The influence of social care on delayed transfers of care (DTOCs) among older people

RESEARCH FINDINGS

- Delayed transfers of care were identified that cannot be explained by local authority-level demographic, demand and supply factors.
- The supply of care home beds and home care can help reduce DTOCs.
- The interventions included in the Urgent and Emergency Care (UEC) vanguards have a statistically significant association with lower local DTOC rates.
- Planning for discharge gives more time to set-up care packages that may help to prevent or reduce DTOCs, alongside helping to avoid unsustainable packages of care that can contribute to re-admissions.
- Physically co-locating social care and NHS discharge teams can assist with the visibility of teams as well as communication across disciplines.
- Clear discharge pathways are especially important where there is high ward staff turnover or use of agency nurses.
- Some DTOCs could be due to communication problems between organisational representatives.
The National Audit Office (NAO) (2016) estimated delayed transfers of care (DTOCs) costs the NHS up to £820 million a year. At a time of financial austerity, the NAO highlighted the need for the care sectors to work together to reduce DTOCs. In addition to financial costs, previous research has found that unnecessarily long stays can lead to an increased need for social care support following discharge, such as requiring help at home. Few studies have explored the relationship between community support (e.g. care home and home care supply) and DTOCs.

This study aimed to bridge the gap in evidence by answering two questions:

1. why delays in discharge are (still) happening; and
2. how they might be reduced or prevented.

**Methods**

The project used quantitative and case study analysis to explore why DTOCs occur and how rates could be prevented or reduced.

The quantitative data analysis used publicly available information (see Box 1) to assess: the level of local DTOC rates that cannot be explained by local demand and supply characteristics, and the influence of social care supply, local discharge processes and urgent and emergency care vanguard on DTOCs, respectively.

Thirty-one discharge teams completed an online questionnaire that explored their local discharge arrangements, with some supplementary information added to the dataset which was available online.

Fifty two professional stakeholders across six case study sites (including operational managers from adult social care and the NHS, members of discharge teams and other key professionals) took part in qualitative interviews in 2018. A case study was a local authority (LA) with associated NHS, voluntary and care organisations, purposively selected to reflect variation in DTOCs, geography and population. Interviews covered details of teams and processes, strategic issues, perceived causes of delays and facilitators of smooth transfers.

**Identifying Local Authorities with Unexplained DTOC Rates**

The quantitative analysis identified unexplained days of DTOCs between 2010 and 2016 for each LA after controlling for their characteristics, i.e. we identified DTOCs that could not be explained by LA-level demographic, demand and supply factors.

Out of 150 LAs, the research team identified LAs where DTOCs were consistently lower than expected given their characteristics available in the public record. Conversely, they also identified a group where DTOCs were consistently higher than expected.

Some LAs stood out, as is the case of a Unitary LA situated in the East Midlands, which has made a significant improvement in performance, especially since 2014. Elsewhere, in a Unitary LA in the South West, integration of health and social care potentially had an impact on the lower than expected DTOC rate. Another LA, a Metropolitan county in Yorkshire & Humber, was also flagged as an interesting place for further studies as it has consistently been having fewer days of DTOCs than expected.

**Box 1: Quantitative Data Sources**

- Figures for number of days of DTOCs and number of DTOC patients are available from the Monthly Situation Report at the NHS England database
- Information on benefits claimed and population characteristics were collected from the Official Labour Market Statistics (NOMIS), run by the Office for National Statistics (ONS)
- The ONS provides a map of Local Authority Districts, Counties and Unitary Authorities from which LA type was extracted
- Measures for social care supply – the number of care home beds in a LA and home care supply – used the Care Quality Commission (CQC) database
- Home care supply was measured in two ways: a count of the number of providers per 10km² for each LA (market defined by LA boundaries) and the average number of providers within 20km of each Middle-layer Super Output Area (MSOA) in a LA, weighted by older population (market defined by distance, i.e. across LA boundaries)
- Average house prices were taken from the Price Paid Data available from HM Land Registry.
- LA adult social care expenditure data were available from NHS Digital

Analysis assessed: the level of local DTOC rates that cannot be explained by local demand and supply characteristics, and the influence of social care supply, local discharge processes and urgent and emergency care vanguard on DTOCs, respectively.
Besides the LAs mentioned here, the ranking tables and graphs that resulted from this step of the research provided a range of different LAs of interest to explore. The LAs include areas that are urban or rural, with high or low population and those that are economically deprived or not. They also include those that consistently have unexplained high or low DTOC rates or areas that have only recently undergone significant changes.

**SOCIAL CARE INFLUENCE ON DTOCs**

Using data for 2011–2016 and controlling for LA-level need and demand characteristics (adult social care expenditure per adult, older population, house price, pension credit and attendance allowance uptake, year and winter effects) the research team quantitatively analysed the influence of home care and care home supply on DTOCs.

The results showed that DTOCs were significantly affected by social care supply. Specifically, every extra home care provider per 10km² decreased DTOCs by 6.7–8.0%, equivalent to 178–212 days per quarter for the average LA, and a 1% rise in number of providers within 20km of a MSOA rose by more than 90.

In line with previous research, the results also showed some evidence of a care home bed effect: a 1% increase in care home bed supply reduces DTOCs by 0.4–0.55%. There was an indication that an increase in adult social care expenditure was associated with lower DTOCs. The finding was not significant. Similar results were found when controlling for any potential reverse causality in the relationship, i.e. DTOCs driving social care supply.

**THE IMPACT OF LOCAL DISCHARGE PROCESSES ON DTOC RATES**

Discharge processes varied among the sites and the online questionnaire captured only two factors that were most common: discharge team being co-located and care providers being on the discharge team (8 and 9 sites out of 31 respectively). The relationships did not achieve significance making us unable to conclude if they help alleviate DTOCs.

**THE IMPACT OF URGENT AND EMERGENCY CARE (UEC) VANGUARD ON DTOCs**

Nine of the 31 LAs were also a UEC vanguard partner. Quantitative analysis found a 29.7% to 32.8% lower DTOCs for these nine LAs compared to the other online survey sites since the implementation of the UEC vanguard in 2015.

To further assess the robustness of the relationship the research team analysed DTOC rates for all 29 Local Authorities in England that were a UEC vanguard partner.

Overall, being part of a UEC vanguard was found to be related to a 37.2% to 40.5% reduction lower local DTOC rates compared to the rest of the country.

It is not easy to pinpoint why UEC vanguards could influence DTOC rates but it is possible that the reductions were side effects of ‘channel shifts’. UEC vanguards were tasked with shifting activity from sub-optimal to the most appropriate care settings through a range of interventions; this activity was known as ‘channel shift’.

As four of the six case studies were UEC vanguard partners, the research team analysed the qualitative evidence relating to four potentially relevant channel shifts: sharing of care records; rapid response for admission avoidance; discharge planning from time of admission; and discharge to assess options.

The four vanguard partner case studies appeared no different to the other two in respect to the selected ‘channel shift’ interventions except for

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**FINDINGS**

<table>
<thead>
<tr>
<th>Number of home care providers</th>
<th>Number of days of DTOC</th>
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<tr>
<td><strong>+1</strong></td>
<td><strong>decrease</strong></td>
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<tr>
<td>each extra provider per 10km²</td>
<td>178–212 days (6.7–8.0%)</td>
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discharge planning. All four reported beginning to plan for discharge sooner than the other two case studies, for example planning discharge from the time of admission. It was perceived that early planning gave more time to set up care packages and enable patients’ families to prepare for discharge. There were no differences in the structure of discharge teams or the range of discharge pathways available between the UEC vanguards and the other two case studies.

CASE STUDIES

Discharge teams
Teams typically included nurses, social workers and/or social care assessors, and therapists. Three sites worked very closely with local voluntary or specialist housing organisations. Teams were acute trust-based except for one council-managed team based in a community trust but covering all council residents in any of three acute trusts. This team spoke about actively pulling patients out of hospitals. Teams were integrated in three and co-located in all sites. Co-location assisted with the visibility of teams as well as communication across disciplines.

Discharge pathways
Discharge pathways comprised of three routes: discharge to usual place of residence with no additional support; discharge home with short-term support; and discharge to a temporary residence for further assessment. In some case studies, these pathways were clearly and consistently described; in others, respondents struggled to give a coherent description. Clear and well understood routes were reported to be especially important where there was high ward staff turnover or use of agency nurses.

Factors perceived to affect DTOCs
All sites spoke about flows through the system, with potential for bottlenecks at various points. Sites recognised that quick discharges could result in readmissions if hastily arranged care packages broke down, or in people’s mobility and subsequent independence being compromised by discharge to temporary beds while awaiting home care packages. Cross sector and multidisciplinary communication between organisational representatives across the care sectors and shared responsibilities for managing these flows were key.

Reablement teams, bridging services and short-term assessment beds were typically seen as buffers to absorb flow at peak times; but these too could become blocked. One case study had remodelled its reablement team to deliver post-discharge crisis intervention and another replaced reablement with independent providers delivering flexible home care post-discharge, increasing or decreasing packages as people settled back into their homes.

All sites experienced shortages with social care capacity, although this could change by the day and some localities, even within LAs, were better served than others. A key concern was that few people receiving a long-term care package subsequently were able to reduce or stop use completely, resulting in ever increasing demand. Some case studies planned working with voluntary organisations to try to reduce the size or intensity of home care packages. Suggestions included short-term help with shopping and housework as well as short-term assistance to facilitate discharge such as transport home, checking a person’s home is safe to be discharged to and organising medication.

The case studies could provide an indication of reasons behind why delays in discharge are still happening and the unexplained days of DTOCs found in the quantitative analysis. Some DTOCs could potentially be due to problems with communication between organisational representatives across the care sector to manage the flow through the system or not planning early for discharge to help ensure appropriate time is given to organise care packages.

BOX 2: LIMITATIONS

There are a number of limitations within the study including:

1. Identifying local discharge processes from the online questionnaire was problematic due to local variation. Only two factors were more common: discharge team being co-located (8 sites) and care providers being on the discharge team (9 sites). Therefore, the research team could not explore how specific local discharge approaches and context can affect DTOC rates and discharge arrangements.

2. The research team could only suggest associations between variables, but could not make causality claims, due to unobserved information that is not available in any dataset.

3. The nature of data collection for DTOCs, suggesting a responsible organisation (NHS, Social Care or both), was mentioned during advisory group meetings and external workshops as a possible source of misreporting. To mitigate this issue the research team decided to use overall levels of DTOCs.

4. The research team only assessed the UEC vanguard. This was due to the small number of participating areas in the online questionnaire being involved in the other four vanguards.
Understanding why delayed transfers of care among older people are a continuing problem and finding ways to reduce or prevent them are high-priority issues for the government, especially with an ageing population nationally.

The project has found that:

- Some DTOCs cannot be explained by the demand and supply characteristics of Local Authorities (LAs)

- DTOCs will occur in practice and therefore the aim must be to lower or minimise the level. DTOCs could be alleviated by:
  - An increase in local home care and care home provision, given adult social care expenditure by LAs;
  - Improving information flow throughout the care system, as well improving communication channels between organisational representatives across the care sector;
  - Planning early for hospital discharge to provide more time to set-up care packages, which can lead to more effective and sustainable packages being put in place

- Local discharge arrangements vary between areas, and there is no consistent discharge process across LAs, making it difficult to describe ‘typical’ models

- LAs that are partners in the Urgent and Emergency Care vanguard appear to have significantly lower DTOC rates on average in comparison to the rest of the country.

- Social care supply is important in determining DTOCs; and there may be effects on DTOCs from other sources of change within the system (e.g. vanguards).
The School for Social Care Research was set up by the National Institute for Health Research (NIHR) to develop and improve the evidence base for adult social care practice in England in 2009. It conducts and commissions high-quality research.

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