

Reducing the length of stay for Inpatient amputees at the Lister Hospital

Project background

- Since April 2019, 94 patients have undergone a major lower limb amputation at the Lister and in that time the average length of stay is 27 days. October 2020 marked the first patient from Harlow to have their surgery at the Lister and since there have been 5 further. With plans for the Lister to become the Vascular hub for Hertfordshire, meaning all surgery, elective and emergency from Princess Alexandra and Watford will eventually be carried out here, the numbers are likely to increase significantly.
- There are currently no national guidelines or benchmarking that would allow us to compare whether the LOS at the Lister is desirable or not; however, there would seem to be some common themes which if addressed could lead to the reduction in this.
- Prolonged stays in hospital are costly, the approximate cost for each day a patient spends in hospital is £195 per day and in this instance there are 3 common themes – Issues with patients wound, access to out of area discharge destinations and patient who have more complex medical issues specifically renal patients.
- This along with exposing them to a greater risk of catching infections and delaying their overall recovery post op are important factors at looking at reducing the LOS.

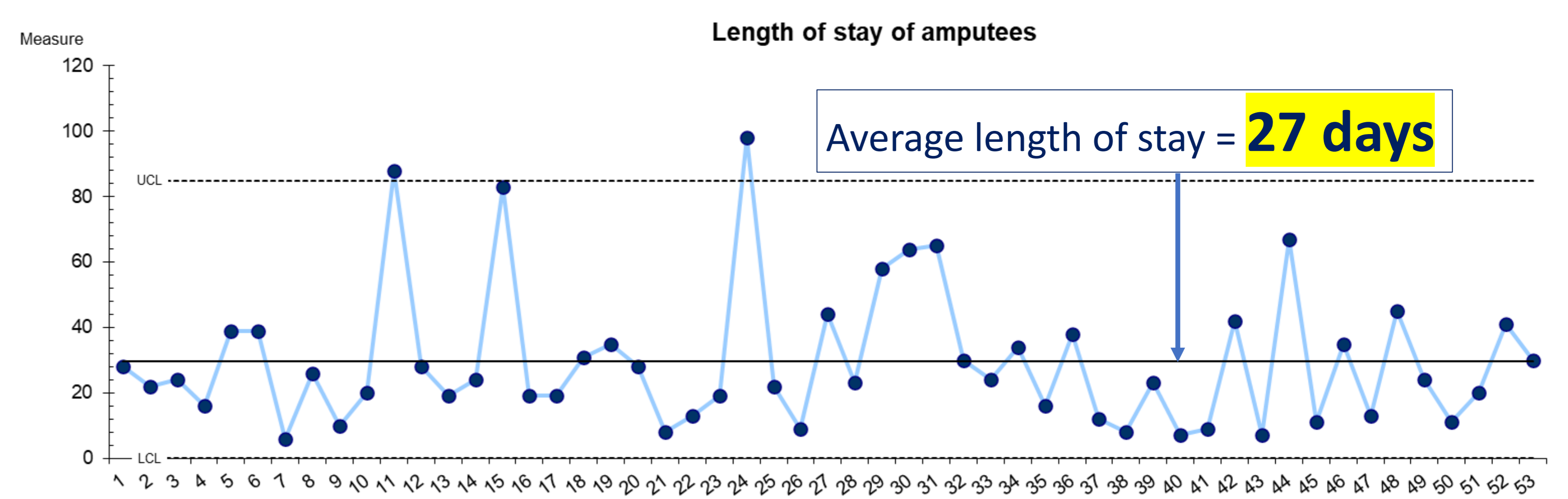
Measures

Length of stay

Patients wait around **8 days** from admission before they are booked for amputation.



Patients are discharged from hospital **19 days** after amputation.



Therapy service data (2019-2022)

	April 2019 to March 2020	April 2020 to March 2021	April 2021 to March 2022
Total Number of Amputations	18	37	35
Sex			
Male	72%	73%	74%
Female	28%	27%	26%
Level of Amputation			
Below knee	11 patients, (61%)	17 patients, (46%)	16 patients, (50%)
Above knee	6 patients, (33%)	12 patients, (32%)	13 patients, (42%)
Through knee	1 patient, (6%)	4 patients, (11%)	2 patients, (6%)
Bilateral	0	4 patients, (11%)	0
Discharge Destination			
IMC	1 patient, (6%)	15 patients, (47%)	24 patients, (69%)
Home	17 patients, (94%)	17 patients, (53%)	8 patients, (23%)
Average LOS	23 days	27 days	27 days
Outcome – RIP			
RIP	3 patients, (17%)	12 patients, (32%)	6 patients, (17%)
Remaining 15 patients		Remaining 25 patients	Remaining 29 patients
Limb user	13 patients, (87%)	10 patients, (40%)	5 patients, (17%)
Under the care of limb fitting centre	0	4 patients, (16%)	13 patients, (45%)
Non Limb user	2 patients, (13%)	11 patients, (44%)	11 patients, (38%)



Physiotherapy service for our amputees.

Methodology

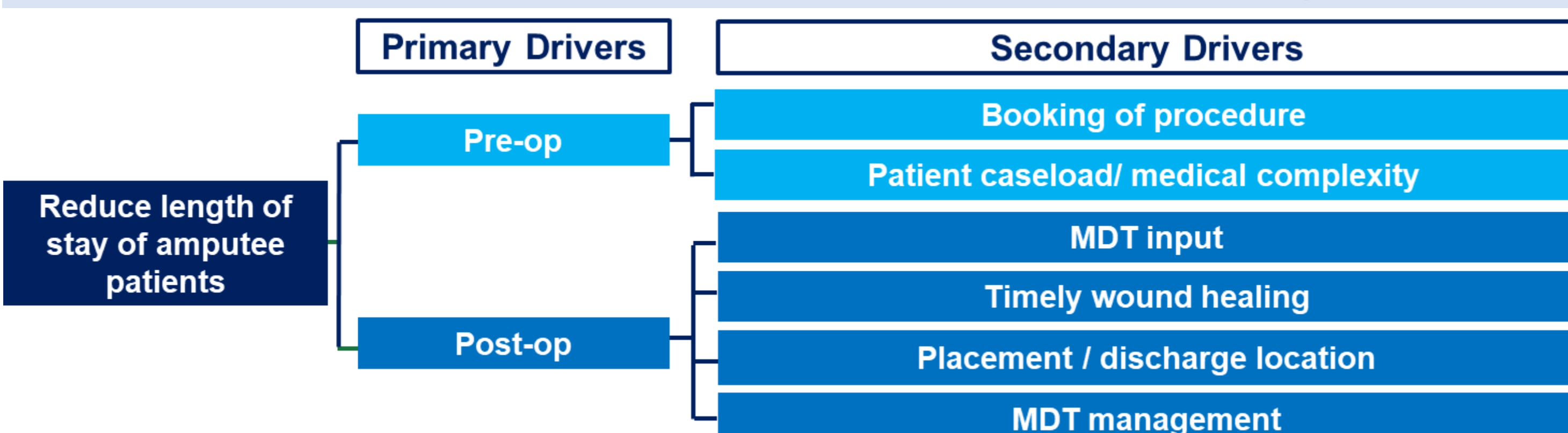
The ENHT 7-step Model for Improvement



Project aim

- Reduce the length of stay of amputee patients, specifically:
- Reduce the pre-op period to 7 days by December 2022
 - Reduce the post-op period to 18 days by December 2022

Change idea to be tested



- Addenbrooke's have recently undertaken a project which has shown to reduce the length of stay down by 2 days by using an **enhanced physiotherapy and occupational therapy service pre op and post op.**



My leadership learnings

- Illustrated the importance of having data to evidence LOS and outcomes.
- Challenges of maintaining the service during covid times
- Listening to what matters to other MDT members led to reducing length of stay as the focus
- Liaising with other vascular networks gave us insight into best practices in other areas



Next steps

- Involving vascular consultants, vascular specialist nurse and nursing staff on 7A to explore topics such as *Wound Management and efficacy of surgery for renal patients.*
 - Smoothing out the existing amputee pathway for out of area patients.