

NURSING CRITERIA-LED DISCHARGE

PROVIDED BY: MONASH HEALTH LIBRARY DATE: 21 JUNE 2023

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

Is a nursing criteria led discharge effective at reducing patient length of stay and improving patient outcomes/experiences of care?

SEARCH METHODOLOGY

A systematic search was conducted for literature. The results were screened by two librarians using <u>Covidence</u>. See the Appendix for the Embase search strategy and search terms.

SEARCH LIMITS

- English-language
- Published in the last 10 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.
- ProQuest Nursing & Allied Health scholarly journals, theses, and books for nursing & AH.
- Grey literature Google, Google Scholar, Trip database, Biomed Central Proceedings.

HAND SEARCHING

• Reference checking should be undertaken for the most relevant articles.

LITERATURE RESULTS

ONLINE RESOURCES (GREY LITERATURE)

AUSTRALIAN

NSW Agency for Clinical Innovation. (2016). **Criteria Led Discharge Toolkit: A resource to support the implementation of CLD.** Link

- Includes guidance on how to assess local readiness for CLD, steps to implementation, templates, checklists, staff training, and consumer education.
- See <u>more CLD resources</u> from ACI, e.g. FAQ leaflet for clinicians and managers, patient information, and draft CLD policy for local adaptation.

Queensland Health. (2023). Criteria Led Discharge [clinical guideline]. Link





Recommended processes for CLD and selection of suitable patients.

Clinical Excellence Queensland. (2023). Criteria Led Discharge. Link

- Improvement project implemented in Queensland Health EDs.
- Sections include: solutions implemented; evaluation and results; and lessons learnt.

A. Clements & R. Cummins, St. George Hospital, Sydney. (2018). ED Nurse-Led Discharge. Link

- Trial of nurse-led discharge in the ED.
- Includes information on development and implementation see discharge checklist on pp.
 7-8
- Outcomes (p. 9): Positive responses from nursing and medical staff; empowerment of nurses; increased utilisation of NLD; decreased LOS in ED and EDSSU; nil adverse patient outcomes.

INTERNATIONAL

NHS England & NHS Improvement. (2021). Improvement guidance for writing a criteria-led discharge policy. Link

• Covers topics such as setting clinical criteria for discharge (p. 5), points for patient safety and governance (p. 7), patient involvement (p. 9), and training (p. 10 on).

Additional NHS resources:

- A manager's guide to criteria-led discharge (2019)
- Ten steps to implementing criteria-led discharge (2019)
- Introducing criteria-led discharge in an acute medical unit (n.d.) [case study]
- Developing criteria-led discharge in an oncology setting (2018) [case study]

Starship Child Health, NZ. (2019). Criteria led discharge [clinical guideline]. Link

CLD guideline for hospital staff on initiating and applying CLD for paediatric patients.

Related documents from Starship Child Health:

- Fast facts for staff planning for discharge on admission
- Process flowchart
- Criteria-led discharge form

PEER-REVIEWED LITERATURE — NEWEST ARTICLES FIRST

Articles are grouped as follows:

- Effectiveness and impact on patient outcomes (pp. 3-4)
- Development and implementation (pp. 4-5)
- Paediatrics (pp. 5-7)

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

All articles can be provided in full text – email <u>library@monashhealth.org</u> a list of articles you require.





EFFECTIVENESS AND IMPACT ON PATIENT OUTCOMES

H. Mao, et al. (2022). Effectiveness of nurse-led discharge service on adult surgical inpatients: A meta-analysis of randomized controlled trials. *Nursing Open*, *9*(5), 2250-2262. Full text

Aim: To determine the effectiveness of nurse-led discharge service for adult surgical inpatients. Results: A total of 1,649 participants were enrolled in 12 randomized controlled trials. The result of readmission rate and emergency visit of intervention group were lower than those of the control group; activities of daily living and quality of life in the intervention group were higher than that of the control group. There was no statistical difference in the length of stay between the two groups.

L. Lees-Deutsch, et al. (2019). **A systematic review of criteria-led patient discharge**. *Journal of Nursing Care Quality*, *34*(2), 121-126. <u>Full text</u>

This article reports on a systematic review conducted to critique safety, quality, length of stay, and implementation factors regarding criteria-led discharge. PURPOSE: Improving patient flow and timely bed capacity is a global issue. Criteria-led discharge enables accelerated patient discharge in accordance with patient selection. RESULT(S): Fifteen studies were identified that showed no increase in patient readmission or complication rates with criteria-led discharge, demonstrating patient safety. The quality of the patient discharge was unremarkable. None of the studies showed an increase in length of stay. CONCLUSION(S): The safety, quality, and length of stay for patients discharged through criteria-led discharge are inextricably linked to the process adopted for its implementation.

R. Stubbs, et al. (2017). Exploring criteria-led discharge program (CLD) for outpatient percutaneous coronary intervention (PCI). Heart Lung and Circulation, 26(Supplement 2), S207. View conference abstract

At Wollongong Hospital outpatients having PCI require an overnight admission. Criteria-led discharge (CLD) was introduced in November 2013 to facilitate discharge by 10am the following day. CLD allows credentialled nursing staff to discharge patients based on medically-prescribed criteria. Failure to meet criteria requires a medical review (medical led discharge, MLD). Prior to CLD, the average time of discharge was 1.34pm with only 6% of patients discharged by 10am. Result(s): Out of 300 outpatient PCIs, 81 (27%) were not deemed suitable for CLD. Therefore, 219 patients were included in this analysis, of those, 159 (73%) were discharged via CLD. The average time of CLD was 9:17am and 92% were discharged by 10am.

J. Webster, et al. (2011). The effectiveness of protocol driven, nurse-initiated discharge in a 23-h post surgical ward: A randomized controlled trial. 48(10), 1173-1179. Full text

A 23-h unit was established in June 2005 to relieve pressure on surgical beds. Patients were to be discharged by 0900h without review by a doctor. However, discharge without review remained the exception rather than the rule. OBJECTIVE: The aim of the current trial was to asses the affect of a protocol driven, nurse-initiated discharge process on discharge time, patient satisfaction and adverse events. SETTING: A large, major metropolitan hospital in Queensland, Australia. METHODS: Participants were randomly assigned into one of two groups: protocol driven, nurse-initiated or usual care. RESULTS: Of the 131 patients completing the trial, only 82 (62.6%) were discharged by 0900h. In the Protocol group 45 (78.9%) patients were discharged on time compared with 37 (50.0%) in the usual care group. This difference was statistically significant (OR 3.75; 95% CI-1.74-8.21; p=0.001). The average length of stay in the 23-h unit was 16.5(SD 6.8)h. This did not differ by group (MD 0.29; 95% CI-2.13-2.71; p=0.81). The overall mean satisfaction score was 95.4 (SD 8.8) and results were similar between groups (Protocol group 96.2 versus





usual care group 94.6; p=0.40). [Note: Study is >10 years old; included as another Australian case]

DEVELOPMENT AND IMPLEMENTATION

M. Payne, et al. (2023). Improving patient throughput: Implementation of a nurse driven interdisciplinary discharge checklist. Oncology Nursing Forum, 50(2), C163-C164. Request article This project aimed to determine if, in acute care oncology teams with high levels of late discharges, would the implementation of a nurse-led discharge checklist, when compared to current oncology service discharge practices, affect discharge times and improve interdisciplinary communication regarding patient discharge needs during morning team rounds. Implementation utilized the four-stage, Plan-Do-Study-Act approach. During planning the discharge checklist was created by reviewing common themes delaying discharges after 1400 and input from the interdisciplinary team. Identified checklist items were then translated onto workroom dry-erase boards in a table format. At the beginning of rounds, the unit charge nurse and attending lead the team through the discharge checklist for each patient planned for sameday discharge and anticipated discharge for the next day. Identified discharge needs, issues, outcomes, and updates were noted on the board. The nurse-led discharge checklist has proven to identify discharge barriers, assign ownership, and increase the number of safe discharges before 1400. ... Charge nurses are now able to quickly identify and communicate actions needed to expedite patient discharge. Potential cost savings are recognized through reduced length of stay and reduced transitions of care to multiple areas by improving same-day bed availability. Current results demonstrate the value of implementing a nurse-driven discharge checklist into interdisciplinary rounds. The project has expanded to include additional oncology services and work has begun to add a patient discharge checklist to our patient portal.

C. Findlay, et al. (2023). Implementing criteria-led discharge for acute admissions to facilitate the elective recovery from COVID-19: An example in acute tonsillitis. *BMJ Open Quality*, 12(1), 002123. Full text

We conducted a quality improvement project to design and introduce a novel inpatient pathway using CLD for patients with severe acute tonsillitis. Our analysis compared the standardisation of treatment, length of stay, discharge time and readmission rate between those treated on the novel pathway compared with standard treatment. Results: The study population included 137 patients admitted to a tertiary centre with acute tonsillitis. Introduction of the tonsillitis pathway using CLD resulted in a significant reduction in median length of stay from 24 hours to 18 hours. Of those treated on the tonsillitis pathway, 52.2% were discharged prior to midday compared with 29.1% who received standard treatment. No patient discharged using CLD required readmission. Conclusion: CLD is safe and effective at reducing length of stay in patients requiring acute hospital admission for acute tonsillitis.

L. Lees-Deutsch, et al. (2020). **Developing a process for criteria-led discharge: Selection of Patients for Efficient and Effective Discharge (SPEED)**. *Journal of Nursing Care Quality*, 35(2), 140-146. Full text

PROBLEM: In acute medicine settings, patients commonly have multiple medical problems, which render single care pathway and clinical protocols of limited use. CLD offers potential, but little evidence exists about how to best implement it in these contexts. APPROACH: Retrospective case note analysis generated characteristics from patients' discharge plans to design a criterion-based framework to aid patient selection for CLD. These criteria were hypothetically tested on patient case notes (n = 50). OUTCOME(S): CLD was identified as suitable (n = 27) and unsuitable (n = 23)





from 50 case notes. Interrater agreement was 86% between 3 reviewers. CONCLUSION(S): This review has provided greater understanding of the complexity of discharge in acute medicine settings. Implementing CLD to optimize timeliness of patient discharge might offer a solution for selected patients.

N. White. (2014). Criteria led discharge among patients who have undergone laparoscopic cholecystectomy, laparoscopic appendectomy or hernia repair in an emergency short stay ward: A best practice implementation project. *JBI Database of Systematic Reviews and Implementation Reports*, 12(4), 548-567. Request article

This implementation project focuses on implementing criteria led discharge (CLD) within a short stay surgical unit. Objective(s): The primary objective of this evidence implementation project was to promote best practice for criteria led discharge, and thereby improve patient outcomes, reduce patient length of stay and improve resource allocation. Method(s): This project utilized the audit and feedback model using the Joanna Briggs Institute's Practical Application of Clinical Evidence System. Audit criteria were created based on the best available evidence on the topic through a search performed by the JBI team. All audit criteria were obtained through case note review following discharge. All audits were undertaken within the same 28-bed surgical unit. Result(s): The post-implementation (follow-up) audit showed significant improvement in compliance to best practice guidelines in many of the audit criteria selected. Despite this, the ongoing follow up audits have shown a decrease in compliance. Further education and monitoring is required.

V. N. Gotz, et al. (2014). **Developing and evaluating nurse led discharge in acute medicine**. *Acute Medicine*, *13*(4), 159-162. <u>Request article</u>

To develop and evaluate nurse-led discharge criteria for a clinical decision unit in a large NHS Foundation Trust. Method: Criteria for nurse led discharge were developed for patients presenting to hospital via the emergency department with chest pain, headache and deliberate self poisoning. Data on length of stay on CDU and readmission were collected for these patient groups during a 2 month period, during which the nurse-led criteria were introduced. Following introduction of the criteria a survey was conducted to evaluate staff opinions of the new system. Result(s): A trend towards reduced length of stay was noted during the month after introduction of nurse-led discharge (18.26hrs vs 20 hours p=0.582). Our staff survey indicated that the process was popular and has been continued since the study period. Conclusion(s): Nurse-led discharge using defined criteria is feasible and popular with staff in an acute medical setting.

PAEDIATRICS

L. Vaughan, et al. (2022). Improving timely discharges through nurse-initiated conditional discharge orders. *Hospital Pediatrics*, 12(6), 600-606. Full text

The objective was to increase the percentage of morning discharges from 6% to 11% on the hospitalist intervention team, sustaining 11% for 6 months. METHOD(S): All patients admitted to a hospitalist service (intervention team) were targeted from July 2018 through March 2020. The primary outcome measure was percentage of morning discharges (6:00 AM-12:00 PM). Quality improvement methodology was used to initiate bundled interventions, including nurse-initiated conditional discharge (NICD) order use and education, written tool dissemination, and weekly e-mail reminders (PDSA1). Continued education with dissemination of an instructional module and a resident champion were established to improve resident hesitancy (PDSA2). RESULT(S): Special cause variation was observed for the primary outcome after PDSA2 with a positive shift in the





number of early discharges. Special cause variation was observed in the process measure after PDSA1 with 6 points above the mean. CONCLUSION(S): Through NICD orders, written tool dissemination, and a resident champion to encourage system-wide culture change, patients were discharged earlier, improving patient flow.

B. Roddis, et al. (2022). **Criteria-led discharge for simple appendicitis in children: A pilot study**. *Journal of Paediatrics and Child Health*, *58*(7), 1238–1243. <u>Full text</u>

A prospective pilot cohort study was conducted including paediatric patients with simple appendicitis (SA) who were managed with CLD and a control group who were managed with standard discharge procedures. A CLD pro forma was developed, standardising care guidelines and clinical criteria indicators to be met for children to be discharged post-operatively. A post-discharge parent survey was also utilised. The primary outcome measure was post-operative length of stay (pLOS), with secondary outcomes of post-operative complication rates and parental satisfaction. Results: The control group consisted of 31 patients and CLD group 35 patients. There was no difference in the median pLOS (24 [16.7–44.6] vs. 25.3 [19.1–50.1] h, P = 0.3). Furthermore, there were no significant differences on any of the secondary outcomes. Parental confidence with time of discharge was very high in both control (85.7%) and CLD (88.2%) groups (P = 1.0).

C. Bell, et al. (2022). **Children's Hospital Discharge Collaborative: Getting home in time for tea**. *Archives of Disease in Childhood*, *107*(5), 22. <u>Full text</u>

The Children's Hospital Discharge Collaborative (CHDC) team are a multi-disciplinary group of staff members passionate about improving the quality and efficiency of our discharges. METHOD: As a collaborative we have trialled interventions in ward areas, learnt what works and what needs improvement, all of which has enabled us to roll out evidence based changes throughout the Children's Hospital. ... We have encouraged the early preparation - sometimes overnight - of quality discharges using a new acronym for electronic discharge advice notes (eDANs - Easy to read, Drugs, Advice, Next Steps). We have facilitated nurse-led and criteria led discharges as well as increased our safe use of over-labelled discharge packs. Another quality improvement project piloted the process of finalising the discharge medicines before the clinical information was completed enabling earlier dispensing. RESULTS: In the period from October 2020 to July 2021 the median percentage of weekly discharges before 1500hours has risen from 36% to 49%. In patient terms, this means approximately 18-20 more patients per week being discharged home before 1500hours.

T. P. Cundy, et al. (2017). **Fast-track surgery for uncomplicated appendicitis in children: a matched case-control study**. *ANZ Journal of Surgery*, *87*(4), 271-276. <u>Full text</u>

This matched case-control study investigates the effect of a multidisciplinary criteria-led discharge protocol for uncomplicated appendicitis in children. METHODS: Key protocol components included limiting post-operative antibiotics to two intravenous doses, avoidance of intravenous opioid analgesia, prompt resumption of diet, active encouragement of early ambulation and nursing staff autonomy to discharge patients that met assigned criteria. RESULTS: Outcomes for 83 patients enrolled to our protocol were compared with those of 83 controls. There was a 29.2% reduction in median post-operative length of stay in our protocol-based care group (19.6 versus 27.7 h; P < 0.001). The rate of discharges within 24 h improved from 12 to 42%. There was no significant difference in complication rate (4.8 versus 7.2%; P = 0.51).





C. Gray, et al. (2016). Nurse-initiated and criteria-led discharge from hospital for children and young people. *Nursing Children and Young People*, *28*(8), 26-29. Full text

The readiness of a child or young person for discharge includes patient safety, the family's ability to care for the child at home and the ongoing treatment they will need, which has a direct influence on their health outcomes and future readmissions to hospital. There are no standard criteria for discharge practice and registered nurses have reported concerns about their ability to provide education and discharge planning to meet the needs of the patient and their family. A literature review was carried out to ascertain the current discharge principles adhered to in practice and the implemented tools used. The problems faced by registered nurses include ineffective communication, poorly defined role in discharge planning and lack of agreement with the multidisciplinary team. The standardisation of discharge procedures may reduce the risk of readmission and health deterioration of the patient and ensure positive health outcomes, improve family health literacy and continuity of care.

Monash Health Library





APPENDIX

EMBASE SEARCH STRATEGY

Embase <1974 to 2023 June 07>

- 1 hospital discharge/ 181125
- 2 ((patient* or in-patient* or inpatient* or hospital* or ward*) adj4 discharge*).mp. 312972
- 3 1 or 2 312972
- 4 clinical protocol/ or standing order/ or patient selection/ or decision making/ or medical decision making/ 590825
- 5 (discharge* adj5 (protocol* or readiness or criteria* or criterion* or process* or scoring or score*)).mp. 22973
- 6 (clinical* adj3 protocol*).mp. 136019
- 7 (patient* adj2 select*).mp. 298800
- 8 (decision* adj2 (making or make)).mp. 583337
- 9 4 or 5 or 6 or 7 or 8 1016691
- nursing staff/ or exp nursing/ or exp nurse/ or team nursing/ 595602
- 11 (nurse* or (nursing adj (team* or staff* or personnel))).mp. 524001
- 12 ("nurse" or "nurses" or "nursing" or "Journal of Nursing Care Quality").jn. 13623
- 13 (nurse author editor or nurse education in practice or nurse education today or nurse educator or nurse leader or "nurse media journal of nursing" or nurse practitioner or nurse researcher or nurseprescribing or nursing or nursing administration quarterly or "nursing and health care perspectives" or "nursing and health sciences" or "nursing and health sciences research journal" or "nursing and midwifery studies" or "nursing and residential care" or "nursing bc registered nurses association of british columbia" or "nursing care and research" or "nursing children and young people" or "nursing clinics of north america" or nursing critical care or nursing economics or nursing education perspectives or nursing ethics or nursing for womens health or nursing forum or nursing health sciences or "nursing history review" or nursing in critical care or nursing in practice or nursing in the community or nursing inquiry or nursing journal or nursing laws regan report or nursing leadership forum or nursing leadership toronto ont or nursing made incredibly easy or nursing management or nursing management harrow london england 1994 or nursing monograph or nursing new zealand wellington nz 1995 or nursing older people or nursing open or nursing outlook or nursing philosophy or nursing philosophy an international journal for healthcare professionals or nursing practice today or nursing praxis in new zealand inc or nursing reports or nursing research or nursing science quarterly or "nursing standard official newspaper of the royal college of nursing" or "nursing standard royal college of nursing great britain 1987" or nursing times or nursingplus open).jn. 130067
- 14 10 or 11 or 12 or 13 782853
- 15 (criteria-led or criterion-led or criteria-based or criterion-based or CLD).mp. 16844
- 16 ((criteria* or criterion*) adj3 (?led or ?based or framework* or protocol*)).mp. 47625
- 17 ((nurse-initiated or nursing-initiated) adj discharge).mp. 8
- 18 (nurs* adj3 (criteria* or criterion*)).mp. 947
- 19 15 or 16 or 17 or 18 56136
- 20 3 and 9 and 14 and 19 71
- 21 limit 20 to english 70
- 22 limit 21 to last 15 years 60





SEARCH TERMS

Concept	Emtree headings	Keywords
Hospital discharge	hospital discharge/	Patient(s) or in-patient(s) or inpatient(s) or hospital(ised)(isation) or ward(s) + discharge(d/s).
Criteria-led / Protocol / Decision-making	clinical protocol/ or standing order/ or patient selection/ or decision making/ or medical decision making/	Criteria-led or criterion-led or criteria- based or criterion-based or CLD. Criteria or criterion + led or based or framework(s) or protocol(s). Discharge(s/d) + protocol(s) or readiness or criteria or criterion or process(es) or scoring or score(s/d). Clinical + protocol(s). Patient(s) + select(ion). Decision(s) + making or make.
Nursing staff	nursing staff/ or exp nursing/ or exp nurse/ or team nursing/	Nurse-initiated or nursing-initiated + discharge. Nurs(e/s)(ing) + criteria or criterion. Nurse(s) or nursing + team(s) or staff or personnel.*

^{*}A search of nursing-specific journals was also included – see lines 12-13 of the Embase search strategy.

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.

