from increased consultant presence and/or ward rounds on medical wards, compared to traditional methods with occasional consultant presence. Most show reduced length of stay, leading to reduced risk of hospital-acquired infection and VTE, as well as reduced hospital costs. Some also showed reduced mortality and/or readmission rates. We aimed to show that increased consultant presence on weekend days during the 2019 Winter led to improved patient outcomes, improved efficiency and reduced costs. Study findings confirm that increasing consultant presence over the weekends creates monetary savings for the health system, as well as improved management of patients reducing the need for MET calls. There were also increased Monday and overall discharges within the department.

Brosinski et al. (2020). **Incorporating Hourly Rounding to Increase Emergency Department Patient Satisfaction: A Quality Improvement Approach.** *Journal of emergency nursing*, 46(4), 511-517. [Article link](#)

A process improvement initiative involving hourly rounding was implemented to improve low patient satisfaction scores. During the intervention phases, self-reported hourly rounding was tracked on a daily basis. Compliance with rounding and patient satisfaction results were provided to staff during unit meetings and were displayed on a visual tracker board. Three variables were measured using a 5-point Likert scale: overall patient satisfaction, patient perception of staff

attitude, and whether the health care team answered all patient questions/concerns. There is a positive relationship between hourly rounding and patient satisfaction scores. Despite low compliance with hourly rounding, patient satisfaction increased for all 3 variables measured. To achieve a change in culture with hourly rounding compliance, nurse managers must consistently monitor staff compliance with hourly rounding.

Weber, et al. (2018). **Dedicated Afternoon Rounds for ICU Patients' Families and Family Satisfaction With Care**. *Critical care medicine*, 46(4), 602-611. [Article link](#)

It was hypothesized that adding dedicated afternoon rounds for patients' families to supplement standard family support would improve overall family satisfaction with care in a neuroscience ICU. The on-service attending intensivist and a neuroscience ICU nursing leader made bedside visits to families to address concerns during regularly scheduled, advertised times two afternoons each week. Dedicated afternoon rounds for families twice a week may not necessarily improve an ICU's overall family satisfaction. Increased dissatisfaction among families who do not or cannot participate is possible.

## EMR DRIVEN INNOVATIONS

Levin, et al. (2021). **Machine-learning-based hospital discharge predictions can support multidisciplinary rounds and decrease hospital length-of-stay**. *BMJ Innovations*, 7(2), 414-421.

[Article link](#)

The study objective was to support discharge-focused rounds by implementing a machine-learning-based discharge prediction model using real-time electronic health record (EHR) data. We aimed to evaluate model predictive performance and impact on hospital length-of-stay. Discharge prediction models were developed from hospitalised patients on four inpatient units. Unit-specific models were implemented to make individual patient predictions viewable with the EHR patient track board. Predictive performance was measured prospectively for 12 470 patients across all units. A pre/poststudy design applying interrupted time series methods was used to assess the impact of the discharge prediction model on hospital length-of-stay. Incorporating automated patient discharge predictions into multidisciplinary rounds can support decreases in hospital length-of-stay. Variation in execution and impact across inpatient units existed.

Gunter, et al. (2019). **Development and Testing of an Electronic Multidisciplinary Rounding Tool**. *AACN advanced critical care*, 30(3), 222-229. [Article link](#)

Patients hospitalized with neurologic and medical issues in the neuroscience critical care unit have widely varying and complex disease states that can change rapidly. The large amount of data that must be reviewed regularly by medical staff members presents a challenge to the provision of high-quality care to these patients. In an effort to lessen the burden, the authors' team implemented an electronic multidisciplinary rounding tool, which facilitates team communication by allowing accurate and concise review of patient information. The rounding tool is incorporated into the EHR as an aid to the rounding process. Nurses have reported that the tool provides a comprehensive summary of the patient's hospital stay that facilitates handoff during shift changes. A survey of nursing staff members demonstrated high levels of satisfaction with the tool during both multidisciplinary rounds and handoffs.

Chivu, et al. (2018). **Virtual multidisciplinary rounds: An electronic medical record-based discharge communication tool**. *Journal of Hospital Medicine*, 13(4 Supplement 1). [Web link](#)

Despite efforts to coordinate care around a single brief daily meeting, multiple aspects of the patient's care can change throughout the day. Current tools to help streamline communication among care team members do not fit the asynchronous reality of the real-time process. The aim of this project is to create a discharge checklist within the EMR to facilitate near real-time

updates in communication between a multidisciplinary care team, streamlining the discharge process, and ultimately decreasing unnecessary hospital days. A project team of clinicians, informatics experts, data analysts, and hospital leadership was assembled to create the initial checklist tool and determine how it could be incorporated into the EMR. Implementation was supported with informational sessions targeted at providers, social workers, and case managers, which identified the particular fields each team member is responsible for completing. The complicated process of safe and timely hospital discharge can be improved by an EMR embedded discharge communication checklist that allows for real-time updates by all care team members.

## ETOOOLS, APPS AND AI

De Bie, et al. (2021). **Intelligent checklists improve checklist compliance in the intensive care unit: a prospective before-and-after mixed-method study.** British journal of anaesthesia, 126(2), 404-414. [Article link](#)

We examined whether a context and process-sensitive 'intelligent' checklist increases compliance with best practice compared with a paper checklist during intensive care ward rounds. We conducted a single-centre prospective before-and-after mixed-method trial in a 35 bed medical and surgical ICU. Daily ICU ward rounds were observed during two periods of 8 weeks. The primary outcome was compliance with best clinical practice, measured as the percentages of checked items and unchecked critical items. The digital checklist improved compliance with best clinical practice, compared with a paper checklist, during ward rounds on a mixed ICU.

Tocci, et al. (2019). **The effect of an electronic decision support quality tool on intensive care unit rounds.** Critical Care Medicine, 47(1 Supplement 1). [Article link](#)

Many intensive care units (ICUs) use checklists during rounds to ensure evidence-based care is provided to all patients. We developed an electronic decision-support tool that presents clinicians with quality measures individualized for each patient (Patient Specific Checklist, or PSC). We hypothesized that replacing a paper-based checklist with PSC would decrease overall time spent on daily ICU rounds, while increasing the time spent on patient care plan discussions. The electronic Patient Specific checklist did not impact overall rounding time and decreased time spent discussing the care plan on daily ICU rounds, but did increase productive discussions regarding quality measures and nurse participation.

Keller, et al. (2018). **Patient safety ward round checklist via an electronic app: implications for harm prevention.** Irish journal of medical science, 187(3), 553-559. [Article link](#)

The aim of this research was twofold, to establish a baseline for patient safety practices on routine ward rounds and to test the feasibility of implementing an electronic patient safety checklist application. Two research teams were formed; one auditing a medical team to establish a procedural baseline of "usual care" practice and an intervention team concurrently was enforcing the implementation of the checklist. The checklist was comprised of eight standard clinical practice items. A baseline audit of the program demonstrated significant practice bias on daily ward rounds which tended to omit several key-proven patient safety practices such as prompting hand decontamination and obtaining up to date reports from nursing staff. Results of the intervention arm demonstrate the feasibility of using the Checklist App on daily ward rounds.

Meo, et al. (2018). **Introducing an electronic tracking tool into daily multidisciplinary discharge rounds on a medicine service: a quality improvement project to reduce length of stay.** BMJ open quality, 7(3), e000174. [Article link](#)

This project aimed to standardise the daily discharge rounds occurring on a medicine service to reduce length of stay. Participants included physicians, nurses and social workers. An electronic

tool was developed which highlighted critical information to be captured during discharge rounds on each current inpatient in a standardised fashion. Information was reviewed and solicited from care teams by a facilitator, then edited and displayed in real time to all team members by a scribe. The electronic tool to standardise information gathered among team members in daily discharge rounds led to improvements in length of stay. Multidisciplinary discharge rounds are an important venue for discharge planning across inpatient care teams and efforts to optimise communication between team members can improve care.

Croghan, et al. (2018). **Robot Assisted Surgical Ward Rounds: Virtually Always There.** Journal of Innovation in Health Informatics. 25(1):982, 2018 May 02. [Article link](#)

Use of telepresence allowing off-site clinicians communicate with patients has been largely restricted to outpatient settings or use of complex, expensive, static devices. We designed a prospective study to ascertain feasibility and face validity of a remotely controlled mobile audiovisual drone (LUCY) to access inpatients. This device is, uniquely, lightweight, freely mobile and emulates 'human' interaction by swiveling and adjusting height to patients' eye-level. Robot-assisted ward rounds(RASWR) were conducted over 3 months. A remotely located consultant surgeon communicated with patients/bedside teams via encrypted audiovisual telepresence robot. RASWRs receive high levels of patient and staff acceptance, and offer a valid alternative to conventional ward rounds when a consultant cannot be physically present.

## STRUCTURED INTERDISCIPLINARY BEDSIDE ROUNDING

Redley, et al. (2020). **Mixed methods quality evaluation of structured interprofessional medical ward rounds.** Internal medicine journal, 50(2), 222-231. [Article link](#)

We evaluate interdisciplinary ward rounds using a Structured Interdisciplinary Bedside Rounding (SIBR) intervention. Participants were clinicians (medicine, nursing and allied health) working in two general medicine wards at a tertiary hospital in Melbourne, Australia. Interdisciplinary participation and frequency of desired clinician behaviours increased, and variability in duration of time per patient decreased, on the SIBR rounds. Qualitative survey and focus group data indicated many positive views. The overall recommendation by staff was that SIBR should continue. The results provide insights into the adoption of SIBR behaviours and illustrated diffusion of behaviours across wards.

Chow, et al. (2019). **Structured Interdisciplinary Bedside Rounds in an Australian tertiary hospital emergency department: Patient satisfaction and staff perspectives.** Emergency medicine Australasia : EMA, 31(3), 347-354. [Article link](#)

OBJECTIVES: To compare patient satisfaction levels, staff perspectives and the time required using Structured Interdisciplinary Bedside Rounds (SIBR; Emory University, Atlanta, GA, USA) versus traditional medical ward rounds (TR) in the ED., METHODS: We conducted an observational cross-sectional study. Ward rounds were categorised into a modified SIBR and TR at a tertiary ED in Australia according to predefined criteria. We compared the duration of ward rounds, invited patients and staff to complete anonymous questionnaires to compare patient satisfaction and staff perspectives. Our study highlights the benefits that could be gained through SIBR technique over the TR method. Better workforce and resource planning is needed to support the sustainable implementation of SIBR in ED.

Cao, et al. (2018). **Patient-Centered Structured Interdisciplinary Bedside Rounds in the Medical ICU.** Critical care medicine, 46(1), 85-92. [Article link](#)

We examined the effects of introducing patient-centered structured interdisciplinary bedside rounds in the medical ICU with respect to rounding efficiency, provider satisfaction, and patient/family satisfaction. The patients and healthcare providers were arbitrarily assigned to



either the patient-centered structured interdisciplinary bedside rounds or nonstructured interdisciplinary bedside round care team. Healthcare providers on the patient-centered structured interdisciplinary bedside rounds team were educated about their respective roles and the information they were expected to discuss on rounds each day. We found that patient-centered structured interdisciplinary bedside rounds provide a venue for increased rounding efficiency, provider satisfaction, and consistent teaching, without impacting patient/family perception.

Schwartz, et al. (2018). **Structured interdisciplinary bedside rounds improve the quality of inter-professional communication on an inpatient general medicine teaching unit.** *Journal of General Internal Medicine*, 33(2 Supplement 1), 348. [Web link](#)

Effective interprofessional communication (IPC) has been shown to influence job satisfaction and patient safety in the inpatient setting. Structured Interdisciplinary Bedside Rounds (SIBR), a brief, standardized team-based approach to discuss inpatient and discharge plans along with a patient safety checklist, is a means of operationalizing IPC in a patient-centered manner. Our objective was to evaluate SIBR's impact on IPC among both physicians and nurses. In this study, SIBR had a significant positive effect on the perceived quality of IPC reported by nurses and physicians. SIBR did not significantly affect nurses' familiarity their patients' care plan, nor relationships between members of the interprofessional team. While SIBR appears to be a promising strategy to improve IPC, future work should examine the impact of SIBR on clinical outcomes, including length of stay, and patient satisfaction.

## INTERPROFESSIONAL COLLABORATION

Heip, et al. (2022). **The Effects of Interdisciplinary Bedside Rounds on Patient Centeredness, Quality of Care, and Team Collaboration: A Systematic Review.** *Journal of patient safety*, 18(1), e40-e44. [Article link](#)

The aim of the study was to explore available evidence on the effects of interdisciplinary bedside rounds (IBRs) on patient centeredness, quality of care and team collaboration; the feasibility of IBRs; and the differences in definitions. Interdisciplinary bedside round has potentially a positive influence on patient centeredness, quality of care, and team collaboration, but because of a substantial variability in definitions, design, outcomes, reporting, and a low quality of evidence, definitive results stay uncertain. Perceived barriers to use IBR are time constraints, lack of shared goals, varied responsibilities of different providers, hierarchy, and coordination challenges. Future research should primarily focus on conceptualizing IBRs, in specific the involvement of patients, before more empiric, multicentered, and longitudinal research is conducted.

Real, et al. (2020). **Patient Perceptions and Real-Time Observations of Bedside Rounding Team Communication: The Interprofessional Teamwork Innovation Model (ITIM).** *Joint Commission journal on quality and patient safety*, 46(7), 400-409. [Web link](#)

Interdisciplinary rounds are designed to address barriers to teamwork, communication, and quality patient care. This study used multiple methods (observations, patient surveys) in two hospital sites to examine communication and teamwork in the Interprofessional Teamwork Innovation Model (ITIM). This multimethod study illustrates the value of system-level approaches to structured patient-centered team care delivery and understanding the complexity of communication in team-based patient care. Findings suggest that when patients feel they are given opportunities to ask questions, speak without being interrupted, and have their questions answered, they tend to be satisfied with their experience of care. Health care leaders may consider ITIM to advance their mission of improving patient experiences and quality of bedside care.

Neely, et al. (2018). **Toc rounds: The right recipe for reducing length of stay.** Journal of Hospital Medicine, 13(4 Supplement 1). [Web link](#)

UAB Hospital implemented a version of interprofessional rounds called transition of care (ToC) rounds on all hospitalist units. ToC rounds clearly defines member roles with the overarching goal to ensure all care providers understand the "plan for the day and the plan for the stay". We aimed to evaluate the potential impact of our distinct ToC round on LOS. ToC rounds includes hospitalists, bedside nurses, unit leaders, care transitions staff (case managers/social workers), with rehabilitation therapists and pharmacists attending most days. Each provider was trained in team goals, member roles, rounds structure/scripting, use of estimated date of discharge for proactive planning, use of whiteboards for communicating goals and discharge date to patients, and processes for addressing barriers to care progression. Implementing daily ToC rounds with clearly defined member roles and team goals is feasible and improves care efficiency as measured by hospital LOS and patient satisfaction on discharge information.

## CROSS SPECIALTY

Goldman-Yassen, et al (2021). **Face-to-Face: Resident-led Radiology Medicine Rounds Facilitate Evidence-based Processes for Clinical Decision Support.** Current problems in diagnostic radiology, 50(5), 580-584. [Article link](#)

The transition toward value-based payment models increases focus on the radiologist's direct impact on hospital-provided patient care. Radiology trainees understand inpatient hospital workflows and decision-making paradigms and are well positioned to interface directly with hospital physicians regarding clinical decision making related to diagnostic imaging and/or image guided interventions. A radiology resident-led project with internal medicine residents focused on Clinical Decision Support was designed, implemented, and reviewed, with the objectives of educating clinical teams and positively impacting patient care. The Radiology resident-led educational medicine rounds promote cross-specialty collaboration, further educate trainees, and directly affect patient management. It is therefore valuable for radiology trainees to directly engage in the teaching of other medical providers, to enhance their own consultative skill set, promote face-to-face interactions with other physicians, and to directly impact patient care.

Patel, et al. (2020) **Pharmacist contributions to consultant-led post-take ward rounds: a service evaluation.** Pharmaceutical Journal. 305(7942) (no pagination). [Article link](#)

Post-take ward rounds (PTWRs) are important components of daily hospital activity, where the multidisciplinary team (MDT) assess patients admitted during the preceding 24 hours and decide whether to initiate treatment, transfer them to an appropriate ward or discharge them. At Imperial College Healthcare NHS Trust (ICHNT), pharmacists participate in the PTWR and make clinical recommendations and interventions on medicine-related issues, detect and prevent medication errors, undertake medicines optimisation, carry out medicines reconciliation and ensure medicine supply. This service evaluation found that pharmacists' contributions on PTWRs at ICHNT are highly valued, with interventions leading to a reduction in prescribing errors and potential for harm. Future work aims to carry out prospective data collection with the use of an observer, to help eliminate reporter bias.

## FAMILY CENTRED ROUNDS

Knighton, et al. (2022). **Intervention, individual, and contextual determinants to high adherence to structured family-centered rounds: a national multi-site mixed methods study.**

Implementation science communications, 3(1), 74. [Article link](#)

Family-centered rounds (FCR) can serve a critical role in interprofessional and patient-family communication. Despite widespread support, FCRs are not utilized consistently in many

institutions. Structured FCR approaches may prove beneficial in increasing FCR use but should address organizational challenges. The purpose of this study was to identify intervention, individual, and contextual determinants of high adherence to common elements of structured FCR in pediatric inpatient units during the implementation phase of a large multi-site study implementing a structured FCR approach. Studies during implementation to identify determinants to high adherence can provide generalizable knowledge regarding implementation determinants that may be difficult to predict prior to implementation, guide adaptation during the implementation, and inform sustainment strategies.

Kydonaki, et al. (2021). **Family ward rounds in intensive care: An integrative review of the literature.** International journal of nursing studies, 113(gs8, 0400675), 103771. [Article link](#)  
The involvement of family members in the ward rounds is a novel but under-researched family-centered care intervention in adult intensive care units, with limited evidence on the impact it has on patient and family-centered outcomes. This integrative review aimed to understand how family rounds are implemented in critical care and to appraise the evidence on outcomes for patients, family members, and healthcare professionals. Most studies reported improved family satisfaction as the main outcome. Future research should focus on longitudinal patient and family-centered outcomes, including mental health outcomes, and on qualitative data to understand the processes, barriers, and facilitators to implement family-centered rounds in intensive care units.

Ostervang, et al. (2019). **Patient Rounds With Video-Consulted Relatives: Qualitative Study on Possibilities and Barriers From the Perspective of Healthcare Providers.** Journal of medical Internet research, 21(3), e12584. [Article link](#)  
In cancer settings, relatives are often seen as a resource as they are able to support the patient and remember information during hospitalization. However, geographic distance to hospitals, work, and family obligations are reasons that may cause difficulties for relatives' physical participation during hospitalization. This provided inspiration to uncover the possibility of telehealth care in connection with enabling participation by relatives during patient rounds. This study aimed to investigate health care professionals' experiences in using and implementing technology to involve relatives during video-consulted patient rounds. It identified a double change by introducing both new technology and virtual participation by relatives at the same time. The change had consequences on health care professionals' work routines with regard to work load, culture, and organization because of the complexity in health care systems.

## LEADERSHIP

Merriman & Freeth. (2022). **Conducting a good ward round: How do leaders do it?** Journal of evaluation in clinical practice, 28(3), 411-420. [Article link](#)  
Ward rounds (WRs) are complex social processes. Done well, WR discussions and decisions contribute to timely, safe, effective progression of care. However, literature highlights medical dominance; marginalisation or absence of other perspectives, safety risks and suboptimal resource use. This study examined leadership behaviours and what supported good interprofessional WRs, defined as enabling interprofessional collaboration and decision making which progresses patient care in a safe and timely manner. Deepening appreciation of this art should support learning and improvements. Whilst everyone contributes to the joint effort of delivering a good WR, WR leadership is key. It ensures effective use of time and diverse expertise, and coordinates contributions rather like a conductor working with musicians. Although WR needs and approaches vary across contexts, the key leadership activities we identified are likely to transfer to other settings.

**SEARCH TERMS**

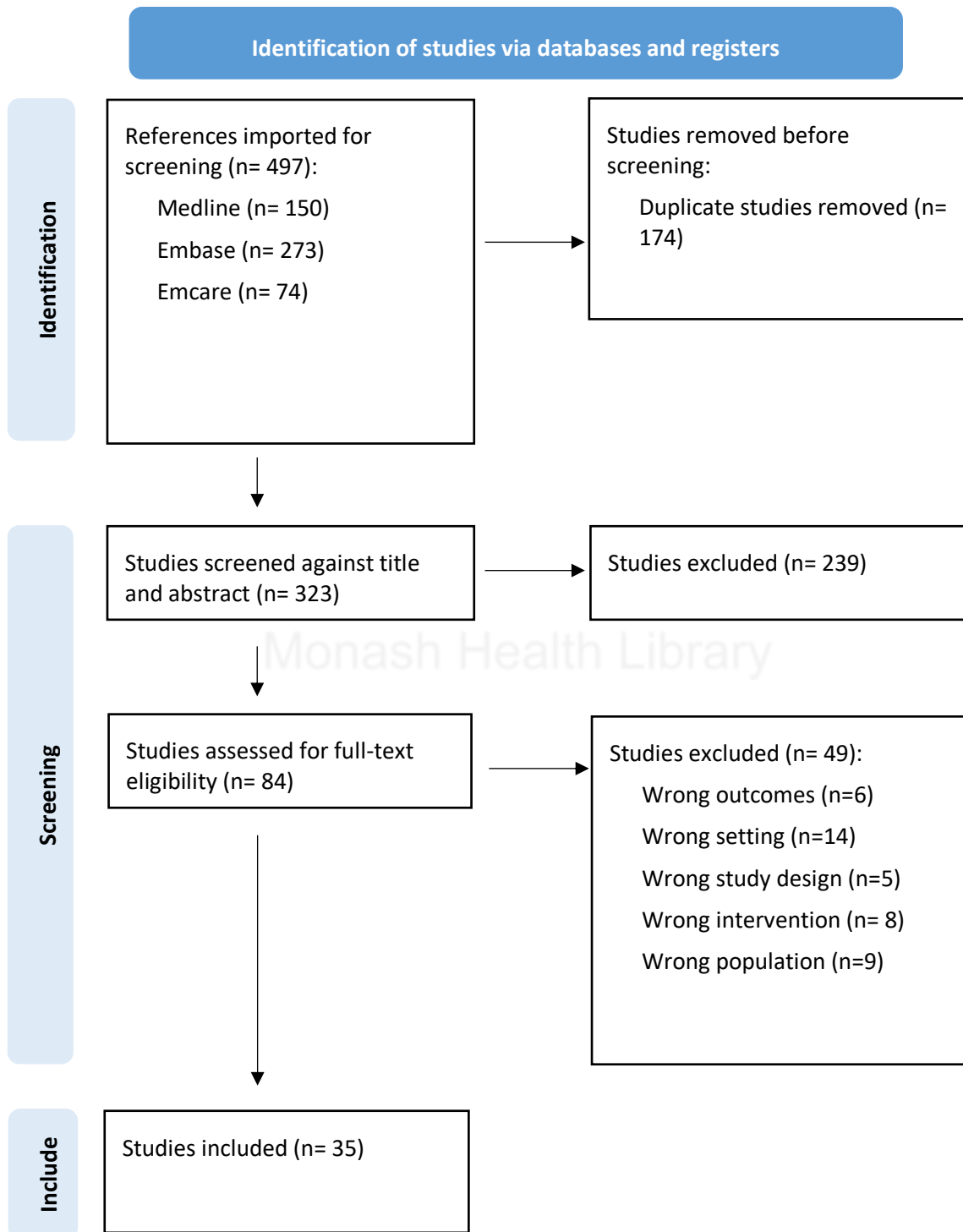
<b>Concept</b>	<b>MeSH headings</b>	<b>Keywords</b>
Ward rounds	Teaching Rounds	round* next to: (ward or doctor* or physician* or consultant* or patient or in?patient or mental health or psychiatrist or hospital or bedside or teaching or daily or morning or inter?disciplinary)
Models, innovation	Delivery of Health Care [Methods, Trends], Referral and Consultation [Methods, Trends], Remote Consultation [Methods], Organizational Innovation, Hospitals, Teaching [Standards, Trends]	round* within 5 words of: (model* or implement* or innovat* or structured or ideal or best practice or gold standard or led or pro?forma or standard* or checklist* or future or alternative or tele*)  modern* or contemporary or trend* or change* or evolution or evolv* or leader* or new* technology or future development*
People & technology	Patient Care Team, Consultants, Physicians, Interprofessional Relations, Telemedicine, Technology, Digital Technology, Videoconferencing, Virtual Reality, Augmented Reality, Artificial Intelligence	tier* or consultant* or medical* or physician* or doctor* or junior or clinician* or specialist* or multi-disciplinary or inter-professional or health professional*  virtual* or digital or technology or video or remote access or mixed reality or artificial intelligence  patient within 3 words of (team or care)
Quality, support & supervision	Preceptorship, Quality of Health Care, Quality Assurance, Quality Improvement, Patient Safety, Attitude of Health Personnel	supervis* or support or preceptorship or quality or safe*

**MEDLINE SEARCH STRATEGY**

- 1 \*Teaching Rounds/ (1175)
- 2 (round\* adj (ward or doctor\* or physician\* or consultant\* or patient or in?patient or mental health or psychiatrist or hospital or bedside or teaching or daily or morning or inter?disciplinary)).ti,ab. (161)
- 3 1 or 2 (1317)
- 4 "Delivery of Health Care"/mt, td [Methods, Trends] (15920)
- 5 "Referral and Consultation"/mt, td [Methods, Trends] (1881)
- 6 Remote Consultation/mt [Methods] (1632)
- 7 Organizational Innovation/ (25301)
- 8 Hospitals, Teaching/st, td [Standards, Trends] (1600)
- 9 (round\* adj5 (model\* or implement\* or innovat\* or structured or ideal or best practice or gold standard or led or pro?forma or standard\* or checklist\* or future or alternative or tele\*)).tw. (3208)
- 10 (modern\* or contemporary or trend\* or change\* or evolution or evolv\* or leader\* or new\* technology or future development\*).tw. (4673424)
- 11 4 or 5 or 7 or 8 or 9 or 10 (4704884)
- 12 Patient Care Team/ or Consultants/ or Physicians/ or Interprofessional Relations/ (218561)
- 13 Telemedicine/ or Technology/ or Digital Technology/ or Videoconferencing/ or Virtual Reality/ or Augmented Reality/ or Artificial Intelligence/ (96148)
- 14 (tier\* or consultant\* or medical\* or physician\* or doctor\* or junior or clinician\* or specialist\* or multi?disciplinary or inter?professional or health professional\*).tw. (2301845)
- 15 (virtual\* or digital or technology or video or remote access or mixed reality or artificial intelligence).tw. (842860)
- 16 (patient adj3 (team or care)).tw. (118372)
- 17 12 or 14 or 16 (2461689)
- 18 Preceptorship/ or Quality of Health Care/ or Quality Assurance, Health Care/ or Quality Improvement/ or Patient Safety/ or Attitude of Health Personnel/ (308687)
- 19 (supervis\* or support or preceptorship or quality or safe\*).tw. (3398573)
- 20 18 or 19 (3570697)
- 21 3 and 11 and 17 and 20 (218)
- 22 limit 21 to yr="2018 -Current" (105)

APPENDIX

PRISMA CHART



This report contains curated literature results against a unique set of criteria at a particular point in time. Users of this service are responsible for independently appraising the quality, reliability, and applicability of the evidence cited. We strongly recommend consulting the original sources and seeking further expert advice.