

## Position Statement

Real Time Information to Support Policy Decisions

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# Rethinking Patient Discharge: A Low-cost Opportunity for Healthcare Efficiency Gains

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### Patient discharge delays are a source of healthcare inefficiencies

Frustration over hospital discharge delays and the bottlenecks they create are a familiar experience to patients and staff. Hours are wasted while inpatients wait to leave, staff wait for free beds, and new patients wait for initial evaluation in [overcrowded emergency departments](#) (EDs). In addition to causing revenue losses, discharge delays may put patients at risk. Anxiety, depression, physical decline from immobility, and risks of infections, bedsores, and falls all increase the longer the patient stays in the hospital, and [clinical studies](#) show higher morbidity and mortality in patients whose discharge is delayed. ED overcrowding can lead to [serious adverse events](#) from delayed critical care and [medical errors](#), and some patients may become so frustrated that they [choose to leave](#) before being seen.

While discharge delays are only one factor contributing to overcrowding, they are also an overlooked one. Specific [evidence-based guidance](#) to address discharge delays is sparse, with current evidence focused on department-specific patient flow as opposed to hospital-wide strategies. Inherent limitations in conducting unbiased definitive research restricts available evidence; however, successful improvement efforts have been documented in the clinical literature and show that large efficiency gains can be achieved with relatively modest investments. The evidence also highlights the need for more research and support for care provider efforts. ECRI believes addressing discharge delays is a major opportunity for efficiency and safety gains and encourages concerted effort by healthcare stakeholders to help optimize discharge processes.

### Addressing discharge delays remains an unmet need

Typically, patient discharge requires that staff members work in concert across different services to address all [discharge components](#) before the physician writes the [discharge order](#). Components include getting clearance from consulting physicians, making sure patients have a place to go (e.g., assisted living facility), scheduling at-home services (e.g., nurse visits), obtaining medications and medical equipment, and arranging transportation. Any setback in these steps leads to patients waiting in their beds. Issues with adjacent processes, such as staff shift changes, can also delay discharge.

Current attempts to address overcrowding in the United States lack standardization and largely focus on [preventing readmissions](#) rather than improving patient flow. Some hospitals have instituted improvement projects targeting ED admission times; however, potential gains are limited by bed availability. [The Joint Commission](#) advises against focusing on admission rates alone and recommends focusing on both admission and discharge throughout the hospital. Suggested focus areas include spreading elective admissions to avoid volume spikes, keeping scheduled procedures on time to avoid domino effects on schedules, discharging patients earlier in the day and on weekends, and having a full-capacity action plan.

### Discharge lounges and other low-cost emerging strategies can optimize patient discharge

Despite a lack of structured clinical guidance, several successful patient flow improvement strategies are reported in the literature,

such as [discharge lounges](#) (DCLs). While DCL definitions vary, the consensus is that DCLs provide a place for patients to wait for discharge components to be completed, thereby freeing beds for other patients. DCLs vary in staffing, equipment, and amenities according to hospital wards' needs. [A recent ECRI Clinical Evidence Assessment](#) found favorable evidence from clinical implementation studies suggesting that DCLs may effectively increase inpatient bed availability and reduce wait times without increasing readmissions or adverse events. Although the evidence did not permit conclusions generalizable to different clinical settings, patients, and DCL setups, the findings show that DCLs are a resourceful way to transition outgoing patients while still accommodating their needs. The studies also highlight inherent limitations that hospitals should keep in mind such as equipment and staffing needs (e.g., supervising pediatric patients in a DCL), planning for preventing and handling events in the DCL, and the critical role of communication in multidisciplinary teams to ensure patients are ready for discharge and have received all needed instructions.

Other discharge process improvement strategies described in the literature include the following:

- [Nurse and allied health provider-led models](#) carry out discharges according to criteria preset by the physician (often via pended orders) to increase discharge time flexibility. However, nurse-led discharge can also lead to miscommunication and patients being discharged prematurely. [A meta-analysis](#) focusing on elderly patients suggests such models may increase length of stay, highlighting the need for validation in each care setting.
- [Team-based discharge models](#) aim to reduce length of stay by adopting a multidisciplinary approach and emphasizing communication to address discharge components in a holistic way. To aid the success of team-based care, discharge discussions need to be initiated early in a patient's care and should include family members and patients to ensure all necessary information has been provided before discharge. Some of these models also incorporate a dedicated case manager to lead communication and ensure process continuity and accountability.
- [Early discharge to home](#) shifts discharge-related care from the inpatient bedside to the patient's home by coordinating homecare earlier (ideally before discharge) and with frequent follow-ups, leveraging telehealth when applicable. Successful transitional strategies include teaching home caregivers skills for caring for the patient alone and even simulating home care (i.e., for practice) while patients are still in the hospital.

When major changes to the discharge process are not feasible, general process optimization approaches, such as Six Sigma

methodologies, may be useful, and [successful instances](#) are well-documented. Because these approaches are not specifically intended for healthcare, thoroughly evaluating the risks and including appropriate metrics are essential.

## Despite its limitations, evidence supports rethinking patient discharge processes

High-quality studies on hospital improvement processes are inherently difficult to conduct. Ideally, such studies should have parallel control and intervention patient groups enrolled at several hospitals with similar characteristics, but this is usually not feasible due to logistic challenges. Thus, most available studies compare outcomes before and after process implementation at a single hospital and are thus at a high risk of bias from time-dependent confounders.

Nevertheless, available evidence provides a rationale for action, as studies demonstrate the potential for efficiency gains through relatively modest process changes and investments. [Some studies](#) that implemented DCLs were able to [reallocate resources](#) and staff, saving on a large upfront investment. Hospitals can also often target a [return on the investment](#) from decreased length of stay and fewer complications and readmissions. Experiences described in [the literature](#) recommend looking at the hospital system as a whole rather than at individual departments. Once bottlenecks are identified, hospitals can consider ways to [implement change](#). For example, to implement a DCL, a hospital will need to determine whether the necessary space is available. Next, a hospital will need to consider DCL utilization to maximize efficiency gains, in particular by identifying patients who can safely use the DCL. In turn, patient transfer criteria will determine the DCL's staffing and equipment needs, though resource availability may also limit DCL use criteria. [Other factors](#) to consider are the DCL hours of operation and available amenities (e.g., food, television). [Some studies](#) mentioned DCL liaisons assigned to promote usage and aid in success.

To measure process improvement success and identify obstacles early on, hospitals should consider whether partial deployment to compare new and old processes side-by-side is feasible. [Metrics can be established](#) to measure patient flow improvement, such as time between admission request and acceptance, ambulance diversion rates, and patient satisfaction. Measuring patient-oriented outcomes (e.g., readmissions, mortality, other adverse events) is a must to ensure patient safety. Long-term follow-up is needed to capture the full process impact, such as insufficient discharge education on lifestyle changes leading to harm over time. Because improved flow can also increase patient volume, attention to [workload](#), stress, and burnout risk to staff is also needed.

## Efforts to optimize discharge processes are warranted

Despite its limitations, available evidence supports taking action to address bottlenecks in patient discharge, as the potential for efficiency gains is demonstrated. Furthermore, the evidence shows the need for additional studies assessing each approach. Due to the logistic challenges of establishing a DCL, we expect evidence will continue to come mostly from individual hospital improvement projects; therefore, supporting these efforts is in the interest of public health. Government agencies and third-

party payers can support these efforts by funding research and by adopting safe and rapid patient discharge as a component of value-based payment schemes in a way similar to what has been achieved through Medicare's [Hospital Readmissions Reduction Program](#). Medical societies and patient safety organizations can also help by providing consensus on critical process improvement parameters, metrics, and safeguards. Thus, it is ECRI's opinion that patient discharge delays are a major but overlooked source of healthcare inefficiencies and that the time has come for a coordinated, nationwide effort to address them.

Learn more: [www.ecri.org](http://www.ecri.org)

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## Are you interested in improving patient discharge processes?

Please share your thoughts and suggestions on process improvement elements, metrics, and safeguards at <https://ly.ecri.org/dischargedelays>.

### Policy Statement

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