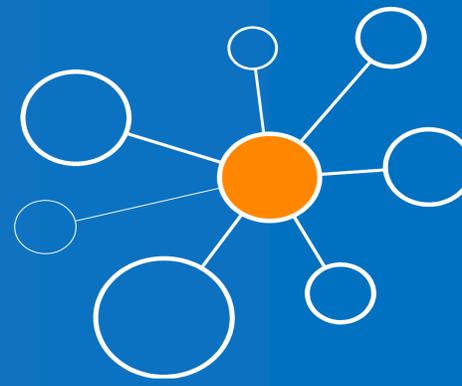


Quality improvement in vascular surgery - A work in progress

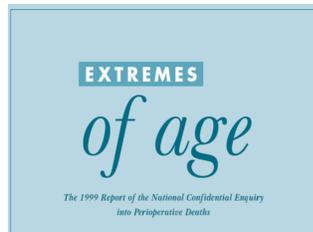
Dr Natalie Gaskell



Background

Our population is ageing and at 65 we can expect to live an average of 18-20 more years, with just over half of these spent in good health but the remainder with disease and disability. More older people are undergoing surgery however, older people have worse outcomes following surgery than their younger counterparts. Many reports have also demonstrated deficiencies in care.

There is an emerging evidence basis for the role of comprehensive geriatric assessment (CGA) and collaborative care in order to improve outcomes. CGA is a multi-modal assessment that evaluates various aspects of a patient's physical, mental and psychosocial health. It focuses on 'geriatric syndromes' such as frailty and delirium which are prevalent in the older surgical population and impact on their post-operative outcomes. Models of pro-active collaborative care have been shown to improve outcomes.



The challenge – A very wide remit!

'Improve the medical care of patients admitted under the vascular surgical team'.

My original idea was to implement comprehensive geriatric assessment for frail older patients admitted under the vascular team to evaluate whether this had an impact on length of stay, readmission and post-operative medical complications.

This proved to be challenging, partially due to difficulties in identifying all appropriate patients. I therefore changed the remit to focus on patients with lower limb peripheral vascular disease complications. This allowed easy identification of patients, but also on the whole represented the frailest and most co-morbid cohort of patients admitted under the vascular team.

Comprehensive Geriatric Assessment



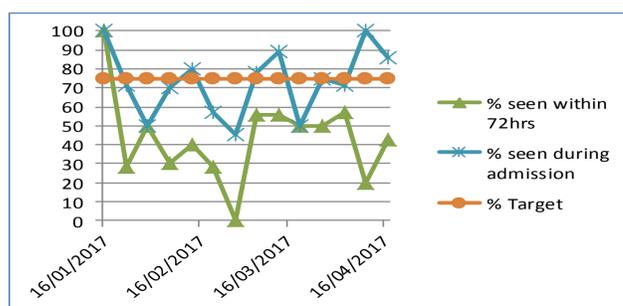
QI process

Aim statement:

"By August 2017, ≥75% of patients admitted as an emergency due to lower limb peripheral vascular disease will undergo a multi-modal assessment based on the principles of comprehensive geriatric assessment (CGA) within 72 hours of admission."

Results

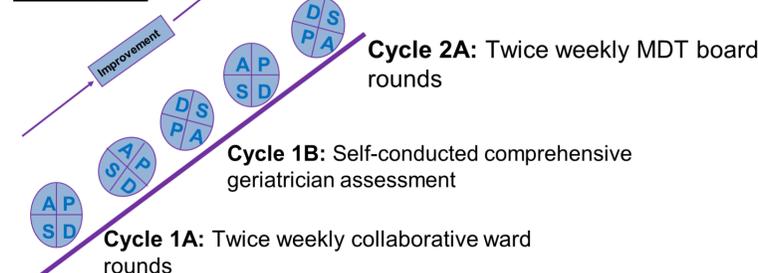
Outcome 1: Run chart showing percentage of eligible patients who received comprehensive geriatric type assessment



Outcome 2: SPC chart showing no particular influence on length of stay

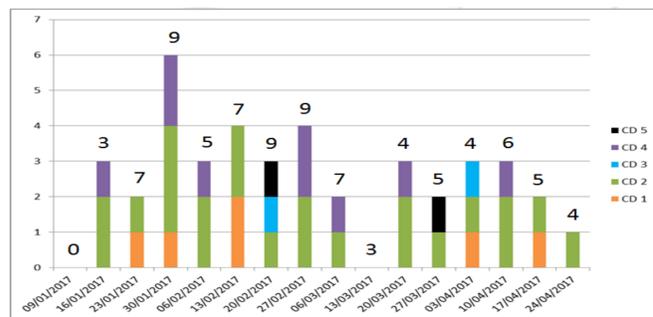


PDSA cycles

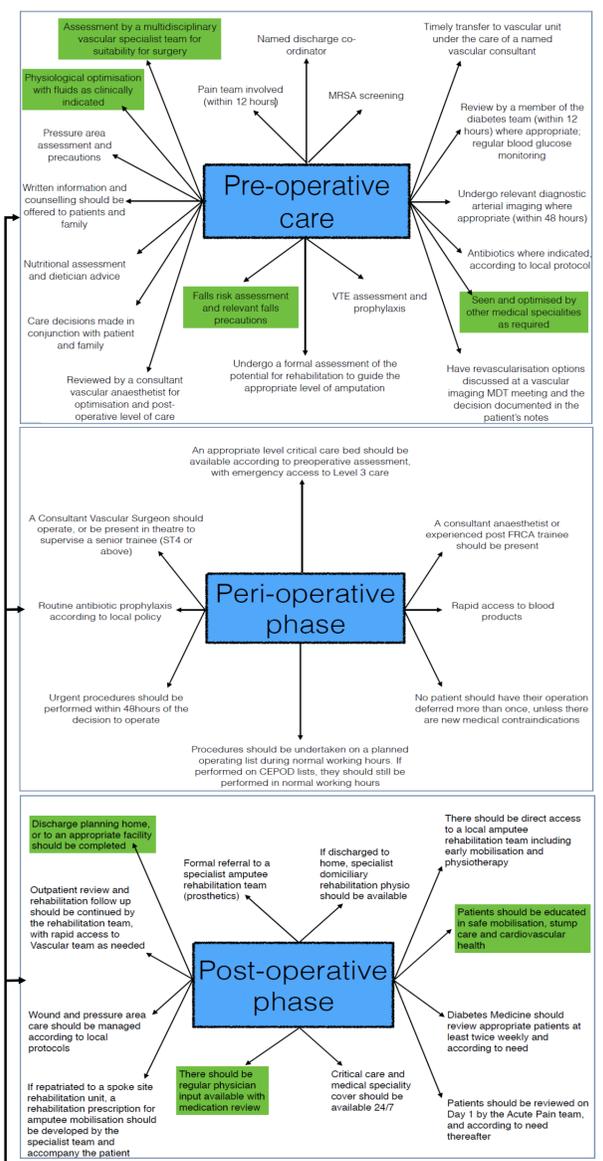


Outcome 3: Bar chart showing number of patients with post-operative complications and severity according to the Clavien-Dindo scale (number above bar shows total number of patients undergoing surgery)

Definitions	
I	Any deviation from the normal postoperative course without the need for pharmacological treatment other than the "allowed therapeutic regimens", or surgical, endoscopic and radiological interventions
II	Requiring pharmacological treatment with drugs beyond those allowed for grade I complications. Blood transfusions and total parenteral nutrition are also included.
III	Requiring surgical, endoscopic or radiological intervention.
IV	Life-threatening complication requiring critical care management; CNS complications including brain haemorrhage and ischemic stroke (excluding TIA), sub-arachnoid bleeding.
V	Death of a patient



Thoughts: No benefit? Wrong measures? Wrong interventions?



Challenges and limitations

- It's hard to measure 'quality of care'
- No baseline data before I started to allow comparison
- Balancing workload with other clinical and training commitments
- Changing your behaviour is easy but changing the behaviours of others is very hard
- One person can't change an entire service in a year
- You need to start small and expand, not the other way around
- In order to see sustainable improvement you need to change the system

What now...

Narrow down the patient intervention group and change the system:

Implementation of best practice for patients undergoing major limb amputation through the creation of a dedicated amputee care pathway.

