Improving access to Comprehensive Geriatric Assessment by improving flow through a Frailty Assessment Area—A QI project

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ABSTRACT

Early Comprehensive Geriatric Assessment is a key component of the assessment of older adults presenting to hospital with frailty syndromes, often this is facilitated through Acute Frailty Units. In this paper we describe how using QI methodology we improved access to our Frailty Unit using a digital solution. The impact of this improvement was demonstrated via the reduction in length of stay that these patients experienced compared to patients admitted to General Care of the Older Person wards.

Introduction

The Frailty Assessment Area was opened at Blackpool Victoria Hospital in December 2021 following a rapid response to escalated pressures within the trust. The unit provides rapid Comprehensive Geriatric Assessment (CGA), via a Geriatrician led multi-disciplinary team, to frail patients admitted to the trust.

The goal of the unit is to reduce the length of stay for frail older patients that might come to harm from a prolonged hospital admission. We recognised that during the first year of operation we were not achieving this initial goal and our length of stay was still too long. A project using Quality Improvement (QI) methodology was undertaken to improve the function of the unit.

Early recognition and management of frailty is key in preventing deterioration and improving outcomes in older adults .[1] Organising services within dedicated Frailty units has been shown to reduce length of stay while maintaining quality of care for older adults.[2] This is particularly important as increasing frailty is associated with a longer length of stay.[3]

The aim of this project was to reduce the length of stay for patients admitted to our Frailty Assessment Area to 48 h over a 12-month period, (Image 1, Image 2, Chart 1, Chart 2, Chart 3, Chart 4, Picture 1).

Method

The QI team was led by the Chief Registrar at the trust, with support for data analysis from the trust QI team. A Consultant Geriatrician alongside a Frailty ANP, the ward manager, matron for the Care of the

Inclusion Criteria

Inclusion Criteria
- CFS greater than or equal to 4
- Geriatric Syndrome
    - Falls
    - Delirium
    - Reduced Mobility

Exclusion Criteria
- Significant head injury
- High risk of wandering (1:1 care)
- Acute stroke
- Acute cardiac problems
- Acute abdomen
- Acute GI bleed
- Major trauma (eg hip fracture)
- Requirement of critical care/ haemodynamically unstable
- Single system problem (eg DKA)

Image 1. Inclusion and exclusion criteria for admission to the Frailty Assessment Area.
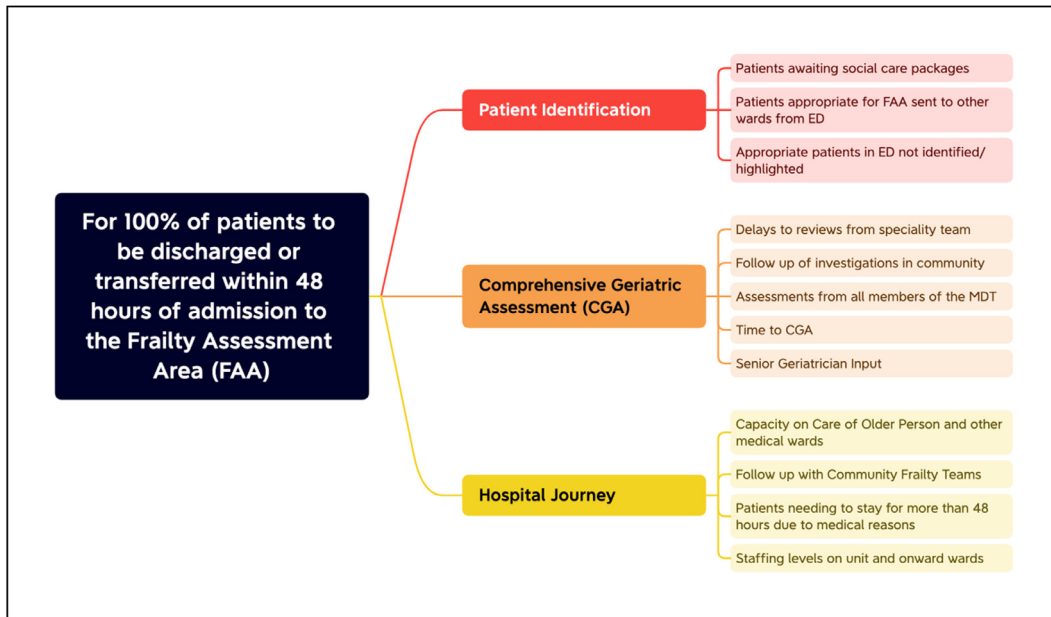
Image 2. Driver diagram for project with primary drivers of patient identification, CGA and hospital journey.
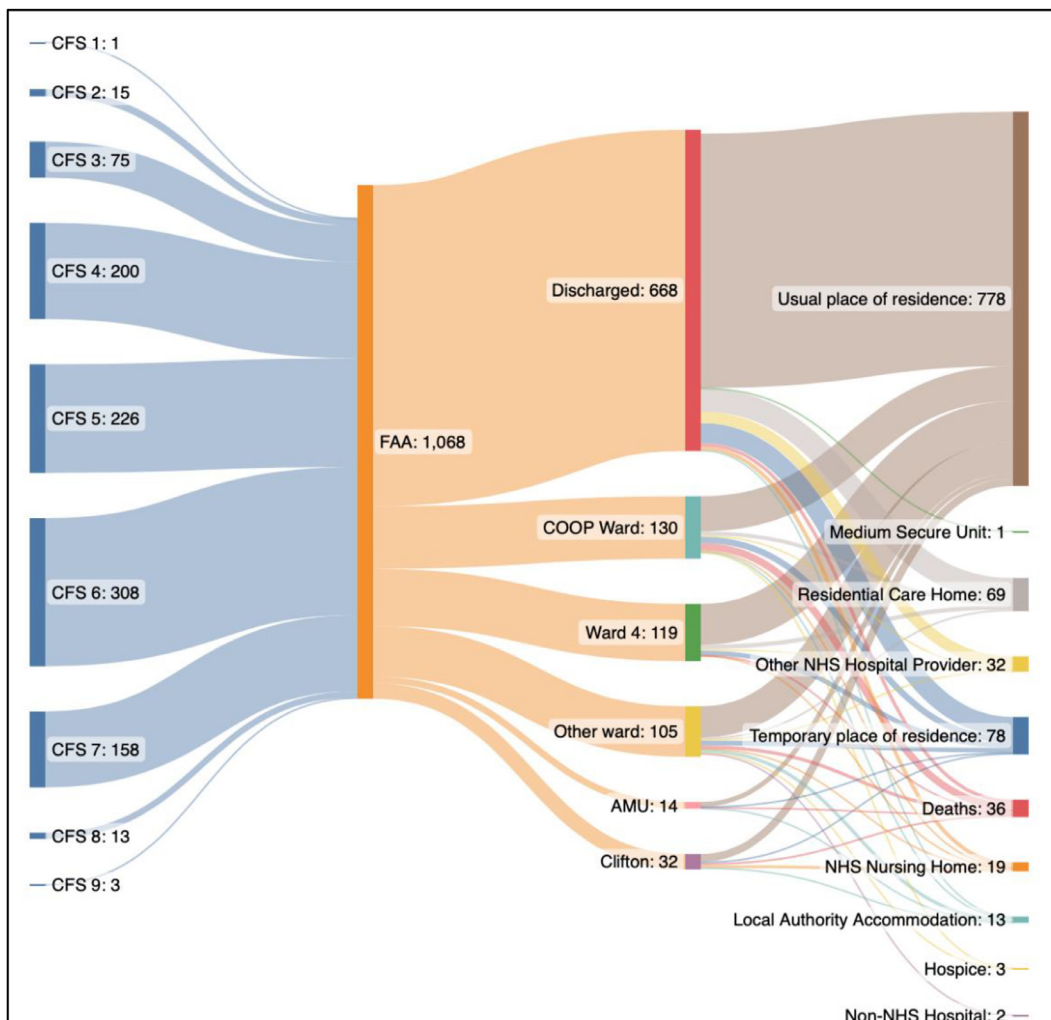

Chart 1. Sankey diagram showing flow based on CFS to FAA and subsequent destination plus final discharge destination over first year of operation.
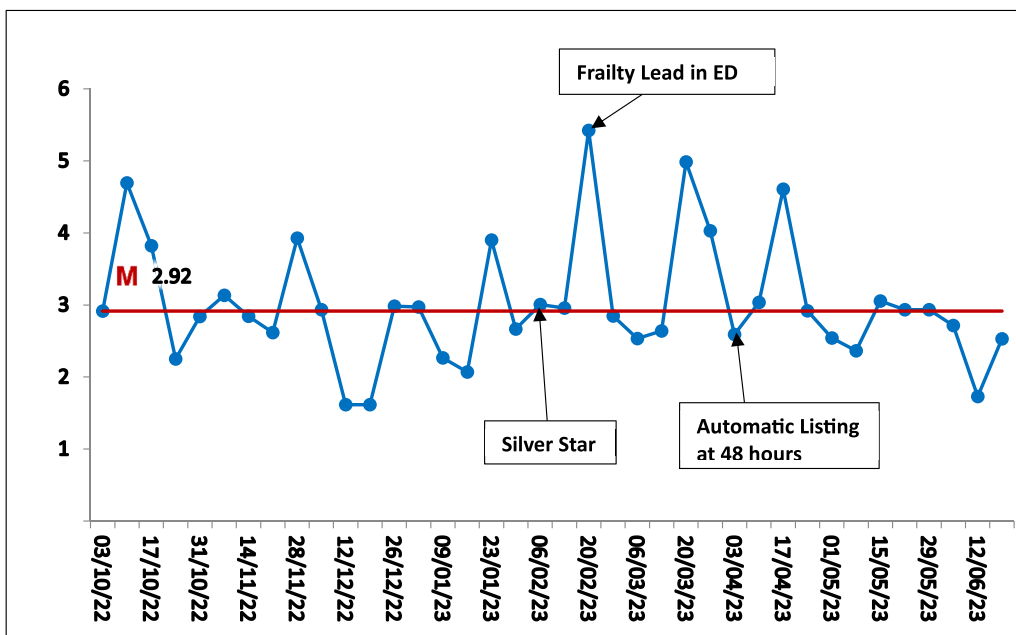
Chart 2. Run chart to show length of stay for patients admitted to Frailty Assessment Area.
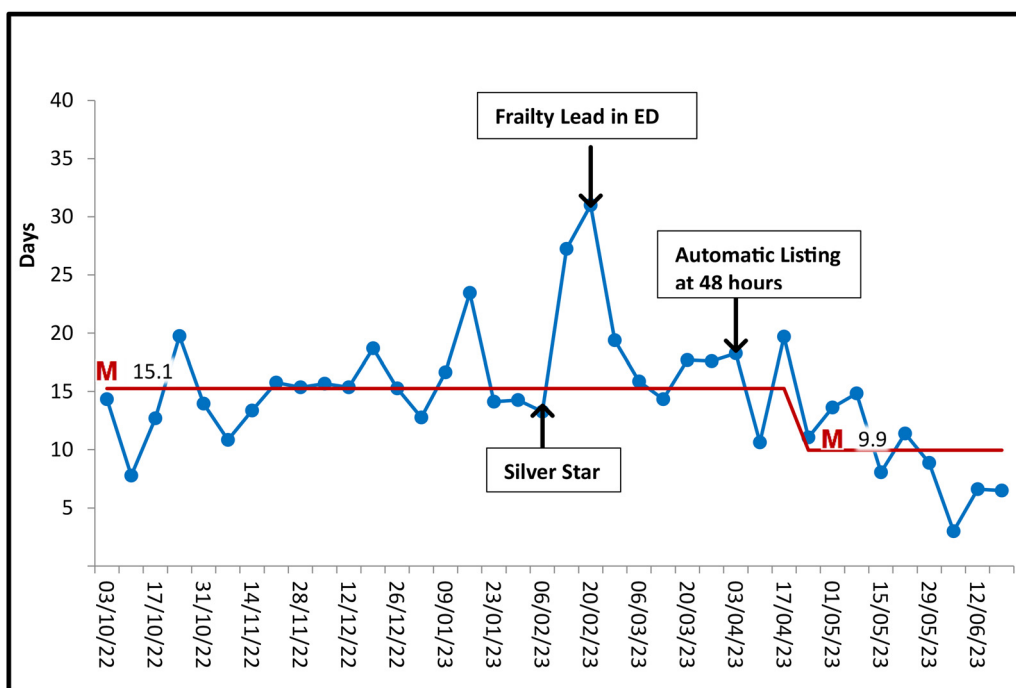

Chart 3. Run chart to show overall length of stay for entire admission at trust for patients admitted via Frailty Assessment Area with PDSA cycles marked.

Older Person department and nursing and medical staff on the unit were consulted for change ideas.

A driver diagram was developed around the aim statement. Primary drivers to flow were identified as patient identification within the Emergency Department and onward movement to Care of Older Person Wards and rehab.

Baseline analysis of flow using a Sankey diagram highlighted the most common destinations and these were highlighted as priorities to focus on. Process mapping of the admission process to frailty highlighted the difficulties in identifying patients within the Emergency Department and so this was another focus for improvement.

An automated digital dashboard was developed that showed live data on several metrics. Length of stay within the Frailty Assessment Area was chosen as the outcome measure and this was measured as a weekly median length of stay for all patients admitted. Balance measures included overall length of stay for whole admission to the trust, weekly total admissions to the unit, and patients and relatives feedback surveys.
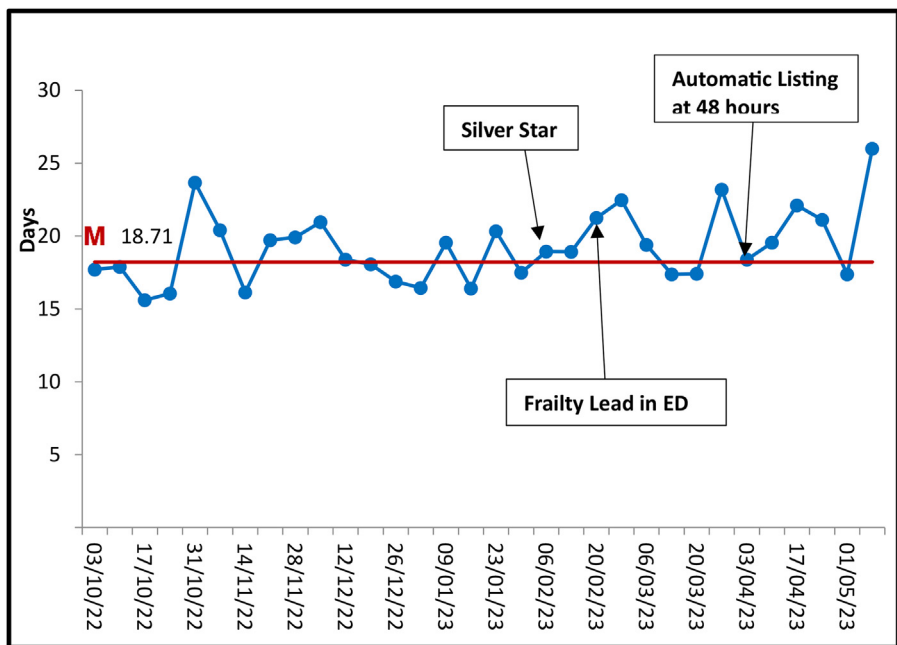
Chart 4. Run chart to show overall length of stay for entire admission at trust patients admitted to Care of the Older Person wards.

Picture 1. E-referral system with patients with silver star highlighting fast identification of patients appropriate for FAA with CFS score noted (P.I.D redacted).

Results

A rapid identification system for highlighting frail patients, those with a Clinical Frailty Score (CFS) of four or greater, was developed. This took the form of a silver star embedded within the e-referral list of patients that had been referred to medicine. By doing this we were able to quickly identify potential patients that would benefit from our Frailty Assessment Area, without a significant change in workload or by asking Emergency Medicine teams or the on-call medical team to do any extra work. In-putting CFS score was part of our standard admission process prior to the project. These patients could be selected by either the bed managers to prioritise transfer to FAA following discussion with either the ED or FAA teams to ensure that they did not meet any of the exclusion criteria.

This process did not initially reduce our length of stay, as it inevitably increased the number of potential patients that were identified for our unit. In the immediate stages following this our length of stay increased, going against our target. Prior to this process we had been manually selecting patients for referral or reliant on referrals from A+E or Medical clinicians.

We initially thought about having a narrower selection criterion for admission as a change idea, however we decided that this might significantly limit flow to the unit. We instead decided to initiate a policy of automatic listing for beds on Care of the Elderly wards at 48 h of admission length. This improved our length of stay back towards our baseline length of stay.

We did not improve length of stay for patients admitted to the frailty unit to the target of 48 h by the end of the QI project. We did notice in our balance measures that the combination of early recognition of frail patients in ED, and earlier CGA on our frailty unit meant that those patients that were transferred on to a Care of Older Person ward following admission to our Frailty Unit, had a significantly lower length of stay than those patients that had been admitted via the Acute Medical Unit, calculated at 684 bed days for the trust over the period of analysis.

Total admissions to the unit, our other balance measure, did not change over the course of the project. Patient and family feedback remained high throughout the length of the project. We used a family and friends test and patients voluntarily submitted feedback. Our feedback was consistently between four and five out five on a patient subjective standard of care.

Discussion

Although we did not improve length of stay for patients as per our aim, we did show that patients that went through our Frailty Unit had a reduced overall length of stay in comparison to those that were admitted via other admission routes to the same wards. To a large part admission length was limited by capacity for beds on transferring wards and by waits for social care services for those requiring support on discharge, both of which were outside our control.

The combination of a broad admission criteria and a way to easily identify frail patients within the Emergency Department via the silver

star system allowed the maximum number of patients to benefit from CGA on our unit. This coupled with a rapid transfer to wards for patients that needed longer admissions allowed flow through the department to be maintained.

Conclusion

The development of a frailty marker embedded within our medical referral system allowed for a rapid identification of patients that might benefit from admission to a Frailty Assessment Area that would otherwise be admitted to the Acute Medical Unit. Although this development did not reduce length of stay on the Frailty unit, early CGA and automatic transfer of patients onwards allowed for flow to be maintained and overall length of stay for these patients was reduced compared to similar patients not admitted to the Frailty Unit.

References

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3. Juma S, Taabazuing MM, Montero-Odasso M. Clinical frailty scale in an acute medicine unit: a simple tool that predicts length of stay. *Can Geriatr J.* 2016;19(2):34.