

## Length of stay case study

### Sheffield Teaching Hospitals NHS Foundation Trust<sup>1,2</sup> October 2014

Sheffield Teaching Hospitals NHS Foundation Trust comprises of five teaching hospitals and provides a full range of both local hospital and community services for people in Sheffield, as well as specialist care for patients from further afield, including cancer, spinal cord injuries, renal and cardiothoracic services. Since 2011 adult community services has been merged with the Trust. Community services were maintained as a whole to enable sustainability, although community services with close synergies to hospital specialist services have been aligned (e.g. heart failure).

The Trust has a history of high quality care, clinical excellence and innovation in medical research. The Trust has been awarded the title of 'Hospital Trust of the Year' in the Good Hospital Guide three times in five years and is in the top 20% of NHS Trusts for patient satisfaction.

The Trust has been proactively seeking to improve patient flow through the hospital and reduce length of stays, particularly for frail older patients.

### Approaches to reducing length of stay

#### Analysis and focus on improvement activity

Detailed flow analysis was undertaken to understand the profile of patients attending the emergency department and those who were admitted into the general medical speciality.

The Trust identified that for frail people there was potential to reduce the time to being seen by a consultant geriatrician and having a care plan established. An analysis of long stays in the hospital found opportunities were missed to discharge the patients after rapid assessment and consultant review, because the services involved in discharge were unable to respond quickly enough. There is an evidence base that identifies that frail patients can deteriorate when delays occur in care pathways.

From October 2011, improving the pathway for frail patients became the main focus for the Sheffield team's Oobeya ('Big Room') process. The Oobeya process involves regular project team meetings within a dedicated room in which all the project information is displayed. The 'Big Room' has an open door policy, where staff are welcomed to come and participate.

The Trust took the decision early on that they should let the improvement programme be led by the staff, so the senior leaders provided the analysis of flow, key challenges and then stepped back to facilitate groups of staff identifying the solutions.

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<sup>1</sup> The Health Foundation (2013) 'Improving the flow of older people Sheffield Teaching Hospital NHS Trust's experience of the Flow Cost Quality improvement programme.' The Health Foundation Available at: [http://www.health.org.uk/media\\_manager/public/75/publications\\_pdfs/Improving%20the%20flow%20of%20older%20people.pdf](http://www.health.org.uk/media_manager/public/75/publications_pdfs/Improving%20the%20flow%20of%20older%20people.pdf) (accessed 3 July 2014)

<sup>2</sup> Personal communication with Tom Downes, Consultant Physician and Geriatrician, Clinical Lead for Quality Improvement, Sheffield Teaching Hospitals NHS Foundation Trust (5<sup>th</sup> Sept 2014)

A frailty unit was established to improve the flow for emergency frail general medical patients and then leading on from this a discharge to assess model. The progress of these changes was tracked using daily bed occupancy.

The Trust continues to identify opportunities to improve patient flow and quality. A review of all the push/pull services was undertaken and the community teams and hospital teams were subsequently combined. A single transfer of care team now facilitates the front door turnaround of patients in emergency department, medical assessment units and frailty unit utilising appropriate community pathways, including discharging patients to assess them supported by Active Recovery (outlined below).

### **Frailty unit**

The frailty unit is based on patient needs (not age) recognising that although frailty does predominantly affect the elderly it can affect a wider age range of patients. Patients access the unit through the emergency department (ED), where GP referrals are also routed through the 'pit stop' in the ED in case resuscitation is needed.

Once the patient is on the frailty unit a nurse undertakes a frailty assessment and there is access to junior doctors and therapists specialising in frailty. The emphasis is on early senior review and getting patients home if appropriate.

There is a consultant presence on the frailty unit seven days a week; from 8am-8pm on weekdays and 8am-5pm at weekends. The consultants do a day on the unit and can be available the next morning to complete consults if required. This approach was adopted as the frailty unit is short stay (4 to 48 hours) and so the continuity of care is less of an issue. Patients are then either transferred rapidly back home or to a base ward in the hospital.

Patients who are admitted and who already have a care package have their care package maintained for 21 days, which enables patients to be easily transferred back home after assessment and review.

The frailty unit also shifted the emphasis to enabling patients to recover at home.

### **Active Recovery**

Active Recovery is a jointly provided service between health and social care that puts in place interventions and treatments to support patients in their own homes.

The service receives referrals from GP's and other community teams: reducing unnecessary admissions to hospital. Active Recovery can respond within 2 hours and assesses the patient in their own home.

The service also facilitates the timely discharge of more complex patients from hospital and continues their assessment, rehabilitation and recovery at home. The aim is to assess the more complex hospital discharge patients on the day of discharge (previously this could have been up to a 2 week wait) in August 2014 90% of patients were assessed within 24 hours. The staff have flipped the traditional model of Assessing to Discharge to the more patient centred approach of Discharge to Assess (D2A).

Active Recovery will have the capacity to support 184 new patients a week by November 2014; half are from the community and half come from the hospital system.

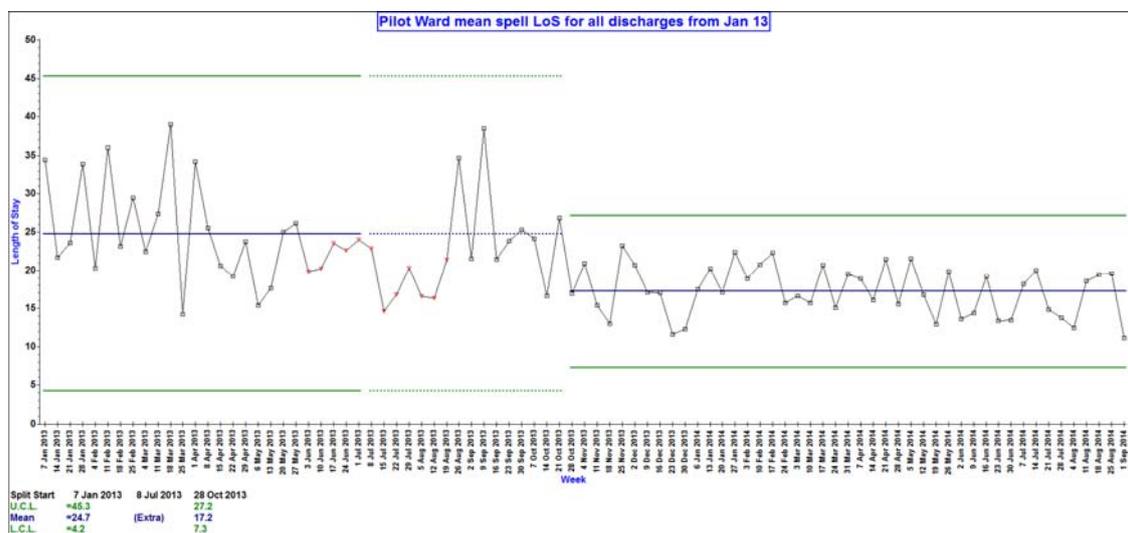
The service has a full multi-disciplinary team at all levels including: consultant geriatricians; nurses; physiotherapists; occupational therapists; dieticians; podiatrists; mental health nurses; pharmacists, pharmacy technicians and band 3 senior rehabilitation assistants.

Nurses, physiotherapists and occupational therapists have core interdisciplinary skills to enable generic assessment and intervention. An aligned workforce of health band 2 rehabilitation assistants and social care short term intervention team staff provide the reablement for patients in the service.

The creation of Active Recovery has improved the patient experience by streamlining the assessment process and development of the reablement staff to have common core skills across health and social care.

The service reduces the long term care required as often the patient's needs are significantly less than predicted in hospital as the patient recuperates and becomes more confident and mobile in their own home.

The first ward to fully implement this approach has a sustained reduction in length of stay of 7 days.



Source: Sheffield Teaching Hospitals NHS Foundation Trust

All of the geriatric and respiratory medical wards are accessing this service and it is being further rolled out to surgery and orthopaedic wards with the eventual aim of including the intermediate care bedded patients.

### Single Transfer of Care team

The community teams and hospital teams that were involved in supporting discharge from hospital were reviewed and subsequently combined. A single transfer of care team now facilitates the front door turnaround of patients in emergency department, medical assessment units and frailty unit utilising appropriate community pathways, including Active Recovery.

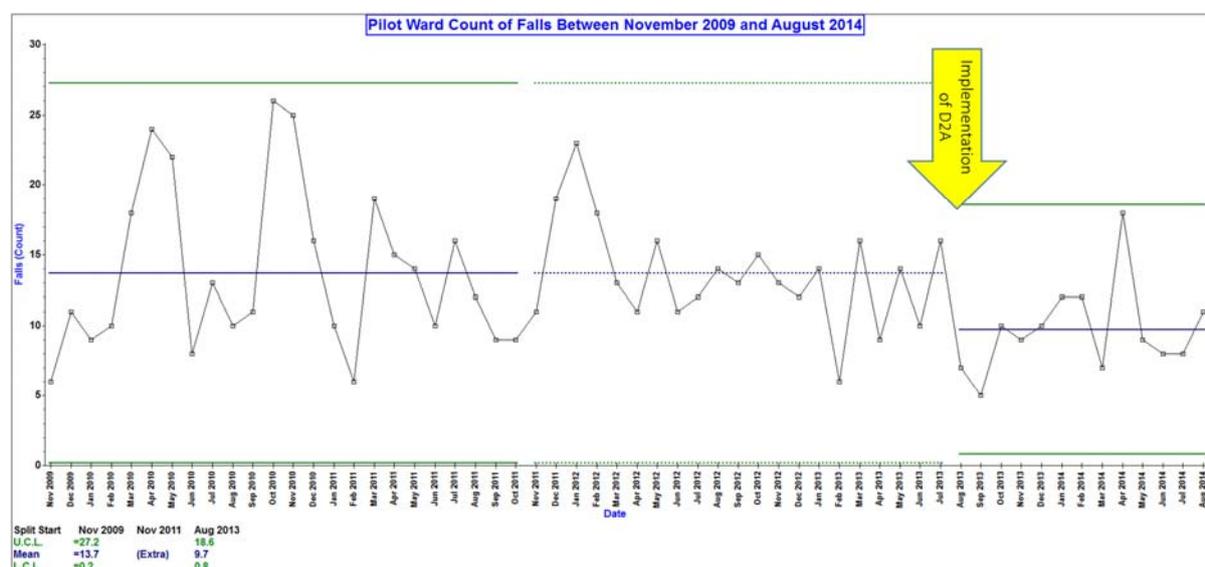
A dedicated team of experienced transfer of care nurses work with each speciality area in the hospital facilitating discharge of complex patients.

### Seven day working

The Trust is moving to establish seven day working to maintain consistent patient flow across the week. Active Recovery and core community nursing services operate 7 days a week.

## Emphasis on safety

The Trust has found that implementing approaches to reduce harms can have a dramatic impact on reducing length of stay. This is in recognition that harms often have a higher impact on the frail and that by focusing on preventing harm, such as falls, it reduces the likelihood of patients decompensating, which can rapidly lead to longer lengths of stays.



Source: Sheffield Teaching Hospitals NHS Foundation Trust

## Impact

- Analysis of data indicates that between 2007/08 and 2012/13 the average length of stay in the Trust decreased from 7.7 days to 7.0, a reduction of 9.3%. This compares with an overall reduction of 6.1% nationally over the same time period.

Average LoS in geriatric medicine has reduced by around 15% over the last five to six years, from 11.6 days in 2006/07 to 9.9 days in 2012/03. The average LoS in general medicine has reduced by 42% from 6.4 days in 2006/07 to 3.7 days in 2012/03.

- The frailty unit has led to a 37% increase in patients who can be discharged on the day of their admission or the following day – with no increase in the re-admission rate.
- Reduced bed occupancy for emergency care for the elderly, allowing two wards to be closed.
- A 15% decrease of in-hospital mortality for geriatric medicine.
- Dementia patients are thought to have had the greatest benefit of the frailty unit and discharge to assess approach, as they are now less likely to become even more confused through a protracted hospital stay and multiple hospital moves. Patients and carers have commented that the frailty unit is a calmer environment than the emergency department or medical assessment unit.
- Active Recovery has altered the decision making within the hospital, and resulted in shifts from weekly multi-disciplinary team meetings to daily and hourly decision making. There is now a culture of establishing a plan for every patient, every day. This has made estimated discharge dates real and believable.

- Discharging patients who are able to be supported at home through Active Recovery has resulted in an increase in the number of patients flowing through a ward and an increasing focus on getting people home as soon as possible. This has had the following impacts on skill mix and staffing levels in the hospital:
  - Additional nursing staff.
  - Physiotherapy having a strong focus on mobility to avoid patients becoming immobile in hospital.
  - Occupational therapy moving to a more generic skill set within the hospital as detailed assessments on capability are now undertaken in a patient's home.
  - There is a challenge around having enough junior doctors to meet the change in rapid discharge as there is a finite supply and the Trust would have to close a ward and redistribute juniors to increase numbers on the ward.

It has also led to the following staff changes in the active recovery team:

- Development of band 3 rehabilitation assistants in the assessment element of the team.

### **Critical success factors**

- Investing in engaging jointly with acute and community health and social care service staff during the transition and maintaining an open dialogue as change was implemented.
- Moving the community and hospital expected response onto a similar timeframe. The response to a GP admission avoidance call is expected within 2 – 24 hours depending on urgency hours and community services have a financial penalty if this is not achieved, whereas a patient in a hospital bed could wait up to 2 weeks to be assessed. This expected response time was equalised and now over 90% of hospital patients are seen within 24 hours regardless of which type of bed they are in (e.g. hospital or home).
- Focusing on the human aspect of patient flow was critical. The data was used to engage staff and help them to explore ways of improving the patient flow. Having an open approach to improvement enabled changes to be owned by the wards, community and individual clinical teams.
- Credible and trusted senior management spanning the hospital and community services teams. The manager was able to act as a bridge in the early stages of the community services joining the Trust and act as a translator between the language of the different perspectives.
- Supporting generic skills – Active Recovery nurses and therapists have generic assessment training at Sheffield Hallam University. Hospital therapists are now also undertaking the training.
- Having close trusting relationships between the leadership of health and social care with three years of being virtually integrated has been a fundamental advantage. Integration was viewed as close co-operation and getting people in the room and agreeing a way forward, rather than pooled budgets and employing health and social care staff in the same organisation.
- Senior clinical presence in the frailty unit was vital in assessing, treating and progressing patients.
- Effective operational managers to embed new processes and work with clinical colleagues to unblock challenges.
- Openly sharing data and keeping commissioners fully informed of the redesign process gained their support.
- Using improvement science to facilitate staff to iteratively design improved care pathways co-ordinated from the Big Room improvement centre.

## **Challenges**

- When the community services joined the Trust it was a challenging time and there were tensions from the specialisms who wanted to separate off the individual community services that related to their area and from primary care who were concerned that the services would be lost within the hospital. The community services also found the language between acute and community care a barrier; at the core of this were the different perspectives that generalists and specialists can often hold.
- Community intermediate care services (now the Active Recovery service) was one of the first services to be market tested and the contract is up for renewal in 2015. This has impacted on staff morale, but the team is recognised as being effective, supportive of change and high performing.
- System change has a massive impact on staff and it needs to be owned by them and driven by them. The change across community teams has been immense and at times very challenging.
- Discharging patients to be assessed ran into the challenge of the hospital teams letting go; there had to be a shift from assessing patients and telling community services the support required to letting the patient be assessed in their own home. Once the hospital staff could see the benefits for patients the shift in behaviours was dramatic. The first ward to implement discharge to assess needed to be supported and allowed to implement the approach in their own time, so in the first week one patient was put through the new service, the second week two and third week three patients. After three weeks the ward wanted to move from testing into implementing the new approach as they saw the approach was a real improvement and truly patient-centred.
- There remain flow challenges in the emergency department which the Trust is focused on improving.

## **Next steps**

The Trust aims to further align the hospital and community based Active Recovery, so that the shift is to 'transferring' patients rather than 'discharging'. Active Recovery is aiming to use additional funding to increase the number of new patients it can support each week to 184 in time for the winter pressures.

The Trust is looking to develop their continual focus on safety. The Trust believes that there can often be a siloed view of safety, where it is viewed as one metric in a system design, but it can be a central lever for improving patient care and reducing length of stay. Focusing system redesign around safety connects with clinicians and promotes a culture of constant questioning and self-evaluation.

Assessing intermediate care beds to meet patient need has also improved with patients transferring often within 24 – 48 hours of referral. There remains a challenge especially on the stroke pathway as only 15 beds in the community; there has been progress against ensuring geriatrician cover on community beds (there are three geriatricians that work half the time for the hospital and half the time for the community provider).

Patients requiring a new permanent care placement often have long stays and the Trust is looking to improve the process through developing an NHS facility focused on ensuring patients transfer into the right placement with the appropriate process in a timely manner.

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***Sheffield Teaching Hospitals NHS  
Foundation Trust was supported by The  
Health Foundation in the Flow Cost  
Quality programme.***