

Focus Area	Citation	Abstract/Findings
Background: Discharge Barriers	Meo N, Liao JM, Reddy A. Hospitalized After Medical Readiness for Discharge: A Multidisciplinary Quality Improvement Initiative to Identify Discharge Barriers in General Medicine Patients. Am J Med Qual. 2020 Jan/Feb;35(1):23-28. doi: 10.1177/1062860619846559. Epub 2019 May 5. PMID: 31055946.	Patients with prolonged hospitalization were more likely than those with extended hospitalization to have financial ($P < .001$) or behavioral ($P < .001$) barriers, homelessness ($P < .05$), and impairment of decision-making capacity ($P < .01$). Understanding the characteristics and discharge barriers of patients who are hospitalized despite medical readiness may increase appropriateness of inpatient resources.
	Harrison JD, Greysen RS, Jacolbia R, Nguyen A, Auerbach AD. Not ready, not set...discharge: Patient-reported barriers to discharge readiness at an academic medical center. J Hosp Med. 2016 Sep;11(9):610-4. doi: 10.1002/jhm.2591. Epub 2016 Apr 15. PMID: 27079295	One hundred sixty-three patients were enrolled, and 68 patients (42%) completed an admission survey and discharge survey ≤ 48 hours before discharge. Patients completed on average 1.82 surveys (standard deviation, 1.10; range, 1-8). Total and mean numbers of barriers were highest on the admission survey and decreased until the fourth survey. On average, the total number of barriers to discharge decreased by 0.15 (95% confidence interval: 0.01-0.30) per day ($P = 0.047$). Ninety percent of patients were discharged with at least 1 issue. The 3 most common barriers on the admission and discharge survey remained the same: pain, lack of understanding of recovery plan, and daily-living activities.
	Flaugh RA, Shea J, Difazio RL, Berry JG, Miller PE, Lawler K, Matheney TH, Snyder BD, Shore BJ. Barriers to Discharge After Hip Reconstruction Surgery in Non-ambulatory Children With Neurological Complex Chronic Conditions. J Pediatr Orthop. 2022 Sep 1;42(8):e882-e888. doi: 10.1097/BPO.0000000000002219. Epub 2022 Jul 25. PMID: 35878419.	Approximately three-quarters of patients experienced delayed discharge (73%) with barriers identified for 74% of delays. Most prevalent barriers involved education (30%) and durable medical equipment (29%). Postdischarge transportation and placement accounted for 26% of barriers and 3.5 times longer delays ($P < 0.001$). Factors associated with delayed discharge included increased medical comorbidities ($P < 0.05$) and GMFCS V ($P < 0.001$). Longer LOS and medical clearance times were found for female ($P = 0.005$), older age ($P < 0.001$), bilateral surgery ($P = 0.009$), GMFCS V ($P = 0.003$), and non-English-speaking patients ($P < 0.001$).
	Plotnikoff KM, Krewulak KD, Hernández L, Spence K, Foster N, Longmore S, Straus SE, Niven DJ, Parsons Leigh J, Stelfox HT, Fiest KM. Patient discharge from intensive care: an updated	We included 314 articles from 11,461 unique citations. Two-hundred and fifty-eight (82.2%) articles were primary research articles, mostly cohort (118/314, 37.6%) or qualitative (51/314, 16.2%) studies. Common discharge themes across all articles included adverse events,

	<p>scoping review to identify tools and practices to inform high-quality care. Crit Care. 2021 Dec 17;25(1):438. doi: 10.1186/s13054-021-03857-2. PMID: 34920729; PMCID: PMC8684123.</p>	<p>readmission, and mortality after discharge (116/314, 36.9%) and patient and family needs and experiences during discharge (112/314, 35.7%). Common discharge facilitators were discharge education for patients and families (82, 26.1%), successful provider-provider communication (77/314, 24.5%), and organizational tools to facilitate discharge (50/314, 15.9%). Barriers to a successful discharge included patient demographic and clinical characteristics (89/314, 22.3%), healthcare provider workload (21/314, 6.7%), and the impact of current discharge practices on flow and performance (49/314, 15.6%). We identified 47 discharge tools that could be used or adapted to facilitate an ICU discharge.</p>
	<p>Meador R, Chen E, Schultz L, Norton A, Henderson C Jr, Pillemer K. Going home: identifying and overcoming barriers to nursing home discharge. Care Manag J. 2011;12(1):2-11. doi: 10.1891/1521-0987.12.1.2. PMID: 21413534.</p>	<p>A qualitative analysis was conducted to describe barriers to discharge and strategies intervention staff used to leverage each client's strengths and work around obstacles. Three main barriers to discharge were found: having an unstable or complex medical condition, lacking family or social support, and being unable to obtain suitable housing. Intervention staff advocated on the behalf of clients, encouraged clients to build skills toward independent living. and contributed extensive knowledge of local resources to advance client goals. Cases of successful transition suggest that a person-centered approach from intervention staff combined with a flexible organizational structure is a promising model for future interventions.</p>
<p>Discharge Planning/Communication</p>	<p>Rush M, Herrera N, Melwani A. Discharge Communication Practices for Children With Medical Complexity: A Retrospective Chart Review. Hosp Pediatr. 2020 Aug;10(8):651-656. doi: 10.1542/hpeds.2020-0021. PMID: 32709740.</p>	<p>Discharge communication was documented for 59% of patient encounters. Communication was less likely to occur for patients with technology dependence (P = .01), older patients (P = .02), and those who were admitted to a teaching service (P = .04). The quality of discharge summaries did not change for patients with technology dependence compared with patients without technology dependence. Communication with the PCP at discharge was less likely to be documented in children with technology dependence. Hospitalists may encounter barriers in completion of appropriate and timely discharge communication with PCPs for CMC. Consistent handoff processes could be used to improve care for our patients with enhanced coordination needs.</p>

	<p>Zoucha J, Hull M, Keniston A, Mastalerz K, Quinn R, Tsai A, Berman J, Lyden J, Stella SA, Echaniz M, Scaletta N, Handoyo K, Hernandez E, Saini I, Smith A, Young A, Walsh M, Zaros M, Albert RK, Burden M. Barriers to Early Hospital Discharge: A Cross-Sectional Study at Five Academic Hospitals. <i>J Hosp Med</i>. 2018 Dec;13(12):816-822. doi: 10.12788/jhm.3074. PMID: 30496327.</p>	<p>Discharge orders for patients ready for discharge are most commonly delayed because physicians are caring for other patients. Discharges of patients awaiting care completion are most commonly delayed because of imbalances between availability and demand for ancillary services. Team census, rounding style, and teaching teams affect discharge times.</p>
	<p>Zhao EJ, Yeluru A, Manjunath L, Zhong LR, Hsu HT, Lee CK, Wong AC, Abramian M, Manella H, Svec D, Shieh L. A long wait: barriers to discharge for long length of stay patients. <i>Postgrad Med J</i>. 2018 Oct;94(1116):546-550. doi: 10.1136/postgradmedj-2018-135815. Epub 2018 Oct 9. PMID: 30301835.</p>	<p>Discharge site coordination was the most frequent cause of delay, affecting 56% of patients and accounting for 80% of total non-medical postponement days. Goals of care issues and establishment of follow-up care were the next most frequent contributors to delay. Together with perspectives from interviewed staff, these results highlight multiple different areas of opportunity for reducing LLOS and maximizing the care capacity of inpatient hospitals.</p>
	<p>Jones WD, Rodts MF, Merz J. Influencing Discharge Efficiency: Addressing Interdisciplinary Communication, Transportation, and COVID-19 as Barriers. <i>Prof Case Manag</i>. 2022 Jul-Aug 01;27(4):169-180. doi: 10.1097/NCM.0000000000000549. PMID: 35617531.</p>	<p>Nurses fully trained in the interdisciplinary communications program aimed to reduce DOTE had significantly lower DOTE outcomes on their discharges compared with untrained staff (i.e., average untrained = 127 min, average trained = 93 min). In addition, the fully trained nurses had 14% more of their discharges fall at or below the 90-min goal compared with untrained staff (i.e., untrained = 40%, trained = 54%). Supplemental research also suggested that the content of the communication training program was very relevant (e.g., empowering families to pick up the patients and using scheduling vs. will-call transportation strategies with patients lowered the DOTE metric). Corollary analyses showed that readmissions were also lowered, and patient satisfaction ratings increased. In addition, the interdisciplinary communications training program can benefit from being updated to include content on how COVID-19 issues adversely impact discharge times since significant relationships between various COVID-19 measures and higher discharge exit times were documented.</p>
	<p>Schwarz CM, Hoffmann M, Schwarz P, Kamolz LP, Brunner G, Sendlhofer G. A systematic literature review and narrative synthesis on the risks of</p>	<p>In total, 29 studies were included in this review. The major identified risk factors are the delayed sending of the discharge letter to doctors for further treatments, unintelligible (not patient-centered) medical</p>

	<p>medical discharge letters for patients' safety. BMC Health Serv Res. 2019 Mar 12;19(1):158. doi: 10.1186/s12913-019-3989-1. PMID: 30866908; PMCID: PMC6417275.</p>	<p>discharge letters, low quality of the discharge letter, and lack of information as well as absence of training in writing medical discharge letters during medical education.</p> <p>Multiple risks factors are associated with the medical discharge letter. There is a need for further research to improve the quality of the medical discharge letter to minimize risks and increase patients' safety.</p>
	<p>Patel H, Fang MC, Mourad M, Green A, Wachter RM, Murphy RD, Harrison JD. Hospitalist and Internal Medicine Leaders' Perspectives of Early Discharge Challenges at Academic Medical Centers. J Hosp Med. 2018 Jun 1;13(6):388-391. doi: 10.12788/jhm.2885. Epub 2017 Dec 6. PMID: 29240850.</p>	<p>We received 61 responses from 115 institutions (53% response rate). Forty-seven (77%) "strongly agreed" or "agreed" that early discharge was a priority. "Discharge by noon" was the most cited goal (n = 23; 38%) followed by "no set time but overall goal for improvement" (n = 13; 21%). The majority of respondents reported early discharge as more important than obtaining translators for non-English-speaking patients and equally important as reducing 30-day readmissions and improving patient satisfaction. The most commonly reported factors delaying discharge were availability of postacute care beds (n = 48; 79%) and patient-related transport complications (n = 44; 72%). The most effective early discharge initiatives reported involved changes to the rounding process, such as preemptive identification and early preparation of discharge paperwork (n = 34; 56%) and communication with patients about anticipated discharge (n = 29; 48%). There is a strong interest in increasing early discharges in an effort to improve hospital throughput and patient flow.</p>
	<p>Subramony A, Schwartz T, Hametz P. Family-centered rounds and communication about discharge between families and inpatient medical teams. Clin Pediatr (Phila). 2012 Aug;51(8):730-8. doi: 10.1177/0009922812446012. Epub 2012 May 7. PMID: 22566708.</p>	<p>Of 118 families, 70% knew discharge goals, whereas only 41% knew discharge day and 63% knew discharge medications. English speakers were more likely to report knowing discharge goals (adjusted odds ratio [AOR] = 3.9, 95% confidence interval [CI] = 1.2-12.2) and discharge medications (AOR = 3.2, 95% CI = 1.1-9.8) compared with Spanish speakers. Non-Hispanics were more likely to report knowing discharge day compared with Hispanics (AOR = 2.7, 95% CI = 1.1-6.6). Families on teams that conduct FCRs are knowledgeable of discharge goals but less knowledgeable of discharge day and medications. Spanish-speaking and Hispanic families are less likely to report knowing discharge plans compared with English-speaking and non-Hispanic counterparts.</p>

	<p>Rohatgi N, Kane M, Winget M, Haji-Sheikhi F, Ahuja N. Factors Associated With Delayed Discharge on General Medicine Service at an Academic Medical Center. J Healthc Qual. 2018 Nov/Dec;40(6):329-335. doi: 10.1097/JHQ.000000000000126. PMID: 29315151.</p>	<p>Patients were interviewed to identify whether they were aware of their EDD. Bedside nurses were interviewed to identify barriers to discharge. In our study, 49.8% of the patients had a delayed discharge. Patients who were aware of their EDD were less likely to have a delayed discharge (odds ratio [OR], 0.3 [95% confidence interval (CI), 0.1-0.6], $p < .001$). Patients who were discharged on Saturday or Sunday (OR, 4.8 [95% CI, 1.7-14.6], $p < .001$) and patients who were waiting for physicians' consult (OR, 4.5 [95% CI, 1.6-14.4], $p = .007$) were more likely to have a delayed discharge. Early identification of the EDD and communicating it with the care team and the patient/family, mobilizing resources for safe weekend discharges, and creating efficient process for consultations might decrease delayed discharges.</p>
	<p>Tipton K, Leas B, Mull N, Siddique S, Greysen SR, Lane-Fall M, Tsou A. Interventions to Decrease Hospital Length of Stay. AHRQ Evidence-Based Practice Centers. 2021. https://effectivehealthcare.ahrq.gov/sites/default/files/related_files/hospital-length-stay-technical-brief.pdf</p>	<p>Few studies have evaluated system-level interventions focused on medically complex, high-risk, or vulnerable patient populations, including frail elderly patients and those with complex chronic illness. Strategies assessed in multiple systematic reviews include geriatric consultation services and early specialized discharge planning. • Substantial research gaps need to be addressed, including interventions for socially or economically vulnerable populations and patients with psychiatric or substance use disorders, contextual factors affecting feasibility of implementation, and the resources and potential savings associated with interventions to reduce LOS. • Hospital administrative leaders, researchers, and policymakers can work to reduce LOS by improving research practice, developing targeted health system interventions, and collaboratively addressing the social care needs of medically complex and vulnerable patient populations. • Two interventions (clinical pathways and case management) improved key outcomes for patients with heart failure. Clinical pathways reduced LOS, readmission, and mortality (low to moderate quality evidence from a single systematic review). Similarly, case management decreased LOS and readmissions (moderate quality evidence from a single systematic review). More research is needed to confirm these findings (Figure i).</p>

	<p>Gonçalves-Bradley DC, Lannin NA, Clemson L, Cameron ID, Shepperd S. Discharge planning from hospital. Cochrane Database of Systematic Reviews 2022, Issue 2. Art. No.: CD000313. DOI: 10.1002/14651858.CD000313.pub6. Accessed 08 June 2023.</p>	<p>Participants allocated to discharge planning and who were in hospital for a medical condition had a small reduction in the initial hospital length of stay (MD – 0.73, 95% confidence interval (CI) – 1.33 to – 0.12; 11 trials, 2113 participants; moderate-certainty evidence), and a relative reduction in readmission to hospital over an average of three months follow-up (RR 0.89, 95% CI 0.81 to 0.97; 17 trials, 5126 participants; moderate-certainty evidence). There was little or no difference in participant's health status (mortality at three- to nine-month follow-up: RR 1.05, 95% CI 0.85 to 1.29; 8 trials, 2721 participants; moderate certainty) functional status and psychological health measured by a range of measures, 12 studies, 2927 participants; low certainty evidence). There was some evidence that satisfaction might be increased for patients (7 trials), caregivers (1 trial) or healthcare professionals (2 trials) (very low certainty evidence)</p>
	<p>American Hospital Association. Private Sector Hospital Discharge Tools. January 2015. Accessed June 20, 2023. https://www.aha.org/system/files/content/15/15dischargetools.pdf</p>	<p>At this time, there is no standardized hospital discharge tool. However, the Department of Health and Human Services (HHS) has developed a standardized patient assessment tool to capture clinical and demographic characteristics of patients across post-acute care settings. This tool exists in two forms – the Continuity Assessment Record and Evaluation (CARE) Tool and the B-CARE tool¹. However, these two tools do not identify the best next setting for patients being discharged from general acute-care hospitals, and providers report both tools are burdensome and lack the ability to capture the full spectrum of a patient's medical complexity to determine post-hospital care needs. Hospital discharge planning tools differ from patient assessment tools in that hospital discharge planning tools are used only within the general acute-care hospital to inform patient transition into post-acute care.</p>
	<p>Bajorek, S. A., McElroy, V. 2020. Discharge Planning and Transitions of Care. Agency for Healthcare Research and Quality: Patient Safety Network. Accessed June 20, 2023. https://psnet.ahrq.gov/primer/discharge-planning-and-transitions-care</p>	<p>Transitions of care refer to the movement of patients between different healthcare settings such as from an ambulance to the emergency department, an intensive care unit to a medical ward, and the hospital to home. The transition from hospital to home can be challenging as patients and families become responsible for care coordination. Hospital discharges are complicated and often lack</p>

		standardization. Patients receive an onslaught of new information, medications and follow-up tasks such as scheduling appointments with primary care providers. As such, discharge planning should begin as soon as possible.
	Dreyer, T. 2014. Care Transitions: Best Practices and Evidence-Based Programs. Center for Healthcare Research & Transformation. Accessed June 20, 2023. https://www.chrt.org/wp-content/uploads/2019/10/CHRT-Care-Transitions-Best-Practices-and-Evidence-based-Programs-.pdf	This paper summarizes best practices in care transitions and describes successful programs that reduced readmissions and overall costs. The paper also includes an annotated bibliography detailing the research on care transitions (Attachment A) and describes the care transitions programs offered by the University of Michigan Health System and Blue Cross Blue Shield of Michigan (Attachment B). The program descriptions were developed through interviews with key informants in each program, providing greater detail than was available on care transitions programs at other organizations
	Mansukhani RP, Bridgeman MB, Candelario D, Eckert LJ. Exploring Transitional Care: Evidence-Based Strategies for Improving Provider Communication and Reducing Readmissions. P T. 2015 Oct;40(10):690-4. PMID: 26535025; PMCID: PMC4606859.	In summary, more-effective handoff and improved provider communication can have a positive effect on hospital readmissions, quality of care, and patient satisfaction, ultimately reducing overall health care costs while potentially avoiding CMS penalties for excessive rehospitalization rates. In this article, we discuss evidence-based strategies for improving provider communication and reducing readmissions
	Patient Flow Initiative Eliminates Barriers to Discharge. Hosp Case Manag. 2016 Dec;24(12):171-2. PMID: 30133204.	When Intermountain Medical Center in Murray, UT, reached capacity a few months after opening, a year-long initiative on patient flow determined that part of the holdup was taking care of last-minute details. Each unit holds a multidisciplinary care coordination meeting every day to discuss each patient and what they need to go to the next level of care. The team sets an anticipated discharge date during the first meeting, giving everyone on the team a target for carrying out their responsibilities. The unit charge nurse chairs the meetings and ensures team members carry out their responsibilities for moving the patient toward discharge.
	Li, J, Clouser, J, Brock, J, Adu, A, Vundi, N, and Williams, M. 2022. Effects of Different Transitional Care Strategies on Outcomes After Discharge – Trust Matters, Too. Joint Commission	In concert with care coordination activities that bridge the transition from hospital to home, hospitals' clear communication and fostering of trust with patients were associated with better patient-reported outcomes and reduced health care utilization.

	Journal on Quality and Patient Safety. 48(1): P40-52. DOI: https://doi.org/10.1016/j.jcjq.2021.09.012	
	Burton, R. 2012. Improving Care Transitions. HealthAffairs. Web Access. DOI: 10.1377/hpb20120913.327236	Given the current budgetary environment and the fact that Medicare is estimated to spend \$12 billion per year on potentially preventable hospital readmissions, interest in improving care transitions to reduce Medicare spending is likely only to grow.
	Health Services Advisory Group. Care Coordination Best-Practices Toolkit. 2019. Quality Improvement Organizations/Health Services Advisory Group. Accessed June 20, 2023. https://www.hsag.com/globalassets/care-coordination/carecoordtoolkit032019final508.pdf	As a CMS Quality Improvement Organization (QIO), HSAG is committed to improving the quality of care delivered in each state we serve. HSAG has met with providers across this state and nationally, identifying tools that will aid you in the work of improving care transitions and coordination across the continuum. Many of these tools have been included in this book to serve as a guide to readmission prevention. We hope this information will help you and your organization improve care coordination efforts and result in reduced avoidable hospital readmissions.
	Stanton M, Dunkin J. A review of case management functions related to transitions of care at a rural nurse managed clinic. Prof Case Manag. 2009 Nov-Dec;14(6):321-7. doi: 10.1097/NCM.0b013e3181c3d405. PMID: 19935350.	In this study, it was determined that the case managers were managing the transitions between the clinic and other outpatient services, as well as managing and ordering the patient's medications and therapies. Approximately 45%-50% of case management functions involved either obtaining medication assistance for patients without funding or assisting patients with the ordering and procurement of essential medicines. Another 45% of the case manager's time was spent coordinating referrals to a wide variety of specialty clinics for diagnostic testing, obtaining appointments with community-based family practice physicians, or coordinating examinations for specialty physicians.