

# Development of the Department of Medicine for the Elderly (DME) Liaison Team

The impact of integrating Geriatric Medicine with Surgical and Anaesthetic teams to realise multidisciplinary working

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## Aim

To improve the care of patients with complexity, multi-morbidity and frailty within the acute hospital, through the development of a specialist liaison team.



## Method

### NELA

Older people undergoing emergency surgery encounter more postoperative medical problems. The National Emergency Laparotomy Audit (NELA) includes the process measure that patients over 70 should have access to specialists in the care of older patients. This gave us a rationale for change to develop collaboration between critical care and surgical teams and development of the Liaison service: a consultant geriatrician, specialist registrar and nurse consultant. We began an integrated way of working through daily reviews of our stepdown unit to case-find these emergency laparotomy patients.

### Urology and General Surgery

Due to the success the service, it has expanded to incorporate twice weekly board rounds on Urology and subsequently General Surgery to highlight patients who would benefit from geriatrician input. This service acts to incorporate the wider MDT to create structured management and coordinated discharge planning.

### Documentation

The liaison team are also responsible for the DME referrals across the wider hospital. This highlighted the referral system, which required improved communication and documentation of advice. We operate an electronic referral system and active patient list with a concise review sticker to improve this communication, with a recognisable logo for audit record-keeping.

MEDICINE FOR THE ELDERLY LIAISON TEAM REVIEW			
Name:	DOB:	HN:	
Baseline function:		Escalation status:	
PMH:	Problem list:	Management advice:	
Outcome: <input type="checkbox"/> Base team to re-refer for further input: <input type="checkbox"/> <input type="checkbox"/> DME to review and support on base ward: <input type="checkbox"/> <input type="checkbox"/> DME to take over care: <input type="checkbox"/>			
Reviewed by:	Date:	Time:	

WPH2370

DME Liaison Team Review Sticker

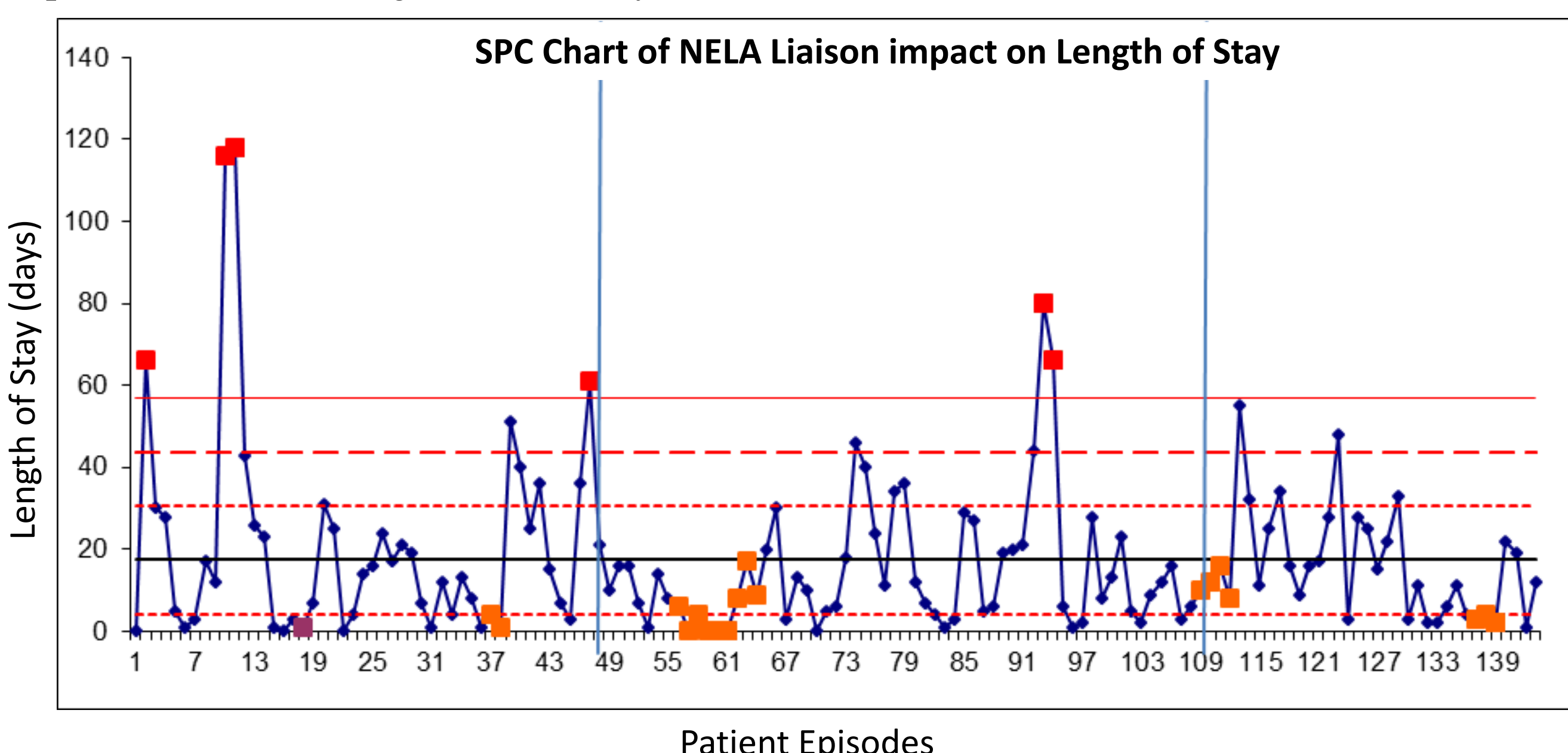
### Sustainability and Leadership

To ensure development of this service, year-long fellowship posts have been created. These registrars deliver the clinical responsibilities with focus on quality and service improvement, whilst developing leadership skills through a formal qualification.

## Results

### NELA

Using NELA criteria, patients seen by a geriatrician post-laparotomy increased from 7% to 93% over two years. Statistical Process Control (SPC) charts demonstrate that introduction of the service was associated with reduction in mean length of stay (LOS) of 3 days per admission (22 → 19 days), with reduced variability. NHS Improvement figures of £400/bed day and trust activity figures indicating 100 emergency laparotomies in the over 70s/year equates to a cost-saving of £120,000/year.



### Urology

Reviewing urology board rounds through an SPC chart demonstrated a mean reduction of 1.68 days (11.34 to 9.66 days). This stemmed from a reduction in LOS exceeding the third standard deviation.

- 1) Mean LOS PDSA Cycle 1: 11.34 days
- 2) Mean LOS PDSA Cycle 2: 9.66 days

Overall Reduction in Variability of LOS  
Mean Reduction of LOS per admission:  
PDSA Cycle 1 vs PDSA Cycle 2: 1.68 days

### General Surgery

Prior to this intervention, patients on general surgery were reviewed through formal referral to the DME Liaison team. Board rounds were then commenced and have reduced the time from admission to referral by 4.9 days (8.0 → 3.1 days) when NELA patients and weekends are excluded. This is associated with a reduction in the variability of length of stay without an increase in readmission rates.

	June '17	Oct	Nov '17	Dec	Feb '18
Patients >70yrs admitted under general surgery	147		118		112
Proportion seen by DME	18%		20%		18%
Admission to DME review	9 days	Board rounds begin	6.2 days	Time and Extramed	6.1 days
Admission to review (Ex. NELA & weekends)	8 days		3.3 days		3.1 days
Co morbidity rate DME (All)	1.9 (1.8)		2 (1.6)		2.4(1.8)
Complication rate DME (All)	1 (0.5)		1 (0.3)		0.9 (0.5)

### Support and documentation

Qualitative survey data collected from surgeons, anaesthetists and ward based multidisciplinary teams' demonstrated unanimous satisfaction with the service and how it supported staff to deliver excellent patient care with more timely resolution of medical and discharge issues through more prompt MDT discussions.

"The team provide such valuable support for us caring for complex, older surgical patients. Their input is hugely helpful and are fortunate to have quick access to their service."  
Miss S Brewer, Surgical Specialist Registrar

"An invaluable service which reduces referral time, involves all of the MDT and decisions are made quicker"  
Mrs T Gadsby, Surgical Ward Sister

"The team's advice, input and support is invaluable as medical problems can be overlooked in acute surgical patients"  
Dr M Patel, Surgical Junior Doctor

Introduction of an electronic referral system (Extramed) has led to better caseload management. We are able to see patients quicker from the point of referral, and support base teams for a longer period of the inpatient stay. We are able to redirect referrals to a more appropriate team in a more timely manner.

10 week period	Paper/Email	Electronic
Total (exc. duplicates)	n = 126	n = 119
Rejected	2	16
Referral to review (Inc weekends)	0.39 days	0.18 days
Average time under review	2.92 days	5.78 days
Length of Stay	22.64 days	17 days



## Conclusions and Future Actions

Management of older and complex patients is everyone's business. Surgical, critical care and liaison teams have worked collaboratively to realise integrated care for older people. Case finding through a twice weekly geriatric medicine and surgical team MDT meeting has enabled more timely recognition of older people with frailty. Specialist support enables rapid resolution in problems with a reduction in length of stay and cost savings to the trust. Clear documentation and communication of advice has improved understanding of the complexities and outstanding problems of these patients. The model is simple, cost-effective and could be translated and operationalised to other NHS organisations.