

What is the effectiveness of the Discharge Lounge? A Rapid Review

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Executive Summary

Background

This review was undertaken to inform best practice in discharge processes.

Objective

The aim of this rapid review was to determine the effectiveness of discharge lounges with specific focus on impact of altering patient flow and levels of patient satisfaction.

Methods

In 2016 an evidence brief was undertaken about studies and reports that evaluated and described the effectiveness of discharge lounges at improving patient flow and patient experience of discharge. This search was updated in 2020.

Results

A total of 4 papers were identified from 2016 and 2020 search (One systematic review, and three single studies).

These studies are summarised below.

Systematic review - Franklin, 2019

A systematic review was performed on Discharge Lounges with the aim of providing a synthesis of the features, implementation practices, and apparent outcomes (to the extent available) of discharge lounges.

The review described the features of discharge lounges using 4 domains: patient eligibility criteria and identification, hours and staffing, clinical and other services provided in the discharge lounge, and space and amenities (Figure 1).

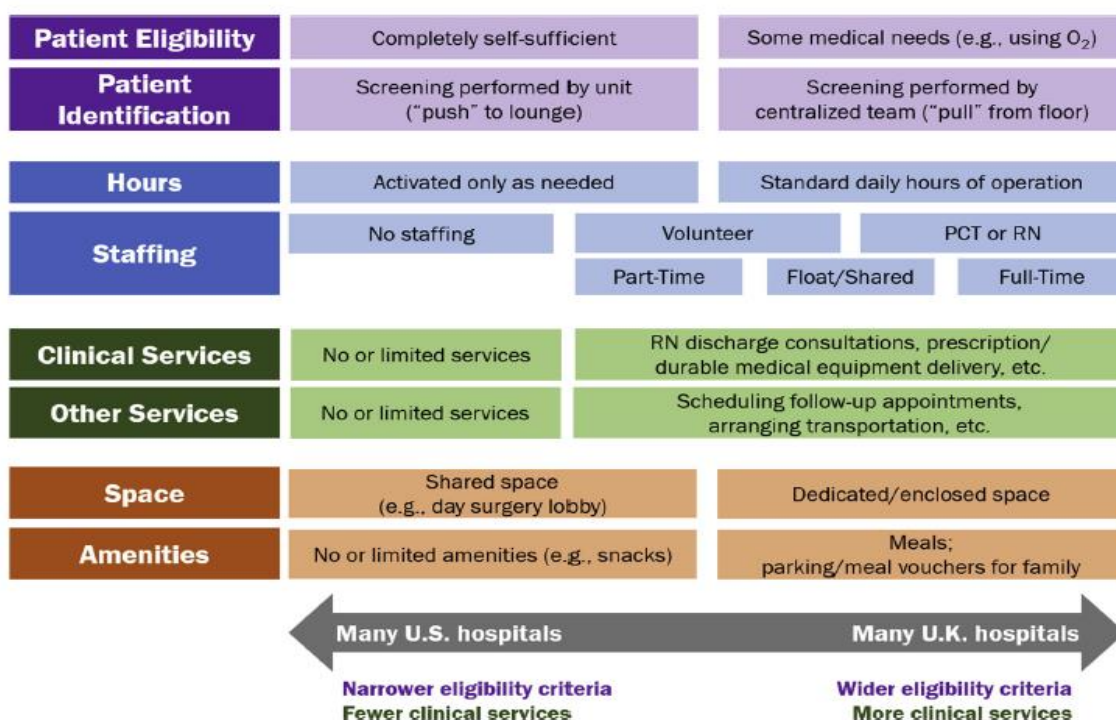


Figure 1: Discharge lounge design variables. PCT, Patient care technician; RN, registered nurse; US, United States; UK, United Kingdom.

Prevalence

In the United Kingdom, between 31% and 60% of hospitals have been estimated to use discharge lounges. There were no statistics on the usage of discharge lounges in the United States.

Performance Measures

There is limited data describing the impact of discharge lounges. One quality improvement report (Hernandez et al., 2014) used an uncontrolled pre-post study design, presented peer-reviewed empirical evidence focused on a discharge lounge. This study found that the outcomes were quite favorable with ED stays over 6 hours decreasing from 24.6 to 15.8%, discharges before noon increasing from 33.4 to 41.5%, and time improved from 126 down to 84 minutes from the time a discharge order was written to the time the patients actually left their inpatient bed.

Implementation Challenges

“Although insufficient data exist to estimate the average life span of discharge lounges, anecdotally, various hospitals have implemented, terminated, and in some cases subsequently relaunched discharge lounges, suggesting either that such efforts are not universally successful or that they sometimes subsequently become unnecessary.”

“Articles recounting unsuccessful discharge lounge implementations discuss underuse of the discharge lounge as a primary reason for program failure. Documented barriers to discharge lounge use revolve around insufficient staff buy-in, suboptimal patient identification procedures, and competing demands on the time of various clinical team members responsible for discharges.”

Articulating a Process for Designing Discharge Lounges

There is a vast array of discharge lounge designs, objectives (flow versus discharge quality), and features (patient selection procedures, staffing, and services). It is stated also that the design choices are unlikely to transfer across different hospitals due to the differing contexts and goals. In addition to this, there is such a paucity of data that identifying best-practice is also not possible.

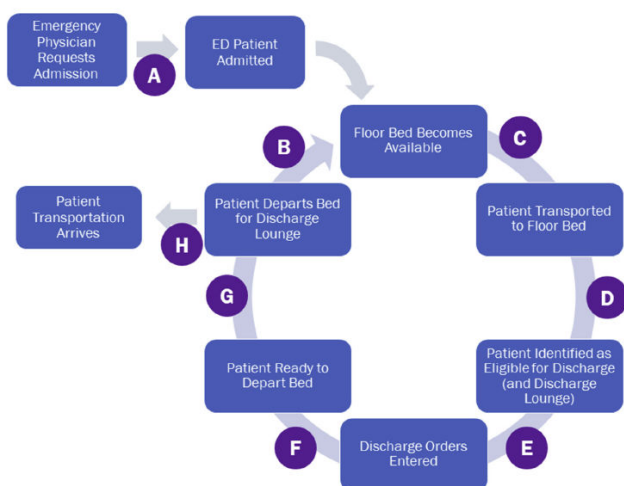
However, what evidence that does exist describes a using “basic lean management practices, including plan-do-study-act cycles and A3 problem solving, an approach to systematically defining a problem, identifying its root causes by using data, developing countermeasures, and monitoring results.”

Quantifying the Return on Investment for Discharge Lounges

There is no data to provide evidence for the return on investment of discharge lounges. However, “return on investment can be estimated by comparing the costs and benefits of discharge lounge implementation and operation. Costs of discharge lounges include investments in space, staffing, and other resources, along with expenses associated with providing care for any readmitted patients whose readmission is related to defects in discharge lounge–related processes. Benefits of discharge lounges include mitigating costs associated with ED boarding and crowding, including those related to forgone revenue from reduced capacity, lengthened wait times, and increased rates of leaving without being seen.”

Evaluating the Need for and Effects of Discharge Lounges versus Other Patient Flow Interventions

There should be a distinction “between the need for and effects of discharge lounges themselves and other patient flow interventions that are often concurrently implemented, but may also be independently implemented. The discharge lounge is a mechanism of accommodating—but not fundamentally eliminating—variation in clinical operations. Numerous sources of variation leading to ED boarding and crowding exist in the admission-discharge continuum, a selection of which is illustrated in” Figure 2.



A	Time between admission request and acceptance by admitting provider
B	Time between previous inpatient's departure from bed and when room is cleaned and prepared for next patient
C	Time between when room is ready and when newly admitted patient is transported from ED to room
D	<ul style="list-style-type: none"> Day/time patient identified as eligible for discharge Day/time patient identified as eligible for discharge lounge; proportion of patients who are screened for discharge lounge
E	Time of day discharge orders written by physician
F	Time taken for discharge order execution by nursing, radiology, lab, pharmacy, and other services
G	Time between patient's readiness to depart inpatient bed and when patient is transported to discharge lounge
H	Time between arrival at discharge lounge and arrival of patient's transportation to home or next care setting

Figure 2. Selected sources of variation in the admission-discharge continuum (with discharge lounge).

“Although the discharge lounge is capable of serving as a buffer to mitigate some of these sources of variation when hospital operations are poorly harmonized (e.g. by allowing patients to depart their inpatient beds while awaiting medication), addressing the root causes of ED crowding and boarding—discharge-related and otherwise—requires other cross-functional strategies.”

Single studies (identified in 2016 report)

Hernandez N 2014 (also included in Franklin review above)

Hernandez N, et al. 2014. A reimagined discharge lounge as a way to an efficient discharge process. BMJ Quality Improvement reports.

Summary: To achieve our goals of improving patient flow and discharge efficiency, we proposed a new project, called the “Discharge Hospitality Center (DHC).” Our previous attempt at creating a ‘discharge lounge’ was unsuccessful. However, we learned from that endeavour which then allowed us to completely redesign the new DHC project and incorporate ongoing feedback from all stakeholders, sharing performance metrics regularly, and collectively searching for ways to overcome barriers and improve performance together. Strict eligibility criteria were created, and every patient was screened for DHC eligibility daily at our multidisciplinary discharge planning meeting. This multidisciplinary group made the final decision about eligibility for the DHC, and took responsibility for distributing the list of eligible patients to the acute care nursing floors immediately after their early morning meeting.”

“The suggested key components of a successful discharge lounge were communication with stakeholders and their buy-in, appropriate location allowing convenient patient pick-up and diligent selection of appropriate patients.”

Reasons for discharge lounge failures:

- Lack of upfront and continuous education of the front line staff and, as a result, lack of their understanding of the process
- Location in a small isolated room that was difficult to find, with no entertainment facilities or oversight
- Lack of ownership with efforts focused only on initial project period without consideration of sustainability
- Inadequate screening of patients for eligibility

Outcomes: **“Our outcomes were quite favourable. Four months after the DHC project was launched, ED stays over 6 hours decreased from 24.6 to 15.8%, discharges before noon increased from 33.4 to 41.5%, and time improved from 126 down to 84 minutes from the time a discharge order was written to the time the patients actually left their inpatient bed.”**

Naiying L, 2013. Implementation of Discharge Lounge (DCL). Singapore Healthcare Management.

Summary: This poster presentation describes the effectiveness of the Discharge Lounge based on the reduction in admission wait time as well as bed day savings. They set out to determine if the average waiting time can be reduced by moving patients for discharge to a separate location to free up hospital beds.

The Discharge Process was as follows:

1. Doctor orders discharge
2. Nurse assesses suitability of patients to be sent to the discharge lounge
3. Nurse/patient service associate brings patient to discharge lounge, cleaning of bed begins
4. Discharge lounge patient service associate actibates Pharmacy and kitchen to send medications and meals to discharge lounge
5. Ward nurse brings discharge documents to patient at the discharge lounge once complete
6. Patient is discharged from discharge lounge.

Outcome: The introduction of a discharge lounge brought about a reduction of admission wait time of up to 2 hours for up to 6 patients a day, translating to a bed days savings of 7.9 days per month during the period of study.

Hospital Interlinks Project. Hospital Discharge Unit/Lounge

Summary: “The discharge lounge generally includes only chairs as a waiting area and may only be available at certain times of the day and with lower grades of staff available (e.g. HCAs). More comprehensive discharge units may also include beds for patients to use, shower facilities, and have nursing staff available at all times. Very few units are also open 24 hours a day, seven days a week. Such units have the potential to discharge patients at any time of day, any day of the week or could be used as a holding area if the patient is to be transferred into a care home. Discharge units may also have a number of dedicated staff for facilitating discharge from hospital, such as occupational therapists who can complete home visits and have links in the community. Specific processes which can be sped up by the discharge unit are: meeting transport (family, friends, or transport services), receiving medication from the pharmacy, and completing discharge paperwork or electronic discharge. The discharge unit requires space in the hospital as any other unit or ward would. Specialised discharge coordinators can also be a part of the unit and begin planning for the patient’s discharge on admission.”

Strengths

- Discharge units function in the reverse way as admission units and therefore should be easily transferable across countries and systems. They do not require any set preconditions, though electronic systems in hospital would be preferable.
- Discharge lounges help streamline processes on the day of discharge – essentially the transition from acute care to community care. Discharge lounges allow resources to be freed up for new admissions thus reducing waiting times for incoming patients.

Weaknesses

The discharge lounge/unit is only effective as part of a holistic discharge policy and requires many steps to be taken prior to internal transfer to the discharge unit.

Opportunities

Discharge units should be seen as more than just a waiting area, which in some more basic implementations is all that lounges are. Having a discharge unit available 24 hours a day 7 days a week could allow patients to be discharged at any time of day any day of the week. This concept would also increase the benefit to patients as they could potentially go home at weekends or at night when they are ready as currently the benefit of lounges is primarily concerned with streamlining resource allocation in hospital.

Conclusions

Overall, the limited body of evidence suggests there is wide variation in discharge lounge design and there is limited insight into their performance. Subsequently, there should be a well-defined rationale for implementing a discharge lounge with respect to whether the discharge lounge is a mechanism of accommodating patients at times of need, a means of providing a streamlined discharge process and experience, or both.

References

Franklin, B. J., Vakili, S., Huckman, R. S., Hosein, S., Falk, N., Cheng, K. & Goralnick, E. (2020). The Inpatient Discharge Lounge as a Potential Mechanism to Mitigate Emergency Department Boarding and Crowding. *Annals of Emergency Medicine*.

Hernandez, N., John, D., & Mitchell, J. (2014). A reimagined discharge lounge as a way to an efficient discharge process. *BMJ Open Quality*, 3(1).

Naiying L, et al. 2013. Implementation of Discharge Lounge (DCL). Singapore Healthcare Management. <http://www.singaporehealthcaremanagement.sg/Abstracts/Documents/PDFs/OP0027%20-%20Liu%20Nai%20Ying.pdf>

Hospital Interlinks Project. Hospital Discharge Unit/Lounge. <http://interlinks.euro.centre.org/model/example/HospitalDischargeUnitLounge>

Appendix

Search strategy

Inclusion/Exclusion Criteria

Table 1. Inclusion/Exclusion criteria

Population	Include: All patients Exclude: None
Interventions	Include: Discharge lounge
Outcomes	Patient experience, patient flow
Context	Include: In patients Exclude: Outpatients, community.
Types of evidence	Include: All
Limits	Date: Last 5 years. Language: Publications in English.

2020 Search strategy

Pubmed database was searched using the terms in Appendix Table 2.

Grey literature was also searched performed. Google was searched using the following terms: "discharge lounge" AND flow OR "patient experience" OR satisfaction. BMJ Quality Journal, The Advisory Board, The Health Foundation, The Beryl Institute, Nuffield Trust, Joanna Briggs, Kings Fund, and the TRIP database was searched using the following terms: "discharge lounge" OR "transit lounge"

Study Selection

Papers identified were screened using inclusion and exclusion criteria established *a priori* (Table 1). Searches of Pubmed, and grey literature were screened by one reviewer (CJ) in consultation with colleagues as necessary.

Table 2. Search terms

Pubmed search terms	Items found
Search (((((((patient experience AND "last 5 years"[PDat])) OR (satisfaction AND "last 5 years"[PDat])) AND "last 5 years"[PDat])) OR (patient flow AND "last 5 years"[PDat])) AND "last 5 years"[PDat])) AND (((((((Discharge Unit) OR Discharge Lounge) OR Transit Care Centre) OR Day of Discharge Unit) OR Transit Lounge) OR Discharge Hospitality Centre) AND "last 5 years"[PDat]) Filters: published in the last 5 years	1052

2016 Search Strategy

A search was conducted in Google, Google Scholar, Pubmed and the listed websites below using a combination of the following terms: Discharge Unit, Discharge Lounge, Transit Care Centre, Day of Discharge Unit, Transit Lounge, and Discharge Hospitality Centre.

- BMJ Quality Journal, The advisory board
- The Health Foundation
- The Beryl Institute
- Nuffield Trust
- Joanna Briggs
- Kings Fund