

Improving patient flow for adult mental health admissions

A mixed methods study on length of stays, delayed discharges, and readmissions

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Background

Longer hospital stays can have profound effects on patients' health and development. Over the past 40 years, there has been a significant reduction of inpatient mental health beds, with increasing pressure on services to reduce lengths of stay (LOS). Whilst there has been consensus on this approach, reducing LOS has not always been successful. Reports reveal that no significant reduction of LOS for psychiatric admissions have happened in the NHS over the past 15 years. This could be due to the current occupancy levels and LOS being optimal, or due to systemic problems preventing further progress. The extent to which clinical and service factors can impact LOS is also not well understood.

This research was commissioned by the Mental Health Urgent Care and Social Care Team at Oxford Health NHS Foundation Trust to inform local interventions to reduce delayed discharges of adult psychiatric admissions.

Aims

The research was conducted in two study phases to seek answers on:

- What do clinicians and social workers think about delayed discharges (e.g. do we have a problem)?
- What do staff think are the barriers and facilitators to preventing delayed discharges?
- How many delayed transfers of care in the Trust are adult acute admissions (2016-2021)?
- How many patients have spent more than 56 days in hospital (locally defined "*delayed discharge*"/national average: 51 days)?
- Which patient, clinical and service level factors influence LOS in OHFT's adult inpatient units?

Methods

We completed:

- A thematic analysis of 17 semi-structured interviews with in-patient/community staff (Oxfordshire & Buckinghamshire), focusing on learning experiences of barriers and facilitators to early discharge.
- A statistical risk prediction model to identify significant factors that influence LOS, potential delays and readmissions. Estimates are based on 5351 admissions in the OHFTs seven adult acute in-patient units (2015-2021).

Key findings

The summaries below contain key findings and corresponding recommendations. A graphical risk calculator is also available online:

<https://ohft.github.io/lengthofstay/>

Phase 1: Staff interviews

All staff we interviewed saw delayed discharges and transfers of care as a large problem in the Trust. Clinicians and social workers provided recent case examples of delayed discharges in the past month.

We found a large variation in how staff defined "*delays*". Some staff focused solely on DTOCs, and others focused on longer hospital stays in general. None of the staff could confirm how and where DTOCs or delays were reported. The data management team reported difficulties in consistency and data quality.

For themes relating to external barriers, all staff reported difficulties with finding placements, lack of community resources and the impact of COVID-19. For internal barriers, staff identified themes relating to (1) a lack of shared responsibility between the clinical, social and community teams in identifying and addressing discharge barriers (team and interprofessional

dynamics); (2) staffing issues (e.g. missing inpatient social workers); (3) uncertainty and concerns towards discharging patients with complex needs.

Many of the staff reported facilitators are provided in the recommendations section. Interviews showed evidence of extraordinary achievements by staff who came together during the immense pressure of COVID-19 to reduce delays and LOS. Some examples included: weekly active tracking of patients and discharge barriers to meet targets of discharge dates, and nurses actively screening patients on the acute ward for rehabilitation (e.g. *Opal Ward*); proactive inpatient social workers overcoming discharge barriers by going the extra mile (e.g. *a social worker on Phoenix Ward went and built a bed for a patient who could not be discharged due to safety/housing regulations*); and a general desire among staff to improve and reduce delayed discharges (e.g. *early identification of discharge barriers, Red2Green, joined up MDT meetings between services etc*).

Phase 2: Analysis of admission data

Between 2016 and 2021, the average LOS of adult acute admissions in OHFT ranged from 54.2 to 58.4 days (~2 months, median: 23-25 days). In contrast to staff interviews and previous reports, we found that the Trust performance of LOS are consistent with the national average at 47-51 days, with reductions in the LOS since 2016. The LOS was on average 11 days shorter for admissions in Buckinghamshire compared with Oxford wards. This difference may partly be explained by the rehabilitation ward in Buckinghamshire, whereas Oxford does not have a rehabilitation ward or a recovery pathway.

Most recorded DTOCs on a patient level (i.e. not summary measures) were older adults. Of the 367 officially recorded DTOCs, we could only identify 39 adult admissions (10% of all DTOCs).

The largest proportion of longer hospital stays occurred among patients with higher underlying

needs, including patients with COVID-19, patients of black ethnicity, 50–65-year-olds, homeless patients, patients more frequently identified at risk of self-neglect or non-compliance with care (e.g. medication adherence), and specific psychotic and bipolar related-admissions. The risk for readmission within one-year post-discharge was also high within these patient groups.

The strongest factors linked to reduced delays included faster allocation of care coordinators upon admission and higher bed occupancy. These findings remained stable after adjusting for positive cases of COVID-19, admission year, patient's level of deprivation and mental health diagnosis.

Recommendations

Positively reward and recognise the hard work and achievements of in-patient, community and social work staff.

Despite several local initiatives in the Trust, most staff described feeling hopeless and powerless in their attempts to reduce delays. Increased attempts to highlight the positive impact of local efforts towards reducing delays (e.g. ward specific case examples) are likely to motivate further efforts.

Strengthen definitions and data collection on delayed discharges and discharge barriers.

The identified challenges with definitions and reporting of delayed discharges impact on being able to measure performance across wards and on OHFT's ranking across different health and safety measures. We recommend strengthening data collection systems on delayed discharges to increase reliability and reduce "waste" of staffing resources. Common barriers to discharge (e.g. *homelessness, awaiting assessments*) are routinely recorded on Carenotes. This data can be linked to *Red2Green*, with flexibility for staff to cross-check accuracy.

Agree on a consensus statement and shared goals discharge readiness.

Implement a consensus statement with criteria for discharge/admission goals of patients with higher underlying social and psychiatric needs, where differences in opinion are likely to be high. Unified and clear goals are likely to facilitate stronger working alliances and faster discharge. Qualitative themes showed differences between social workers and consultants toward discharge readiness. Smaller differences between wards were also observed.

Ensure adequate inpatient social workers on wards to facilitate care coordination of discharges from hospital.

Having an assigned care coordinator within two weeks of admission was the strongest predictor for faster discharge and one of the most frequently endorsed themes for improvement areas by staff. Allocate or ringfence newly released funding by the government¹ to ensure adequate staffing levels of social workers.

Collate a placement database based on past placement providers to help staff identify suitable placements faster.

Social workers and clinicians spend a significant amount of time identifying suitable placements and making referrals. This process could be streamlined by collating a database of previous placements, contracts and discharge destinations (e.g. the CRIS team could work with social workers to build a database using previous data).

Commission crisis resolution home treatment teams and emergency housing providers

Patients who spent the longest time in hospital and had the highest risk of faster readmission with one-year post-discharge were homeless, more deprived, had psychosis, and identified risks relating to self-neglect, non-compliance with care and aggression. These findings highlight a potential gap of suitable placement providers that can maintain treatment gains in the community following discharge. Allocated funding¹ could

prioritise commissioning 'step-down' 24-hour supported accommodations to support transition with daily activities, health and care assessments.

Facilitate staff support for team cohesion

Whilst a large driver of staffing levels relates to longstanding wider systemic issues in Oxfordshire (staff retention, salary, housing prices etc.), qualitative themes point to underlying cultural issues on wards. The most frequently endorsed facilitators were working on team dynamics to build trust and define shared goals between professions.

Increase digital solutions to help community staff and placement providers liaise with hospitals.

COVID-19 has taught us the importance of using technology to overcome communication and information sharing barriers. Despite this, staff reported that significant time was taken up organising assessments, repeating requests for information from ward teams (or vice versa), or sourcing care agencies. Increasing the use of digital consultations on wards could allow external services to conduct assessments faster. Staff also endorsed a common platform for communicating discharge dates, contact details, and schedules earlier (e.g. staff rotas).

Smaller significant differences between counties but not between wards

Some qualitative themes related to significant differences between wards in LOS. We found no evidence for an overall significant difference between specific acute wards (excluding Ashurst PICU and Opal ward). However, significantly shorter LOS was observed in Buckinghamshire overall, relative to Oxfordshire. All estimates are adjusted for patients' gender, social deprivation, admission year and any positive covid tests.

Acknowledgement

This report and research would not have been possible without the invaluable contributions of the social workers, consultant psychiatrists and modern matrons connected to the eight adult inpatient units in Oxford Health Foundation Trust NHS. We also acknowledge the support of the Performance and Information team, CRIS and the Oxford Healthcare Improvement team, patients and their families.

¹[C0894 Mental health winter 2021 discharge funding supporting-guidance, ref 001559](#)

Figure 2. Thematic map of the five themes (centre circle) and 18 subthemes (connected circles) for staff views on barriers and facilitators of discharge

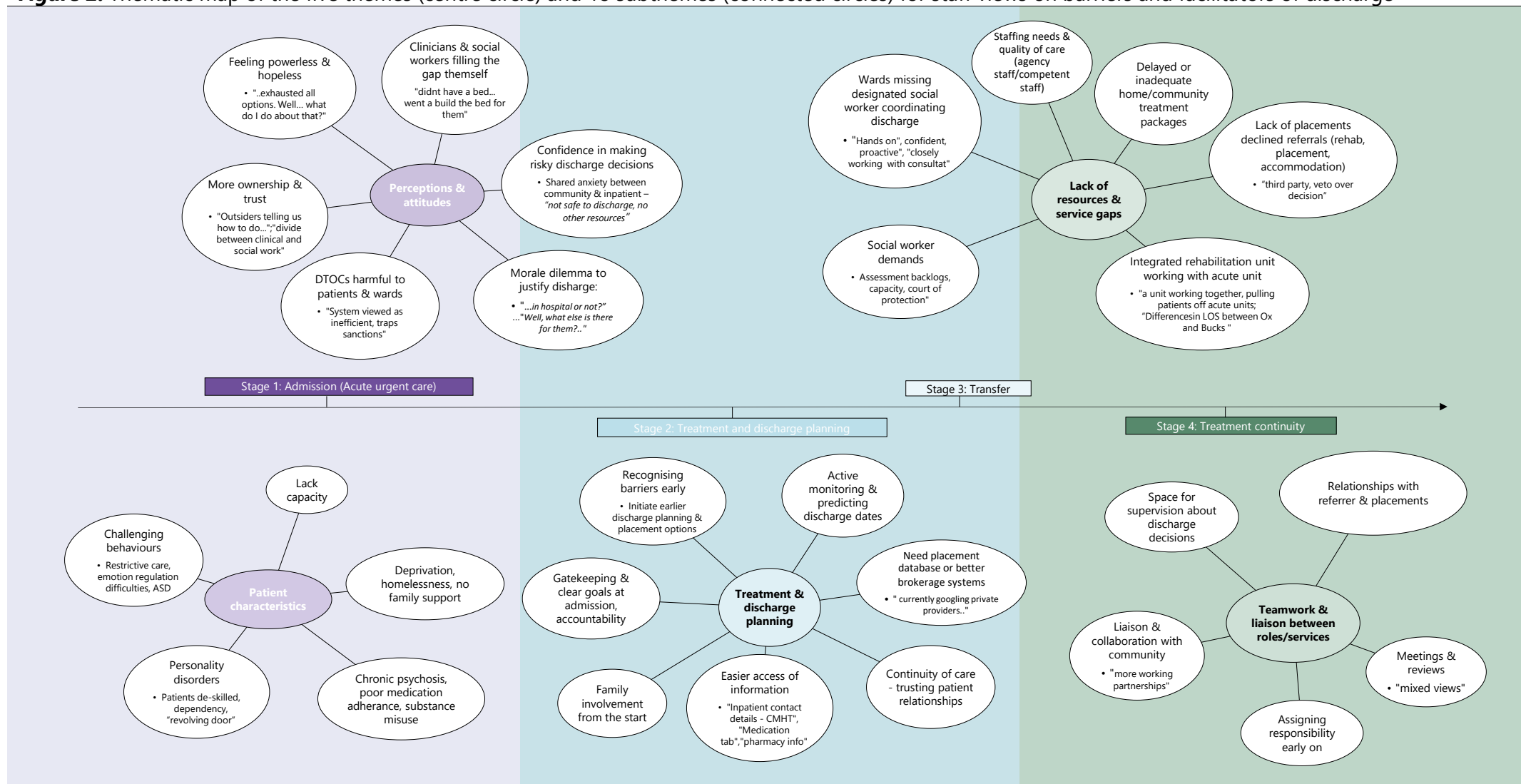
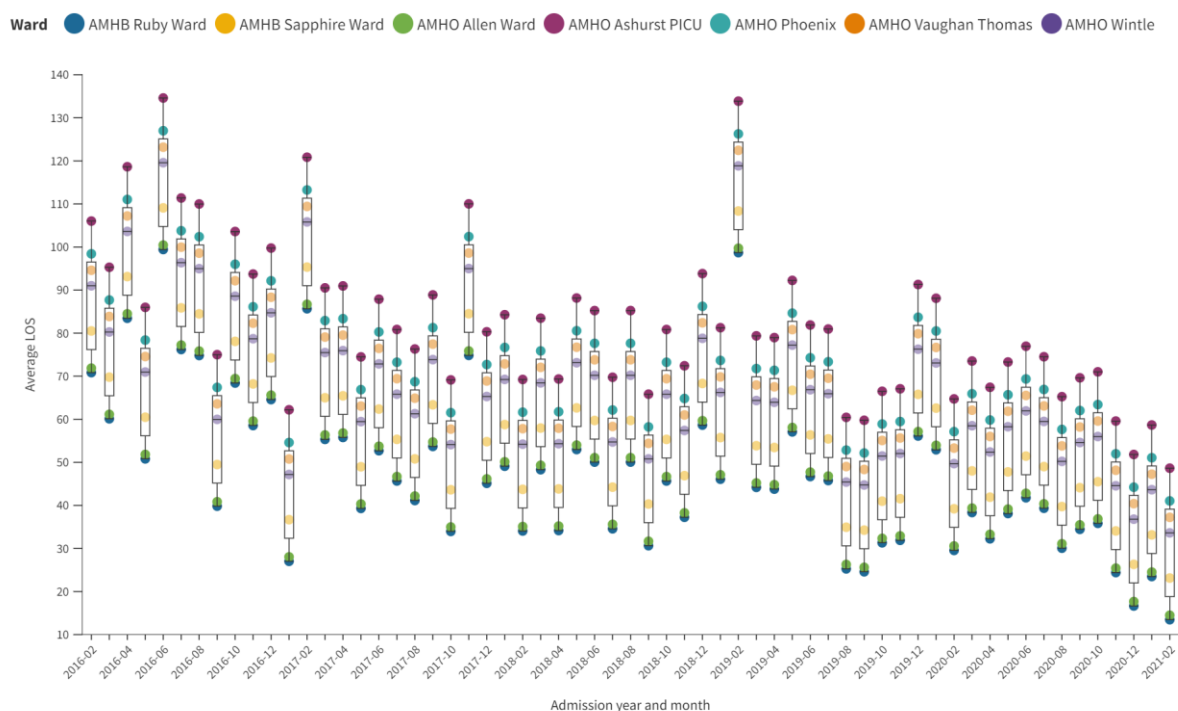
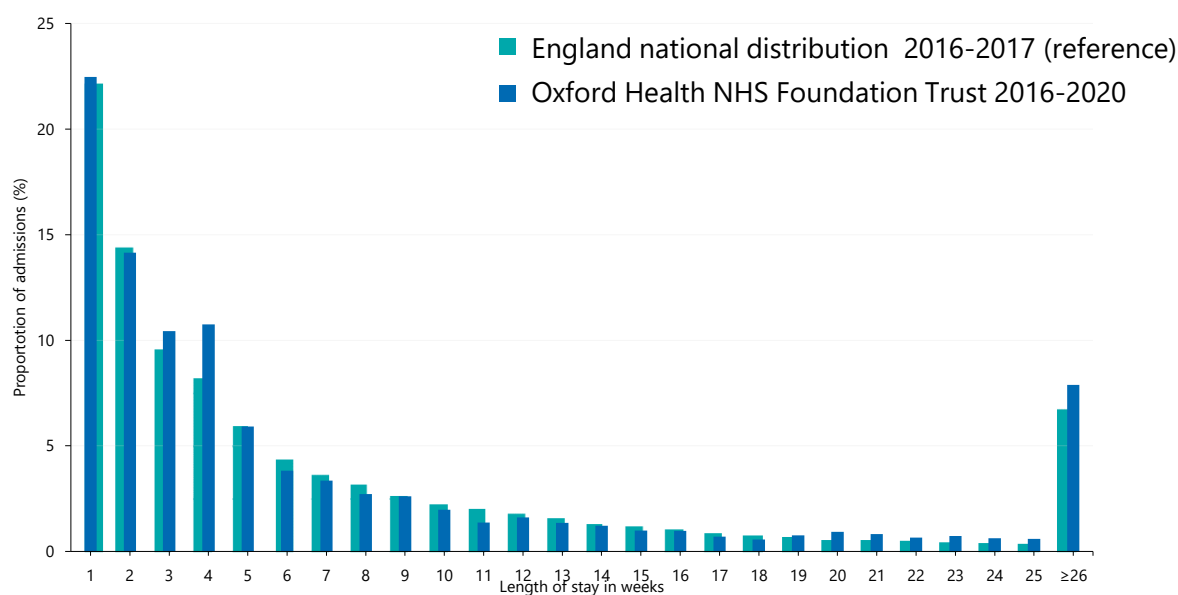


Figure 4. Box plot showing average length of stay (days) by ward and admission month over time (2016-2021)



See [interactive version online](#). For each admission month between February 2016 and 2021, each coloured point shows the average length of stay (LOS) per ward. The boxes show the median and interquartile ranges, with whiskers extending (up to) 1.5 times the IQR above the upper quartile and below the lower quartile.

Figure 5. Comparison between OHFT and national admissions (2016-2017) in the distribution of LOS (weeks)



The comparator source is adapted from RCPsych commissioned report by Wyatt et al.⁸ using the same data source for national estimates (HES-APC 2016-2017). See also eTable 2 in the supplementary.