

WARD ROUNDING

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Please find following a summary of a literature search and relevant results. All articles can be provided in full - email <u>library@monashhealth.org</u> for a list of the articles you require.

QUESTION

Does effective interdisciplinary ward rounding impact information flow, care progression for patients, and reduce errors?

RESULTS

ONLINE RESOURCES (GREY LITERATURE)

HEALTH SERVICE DOCUMENTS

- Qld Government. Metro North Health. (2022). Productive Ward Releasing time to care. Web link.
- NHS. (2021). Modern ward rounds. Web link.
- NSW Government. Clinical Excellence Commission. (2019). Multidisciplinary Team (MDT) with Patient Rounds. Web link.
- Government of Saskatchewan. (2017). Interdisciplinary rounding. Web link.

SPECIALIST MEDICAL COLLEGE DOCUMENTS

 Royal College of Physicians. (2021). Modern ward rounds. Best practice: the process. <u>Web</u> <u>link.</u>

PEER-REVIEWED LITERATURE – MOST RECENT FIRST

Articles are grouped by theme:

- Clinician experience p. 1.
- Clinical outcomes p. 4.
- Patient satisfaction p. 6.
- Tools p. 6.
- Productive Ward p. 8.

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

CLINICIAN EXPERIENCE

Mastalerz, K. A., et al. (2024). "We're all truly pulling in the exact same direction": A qualitative study of attending and resident physician impressions of structured bedside interdisciplinary rounds. *Journal of hospital medicine, 10.1002/jhm.13272.* Advance online publication. <u>Request full-text.</u>



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Structured bedside interdisciplinary rounds (IDR) have the capacity to improve patient care, interprofessional teamwork, and physician empathy for patients and the interprofessional team. However, sustained leadership support and clearly defined rounds goals and objectives are necessary ingredients to maximize the benefits and address the challenges of bedside IDR.

Brown, T. N., et al. (2023). Improvement in Multidisciplinary Provider Rounding (Surgical Rounds) in the Pediatric Cardiac ICU: An Application of Lean Methodology. *Pediatric critical care medicine*, 24(6), e282–e291. <u>Click for full-text.</u>

Lean methodology can be effectively applied to multidisciplinary rounds in a joint cardiothoracic surgery/cardiac intensive care setting to decrease waste and inefficiency. Interventions resulted in decreased preparation time, transition time, presenting provider changes, total rounds duration indexed to patient census, and anecdotal improvements in provider satisfaction.

Buchanan, C. J., et al. (2023). **Engaging resident physicians in the design, implementation, and assessment of bedside interdisciplinary rounds.** *Journal of interprofessional care, 1*–7. Advance online publication. <u>Request full-text.</u>

Post-implementation survey results revealed high overall satisfaction with bedside interdisciplinary rounds among residents, improved perceived efficiency of rounds, preserved quality of education, and value added by interprofessional input.

Huang, K. X., et al. (2023). Physician behaviors associated with increased physician and nurse communication during bedside interdisciplinary rounds. *Journal of hospital medicine*, *18*(10), 888–895. <u>Click for full-text.</u>

Implementing interdisciplinary rounds structures and procedures that promote attending physician involvement, physician initiative, and early nurse participation could optimize interdisciplinary communication and quality of care.

Morris, M., et al. (2023). Interdisciplinary collaborative working on surgical ward rounds: reality or rhetoric? A systematic review. *Journal of interprofessional care*, *37*(4), 674–688. <u>Click for full-text</u>.

Persistent hierarchies within surgical wards act as a barrier often preventing allied health professionals from speaking up, thus perpetuating intra disciplinary siloed behaviours. This barrier contributes to a dearth of research evidence to facilitate interdisciplinary collaborative intentionality in surgical ward rounds and surgical education

Muirhead, R., & Bates, A. (2023). Does the Implementation of Multidisciplinary Developmental Care Rounds Increase the Utilization of Developmental Caregiving Interventions in the Neonatal Unit? *The Journal of perinatal & neonatal nursing*, *37*(2), 153–163. <u>Click for full-text</u>.

Despite the majority of staff members who participated in both surveys acknowledging the importance of family-centered developmental care practice on neonatal outcomes, their use in clinical care is not always considered or practiced.

Gisondo, C., et al. (2022). An Observational Time Study of Neonatal Intensive Care Unit Multidisciplinary Rounds. *American journal of perinatology*, 10.1055/a-1933-7137. Advance online publication. <u>Click for full-text.</u>



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On average, the medical team spent over 2 hours per day making multisciplinary rounds in the NICU with substantial variation between attending providers. While most time was spent on patient care, teaching, and talking with parents, we identified opportunities to improve rounding efficiency.

Heip, T., 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. <u>Click for full-text.</u>

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.

Shivananda, S., et al. (2022). Improving Efficiency of Multidisciplinary Bedside Rounds in the NICU: A Single Centre QI Project. *Pediatric quality & safety, 7*(1), e511. <u>Click for full-text.</u>

Redesigning bedside rounds improved staff engagement and workflow, resulting in efficient rounds and better staff experience.

Becker, A., et al. (2021). A Resident-driven Initiative to Increase Bedside Teaching on Interdisciplinary Rounds. *Pediatric quality & safety, 6*(3), e408. <u>Click for full-text.</u>

We improved inpatient rounds bedside physical examination teaching and satisfaction without sacrificing efficiency. This project demonstrates the feasibility and success of a resident-driven education initiative to successfully motivate fellow residents and colleagues across disciplines to enact change.

Schwartz, J. I., et al. (2021). Structured interdisciplinary bedside rounds improve interprofessional communication and workplace efficiency among residents and nurses on an inpatient internal medicine unit. *Journal of interprofessional care, 1–8.* Advance online publication. <u>Request full-text.</u>

The implementation of Structured Interdisciplinary Bedside Rounds significantly improved perceived interprofessional communication and workplace efficiency, which are two important domains of healthcare quality.

Walton, V., et al. (2019). How Do Interprofessional Healthcare Teams Perceive the Benefits and Challenges of Interdisciplinary Ward Rounds? *Journal of multidisciplinary healthcare, 12,* 1023–1032. <u>Click for full-text.</u>

Clinicians recognise there are greater benefits to Interdisciplinary bedside ward rounds (IBRs) and have a willingness to participate. However, careful consideration is required to introduce and continually achieve the best from IBR as they require changes in organizational context and culture.

Wu-Fienberg, Y., et al. (2019). Impact of interdisciplinary rounds in the spinal cord injury unit on relational coordination for patients with pressure injury: A pilot study. *The journal of spinal cord medicine*, 42(2), 245–250. <u>Click for full-text.</u>



Interdisciplinary rounds in the spinal cord injury unit was associated with significantly better relational coordination with hospitalists, surgical specialists, infectious diseases, nursing, and pharmacy. This effect was primarily due to improvements in communication domains, without significant difference in relationship domains.

CLINICAL OUTCOMES

Nimmagadda, K., et al. (2023). Virtual Multidisciplinary Rounds to Reduce Length of Stay, Decrease Variation, and Promote Accountability. *Joint Commission journal on quality and patient safety,* 49(9), 450–457. <u>Click for full-text.</u>

Virtual multidisciplinary rounds combined with other interventions can effectively reduce LOS and observation hours. Decreasing variation among hospitalists and improved key stakeholder engagement can be achieved with virtual multidisciplinary rounds.

Patel, S. V., et al. (2023). The Utilization of 15-Minute Multidisciplinary Rounds to Reduce Length of Stay in Patients under Observation Status. *Healthcare (Basel, Switzerland), 11*(21), 2823. <u>Click for full-text.</u>

Multidisciplinary rounds for observation patients led to a reduction in LOS from 29 h to 20 h.

Srinivas, V., et al. (2023). Synergistic strategies: Optimizing outcomes through a multidisciplinary approach to clinical rounds. *Proceedings (Baylor University. Medical Center)*, 37(1), 144–150. <u>Click for full-text</u>.

MDRs have evolved to reduce patient mortality, complications, length of stay, and readmissions, and they enhance patient satisfaction and utilization of ancillary services.

Sreepathy, P., et al. (2022). The association between implementation of multidisciplinary rounds and clinical outcomes. *Frontiers in cardiovascular medicine*, *9*, 1005150. <u>Click for full-text.</u>

Multidisciplinary rounds implementation was associated with significantly decreased mortality and positively impacted resource utilization with increased consultations for ancillary services.

Basic, D., et al. (2021). Twice-Weekly Structured Interdisciplinary Bedside Rounds and Falls among Older Adult Inpatients. *Journal of the American Geriatrics Society*, *69*(3), 779–784. <u>Request full-text.</u>

This study is the first to investigate the effect of Structured Interdisciplinary Bedside Rounds (SIBR) on in-hospital falls. It provides evidence that a sustainable, twice-weekly intervention is associated with a reduction in falls. It has the potential to be used in other settings where falls are frequent.

Stuhec, M., & Tement, V. (2021). Positive evidence for clinical pharmacist interventions during interdisciplinary rounding at a psychiatric hospital. *Scientific reports, 11*(1), 13641. <u>Click for full-text.</u>

Including a clinical pharmacist in the interdisciplinary ward rounds at a psychiatric hospital reduced the number of expressed and potential drug-related problems with a very high recommendation acceptance rate.





Wickersham, A., et al. (2021). Making Room at the Bedside: Improving Communication Alongside Medical Education Through Interdisciplinary Rounds. *American journal of medical quality, 36*(1), 42–48. <u>Request full-text.</u>

Following the intervention, there were perceived improvements in interdisciplinary communication, care coordination, and teamwork, and there were no significant changes in length of stay.

Sunkara, P. R., et al (2020). Impact of structured interdisciplinary bedside rounding on patient outcomes at a large academic health centre. *BMJ quality & safety, 29*(7), 569–575. <u>Click for full-text.</u>

structured interdisciplinary bedside rounding did not reduce LOS and 30-day readmissions but had a significant impact on 7-day readmissions.

Chava, R., et al. (2019). Multidisciplinary rounds in prevention of 30-day readmissions and decreasing length of stay in heart failure patients: A community hospital based retrospective study. *Medicine*, *98*(27), e16233. <u>Click for full-text.</u>

Implementation of multidisciplinary rounds program on congestive heart failure patients resulted in significant decrease in both readmission rate and length of stay in our hospital.

Guzinski, C., et al. (2019). Good practices for effective communication: the experience of the interdisciplinary round in orthopedic surgery. *Revista gaucha de enfermagem, 40*(spe), e20180353. Click for full-text.

The implementation of the structured interdisciplinary round has had positive implications for effective communication, reducing risks and failures in the care process, and can be considered good practice regarding patient safety.

Lopez, M., et al. (2019). Impacting Satisfaction, Learning, and Efficiency Through Structured Interdisciplinary Rounding in a Pediatric Intensive Care Unit: A Quality Improvement Project. *Pediatric quality & safety*, *4*(3), e176. <u>Click for full-text</u>.

Implementing a Structured Interdisciplinary Bedside Rounds process in our PICU resulted in greater family and staff satisfaction, improved workflow and decreased rounding time by 34% without compromising education. LOS decreased significantly with no increases in mortality or readmissions.

Patel, H., et al. (2019). Improving Early Discharge Using a Team-Based Structure for Discharge Multidisciplinary Rounds. *Professional case management*, 24(2), 83–89. <u>Click for full-text.</u>

Our team-based multidisciplinary discharge rounds (MDRs) pilot improved interdisciplinary relationships and communication and resulted in shorter LOS, earlier discharge times, and lower 30-day readmissions.

Smith, C. V., et al. (2019). Interdisciplinary Rounds on a Hospitalist Service: Impact on Palliative Care Measures, Quality, and Utilization Outcomes. *Journal of nursing care quality*, *34*(4), 295–300. <u>Click for full-text</u>.

Results support interdisciplinary rounds (IDRs) as a mechanism to improve time to palliative care (PC) referral, decrease LOS, direct cost, and 30-day mortality among hospitalized adults. A more objective method of identifying patients with unmet PC needs may be warranted.







PATIENT SATISFACTION

Schneider, D., et al. (2023). Effects of participation in interdisciplinary rounds in the intensive care unit on family satisfaction: A cross-sectional study. *Critical care science*, *35*(2), 203–208. <u>Click for full-text</u>.

The presence during interdisciplinary rounds was associated with improved general satisfaction and satisfaction with the decision-making aspect.

Javed, A., et al. (2021). Improved Clinical Competence and Patients Satisfaction: Comparison of Patient-centered, Interdisciplinary Collaborative Round versus Traditional Post-partum Round. *Journal of the College of Physicians and Surgeons*, *30*(7), 868–870. <u>Click for full-text</u>.

This study showed that in the traditional round, the patient's satisfaction with the treatment was 95.1%; whereas, in patient-centered collaborative care rounds it was 96.9%. Patients were more satisfied with the treatment options discussed with them and the results of the medical tests explained to them

Kang, J., et al. (2020). State anxiety, uncertainty in illness, and needs of family members of critically ill patients and their experiences with family-centered multidisciplinary rounds: A mixed model study. *PloS one*, *15*(6), e0234296. <u>Click for PDF</u>.

Families reported family-centered multidisciplinary rounds were positive, useful experiences. Thus, standardization of family-centered multidisciplinary rounds is needed to meet families' various needs.

Chow, M. Y., et al. (2019). Structured Interdisciplinary Bedside Rounds in an Australian tertiary hospital emergency department: Patient satisfaction and staff perspectives. *Emergency medicine Australasia*, *31*(3), 347–354. <u>Click for full-text</u>.

Structured Interdisciplinary Bedside Rounds (SIBR) only weakly correlated with the overall positive experience in the ED. Organisational implementation issues raised through qualitative methods are reported in the paper. The study highlights the benefits that could be gained through SIBR technique over the traditional rounds method. Better workforce and resource planning is needed to support the sustainable implementation of SIBR in ED.

TOOLS

McCormack, G., & Mehta, P. C. (2023). Engaging Chief Medical Officers to Improve Multidisciplinary Rounds. *HCA healthcare journal of medicine*, *4*(6), 397–405. <u>Click for full-text</u>.

CMO engagement can help physicians take steps to decrease variation in practice, leading to compliance with best practice guidelines and decreasing the overall LOS in hospitals. The Multidisciplinary rounds (MDRs) process can support these efforts. Empowering CMOs through the use of the NATE Tempo tool improved engagement. Through the tool, the CMO promotes coordination of patient care throughout the hospital experience and during the post-discharge phase.



Perera, A. C., et al. (2023). **Exploring Plan of Care Communication with a Multidisciplinary Rounding Plan to Nursing Care Plans.** *The Journal of neuroscience nursing*, *55*(2), 49–53. <u>Click for full-text</u>.

The multidisciplinary rounding plan mean score of 4.51 (1.50) correct answers was statistically significantly higher than the nursing care plan mean score of 0.31 (0.71) correct answer (P < .0001).

Lai, C. H., et al. (2022). Integration of an Intensive Care Unit Visualization Dashboard (i-Dashboard) as a Platform to Facilitate Multidisciplinary Rounds: Cluster-Randomized Controlled Trial. *Journal of medical Internet research*, 24(5), e35981. <u>Click for full-text</u>.

i-Dashboard increases efficiency in data gathering. Displaying i-Dashboard on large touch screens in MDRs may enhance communication accuracy, information exchange, and clinical satisfaction. The design concepts of i-Dashboard may help develop visualization dashboards that are more applicable for ICU MDRs.

Maran, E., et al. (2022). Effects of multidisciplinary rounds and checklist in an Intensive Care Unit: a mixed methods study. Revista brasileira de enfermagem, 75(3), e20210934. <u>Click for full-text.</u>

The multidisciplinary rounds with checklist use reduced data on health indicators of critically ill patients and was considered a vital practice in the intensive care setting.

Radhakrishnan, N. S., et al. (2022). **Prospective application of the interdisciplinary bedside rounding checklist 'TEMP' is associated with reduced infections and length of hospital stay**. *BMJ open quality*, *11*(4), e002045. <u>Click for full-text</u>.

The study combined standardised nursing and physician interdisciplinary bedside rounds with a mnemonic checklist to assure all key nursing care components were modified daily. Following training physicians and nurses achieved adherence levels of over 70%. A high correlation between adherence and reductions in length of stay was observed emphasising the importance of rigorous training and monitoring of performance to bring about meaningful and reliable improvements in the efficiency and quality of patient care.

Brown, L., et al. (2020). **Standardizing Multidisciplinary Rounds: Creation of an Efficient and Effective Process to Care for the Critically III.** *The Journal of nursing administration, 50*(1), 5–8. <u>Click</u> <u>for full-text.</u>

We conducted a retrospective review of rounding data before and after the implementation of a simplified and streamlined rounding template for ICU nurses and measures to standardize rounding processes and attendance. Rounding time was decreased by 25% in postimplementation phase.

Gunter, E. P., et al. (2019). **Development and Testing of an Electronic Multidisciplinary Rounding Tool.** *AACN advanced critical care, 30*(3), 222–229. <u>Click for full-text.</u>

urses 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.

PRODUCTIVE WARD



Williams, B., et al. (2021). Evaluation of the impact of an augmented model of The Productive Ward: Releasing Time to Care on staff and patient outcomes: a naturalistic stepped-wedge trial. *BMJ quality & safety, 30*(1), 27–37. <u>Click for full-text.</u>

The study found evidence that the augmented version of The Productive Ward: Releasing Time to Care Intervention was successful in improving a number of dimensions of nurse experience and ward culture, in addition to improved patient experience and evaluations of the quality of care received.

Robert, G., et al. (2020). Exploring the sustainability of quality improvement interventions in healthcare organisations: a multiple methods study of the 10-year impact of the 'Productive Ward: Releasing Time to Care' programme in English acute hospitals. *BMJ quality & safety, 29*(1), 31–40. <u>Click for full-text.</u>

As an ongoing QI approach Productive Ward has not been sustained but has informed contemporary organisational QI practices and strategies. Judgements about the long-term sustainability of QI interventions should consider the evolutionary and adaptive nature of change processes.

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APPENDIX

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SEARCH METHODOLOGY

A systematic search was conducted for literature. The results were screened by librarians using <u>Covidence</u>.

SEARCH LIMITS

- English-language
- Published within the last 5 years

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.
- Cochrane Library collection of databases containing high-quality independent evidence.
- Grey literature Google, Google Scholar, Trip database, Biomed Central Proceedings.

SEARCH TERMS

Concept	MeSH headings	Keywords
Ward rounds	Teaching Rounds; Organizational Innovation; Efficiency, Organizational	Inter(-)disciplinary; multi(-)disciplinary; modern [within 5 words of] round
		Productive ward

MEDLINE SEARCH STRATEGY

1 ((interdisciplinary or Inter-disciplinary or multidisciplinary or multi-disciplinary or modern*) adj5 round*).ti,ab. 879

- 2 productive ward*.ti,ab. 49
- 3 *Teaching Rounds/ and (Organizational Innovation/ or Efficiency, Organizational/) 31
- 4 1 or 2 or 3 950
- 5 limit 4 to (english language and last 5 years) 348





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