

**SERVICE DEVELOPMENT BUSINESS CASE**

<b>Title:</b>	Perioperative care of Older People undergoing Surgery (POPS) at Kent and Canterbury Site				
<b>Division:</b>	Surgery and anaesthetics	<b>Specialty/ Department:</b>	POPS		
<b>Project Manager:</b>	Naomi Webb	<b>Financial Lead:</b>	Dean Henley	<b>HR Partner:</b>	Karl Woods

\* ALL SECTIONS MUST BE COMPLETED

**Section 1 - Executive Summary****1. What is the issue/s that needs to be resolved? (Include Timescales)**

Increasing numbers of older people are undergoing elective and emergency surgery. This is related to changing demographics, advances in surgical and anaesthetic technique, changing patient expectations and changing healthcare professional attitudes and behaviours. The overall impact is that rates of surgical procedures in older people are now significantly higher than in any other age group.

Whilst it is clear that older people have much to gain from surgery in terms of symptom control and life expectancy, they remain at higher risk of adverse postoperative outcome (morbidity, mortality, process) in comparison to younger people. This adverse risk profile is due to factors that are associated with ageing; poor physiological status, multi-morbidity and geriatric syndromes such as cognitive impairment and frailty. These risk factors are particularly prevalent in the vascular surgical population; with multi-morbidity in 80% of patients, cognitive impairment occurring in 70% of patients, frailty levels being at a par with those on geriatric medicine wards.

Perioperative care of Older People undergoing Surgery (POPS) is a service that aims to address these issues. It is a geriatrician lead service that used the skills of the whole multi-disciplinary team to provide care for older patients. There is emerging evidence that clinician and patient reported as well as process outcomes can be improved in frail older surgical patients with the implementation of a POPS service. Work led by POPS at Guys and St Thomas' NHS Foundation Trust (GSTT) has demonstrated that geriatrician led and delivered preoperative assessment, optimisation and shared decision making with follow through of the patient on the surgical ward with POPS providing a single point of care for medical, rehabilitation and discharge planning, can reduce postoperative complications and shorten length of stay (LOS). This was initially demonstrated in orthopaedic elective patients and more recently in elective vascular surgical patients (reduced medical, surgical complications and a 40% reduction in LOS). Evidence gained locally at EKHUFT has demonstrated clear and significant benefit of the POPS service to both patients and to the working of multidisciplinary teams (see case for change section below).

There is therefore overwhelming support to expand the service further at EKHUFT. However, for this to occur there are 2 key issues that need to be overcome:

1. Ensure **sustainability of the current service**
2. Provide **additional resource to expand the service** into other areas

In more detail, the issues that require addressing are:

- Sustainability of the service: when consultant is on leave there is no cover therefore, the service stops.

	<ul style="list-style-type: none"> <li>• Current consultant time not used to full potential as no lower grade doctors to assist in tasks that do not specifically require consultant input.</li> <li>• The service would provide an excellent training opportunity, however, no trainees allotted to the service.</li> <li>• At the Canterbury site there is a need and demand for POPS input into the elective Urology pathway but current workforce does not have sufficient resource to provide an outpatient Urology service.</li> <li>• The work load within Vascular is set to increase (both inpatient and outpatient elective work) with the merger with Medway to become the regional Vascular hub at Canterbury. The current team will not be able to take on any extra workload as they are currently working to capacity.</li> <li>• The Elective Orthopaedic Centre is set open at the Canterbury site. There is a need and demand for POPS input in the elective pathway both outpatient pre-operative workup and including medical cover postoperatively on the wards with support with discharge planning. Additional workforce would be needed to cover this.</li> <li>• There is need within other surgical specialities: this business case puts forward the case to expand at the Canterbury site and ensure sufficient workforce to meet the demand and establish sustainability at this site. In the future, once this has been achieved and benefits continue to be realised; covering the needs of other surgical sub-specialities can be looked in to and planned for in subsequent business cases (for example, General Surgery and T&amp;O needs at other sites).</li> </ul>
<b>What are the options to address the issue/s?</b>	
	<p><b>Option 1) Do Nothing - No further investment in the POPS service.</b></p> <p>This would lead to the following issues:</p> <ul style="list-style-type: none"> <li>• Current clinical team (1 WTE POPS consultant and 1 WTE CNS, 0.6 WTE OT time) could not cope with increased workload within Vascular and quality of current service would suffer and may require suspension of the Urology inpatient POPS service.</li> <li>• Continued issue with lack of cover when POPS consultant is on leave and breaks within the service during these periods.</li> <li>• Inability to provide service to elective Urology pathway patients and Elective Orthopaedic Centre.</li> </ul> <p>Inability to spread the service and quality improvements along with improved outcomes into other specialities.</p> <p><b>Option 2) (preferred option). Expansion of POPS service at the Canterbury site with greater resource to ensure a sustainable service and also expansion of the service.</b></p> <p>This will allow for:</p> <ul style="list-style-type: none"> <li>• Sustainability within Vascular, continuing to provide care for patients in both elective and emergency pathways. Important considering the plan for regional merging of Vascular services to Canterbury and anticipated increase in workload.</li> <li>• Sustainability within Urology, continuing to provide care for emergency admissions and allowing for provision of a new outpatient service for those in the elective pathways, importantly including elective cancer pathways</li> <li>• Support to new Elective Orthopaedic Centre at Canterbury. Outpatient elective service allowing for preoperative review with optimisation and shared decision making. Follow up on the ward of POPS patients postoperatively. Medical support to elective orthopaedic patients and help with discharge planning.</li> <li>• Creating sustainability of the service on the Canterbury site will also make it more possible to allow for planning for future expansions across site and other surgical sub-specialities in the future.</li> </ul>

3.	<b>What is the financial impact of the Options?</b>
	<p><b>Option 1)</b> This option will continue with the current resources, however, with the predictable increase in workload with the regional Vascular merger the quality of the service will suffer and the current benefits realised from the service will diminish and cost savings currently realised may not continue, as workload would be unmanageable. This may also impact on patient safety.</p> <p><b>Option 2)</b> This option will have a greater resource / revenue cost than the current service. However, this will provide additional income opportunities, cost avoidance from reduction in length of stay, readmission rates and cancellations on the day. Where treatment ‘turndown’ as a result elective decisions are made appropriately in conjunction with the patient, this would also result in a cost avoidance from inappropriate treatment and potential post-operative complications.</p> <p>Underpinning this will be a significant improvement in care quality in the areas in which the POPS service is delivered.</p> <p>Option 2 will allow the sustainability and expansion of the POPS service. The POPS service and care model has a clear evidence base with randomised controlled trials demonstrating cost savings in several areas listed below. Some of these areas are more complex to measure and track through the systems. The overall financial benefits will be reflected within the next 1-2 years. A thorough evaluation of the financial benefits of the service require the expertise of a health economist, as the benefits are accrued across primary and secondary care, across Care Groups at secondary care level and in social care.</p> <p>Costs savings not quantified include:</p> <ul style="list-style-type: none"> <li>• Reduced number of specialist appointments to optimise patients preoperatively</li> <li>• Reduced investigation costs through targeted and focussed investigations, reducing unnecessary tests</li> <li>• Reduced pharmacy costs through individualised rationalisation of patients medication</li> <li>• Reduced transportation costs through patients having fewer appointments</li> <li>• Reduced GP appointments to manage complex frailer older patients.</li> <li>• Reduced cancellations of surgery due to over-occupancy. (Through reduced length of stay)</li> <li>• Multidisciplinary models of care resulting in higher tariffs for outpatient clinics.</li> </ul> <p>However, there are 3 main areas where the POPS service has estimated savings for the trust. These are:</p> <ol style="list-style-type: none"> <li>1) Reduced length of Stay</li> <li>2) Reduced re-admissions</li> <li>3) Reduction in cancellations</li> <li>4) Improved coding</li> </ol>

Please expand rows to provide additional financial detail where applicable.					
Income/ Cost Impact	2021/22 £'000	2022/23 £'000	2023/24 £'000	WTE	Notes
Capital Investment	£0	£0	£0		
<b>TOTAL CAPITAL</b>	<b>£</b>	<b>£</b>	<b>£</b>		
Clinical Income	£0	£93	£124		Income from additional activity in Section 2
Other Income	£0	£0	£0		Non clinical activity income
Pay Costs/ WTE	-£71	-£322	-£322	4.45	
Non-Pay Costs	-£0	-£17	-£15		
Clinical Support Services Costs	-£0	-£75	-£100	2.00	
<b>Income &amp; Expenditure (I&amp;E) Impact</b>	<b>-£71</b>	<b>-£321</b>	<b>-£313</b>	<b>6.45</b>	<b>Sum of above (excl capital)</b>

**4. What are the details of the preferred option?**

The preferred option is **Option 2)** which will both ensure sustainability of the current POPS service but also allow expansion of the service at the Canterbury site.

This will allow for:

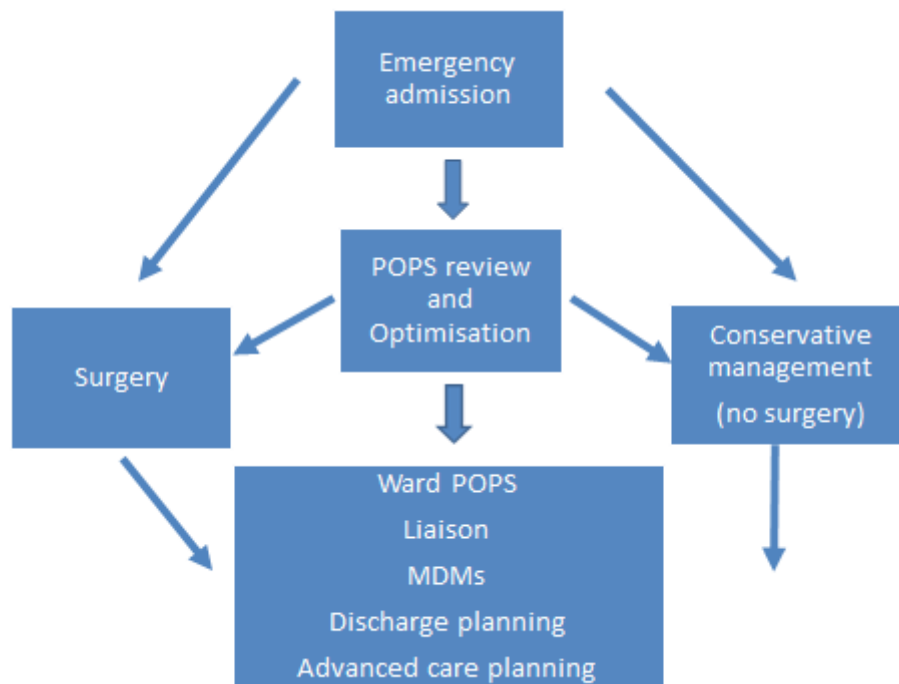
- Sustainability of POPS within Vascular, continuing to provide care for patients in both elective and emergency pathways. Important considering the plan for regional merging of Vascular services and anticipated increase in workload.
- Sustainability within Urology, continuing to provide care for emergency admissions and allowing for provision of a new outpatient service for those in elective pathway.
- Support to the new Elective Orthopaedic Centre at Canterbury. Outpatient elective service allowing for preoperative review with optimisation and shared decision making. Follow up on the ward of POPS patients postoperatively. Medical support to elective Orthopaedic patients and help with discharge planning.
- Creating sustainability of the service at Canterbury will also make it more possible to allow for planning for future expansions across site and other surgical sub-specialties in the future.

**The POPS service model of care:**

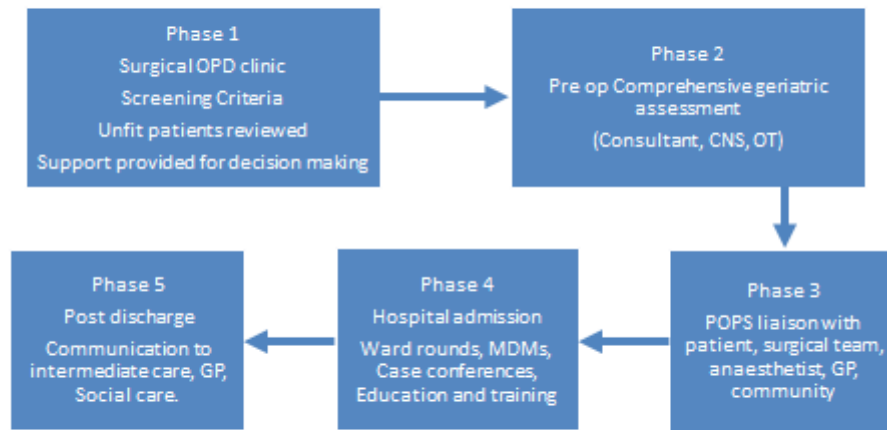
- Preoperative screening to identify (in and out) patients who would benefit from the POPS service.
- Alongside screening POPS will accept referrals from Consultants, pre admission clinics, Nurse Specialists, and Therapists.
- Identified patients will undergo a multidisciplinary Comprehensive Geriatric Assessment (CGA) based on validated tools.
- Any identified comorbidities or syndromes will be pre-operatively optimised using evidence based guidance.
- Education on exercise, nutrition and pain management will be provided to the patients.
- Patients will be counselled preoperatively about their risk of post-operative complications and what they can expect of their hospital stay. (For example patients at risk of delirium are counselled with their relatives about this risk, what to expect if it occurs and what they can do to minimise severity/duration)

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- Therapists will be involved and anticipate needs on discharge from hospital, such that equipment can be provided proactively. (To prevent unnecessary discharge delays).
- Post operatively surgical patients will be reviewed on the wards by the Geriatrician and CNS, providing direct intervention and staff education in early detection and treatment of medical complications; delirium, functional decline, bowel/bladder dysfunction, poor nutrition.
- Regular MDMs will be held to discuss patient discharge planning with ward staff and therapists, to facilitate rapid and coordinated discharges.
- The team will liaise with the patient's local services to set up re-ablement care, rehabilitation, respite for dependents and equipment installation.
- Following discharge, the POPS team will provide outpatient clinic review in those with ongoing medical problems. Thereafter, patients will be signposted to the relevant services, eg falls programmes, continence services, other outpatient services and the voluntary sector for ongoing support.
- A joined-up approach with the POPS team liaising and collaborating with all team members involved in the patient journey will be established.



## POPS Model: Elective Surgery



### Section 2 - Case for Change Summary

#### 1. What is the issue/s that needs to be resolved?

Increasing numbers of older people are undergoing both elective and emergency surgery with clear benefits in terms of symptomatic relief and improved survival. However, whilst older people have much to gain from surgery, they remain at high risk of adverse postoperative outcome. This is true across clinician-reported, patient-reported and process related measures. For example, the literature provides evidence that older people are more likely than younger patients to experience post-operative medical complications, functional deterioration and consequently a longer length of stay.

Such data has led to the growing recognition of the need for involvement of geriatricians in the care of complex older people undergoing surgery. The NCEPOD report, 'An Age Old Problem', reviewed the care received by older surgical patients, noted deficiencies in care and recommended routine daily input from geriatricians. Similarly reports from the Royal Colleges of Anaesthetists and Surgeons and the Associations (British Geriatrics Society and Association of Anaesthetists of Great Britain and Ireland) support the development of collaborative care.

In order to deliver this 'gold standard' care and improve care quality and outcomes in older patients undergoing surgery we need to invest in the POPS (Proactive care for Older People undergoing Surgery) service at EKHUFT to both make it sustainable but also expand it to deliver this 'gold standard' across other areas and surgical specialties.

Nationally the concept of a POPS service was developed at Guy's and St Thomas' NHS Foundation Trust (GSTT) and randomised controlled trials have demonstrated its clear benefit. The intervention has been shown to reduce length of stay and post-operative complications. To be effective this approach needs a patient centered and a holistic approach using the skills of a multidisciplinary team to support every aspect of patient care. The POPS team is an example of true multidisciplinary working; comprising of surgeons, anaesthetists, critical care staff, geriatricians, occupational therapists, physiotherapists and social workers working together to optimise; assessment, intervention, post-operative care and discharge.

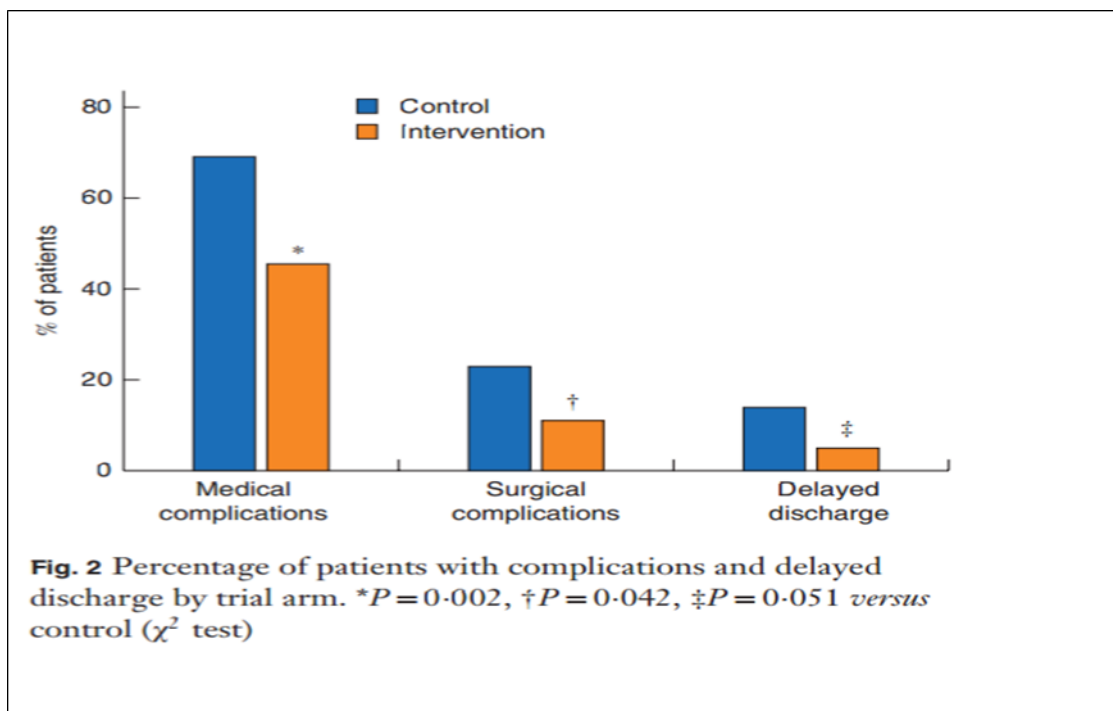
There is growing research evidence to support the implementation of POPS. In a pre and post study in older elective Oerthopedic patients at GSTT, those who underwent POPS had reduced medical and multidisciplinary complications and a 4.5 day reduction in length of stay despite higher comorbidities. (Age and Ageing 2007).

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The following table compares the cohorts' post-operative outcomes.

	Routine preoperative care	POPS Cohort	POPS Service Improvement
Pneumonia (p=0.008)	20%	4%	16%
Delirium (p=0.036)	19%	6%	13%
Pressure sore (p=0.028)	19%	4%	15%
Delayed mobilization (p=0.012)	28%	9%	19%
Length of stay (median)	14.5 days	10 days	4.5 day reduction

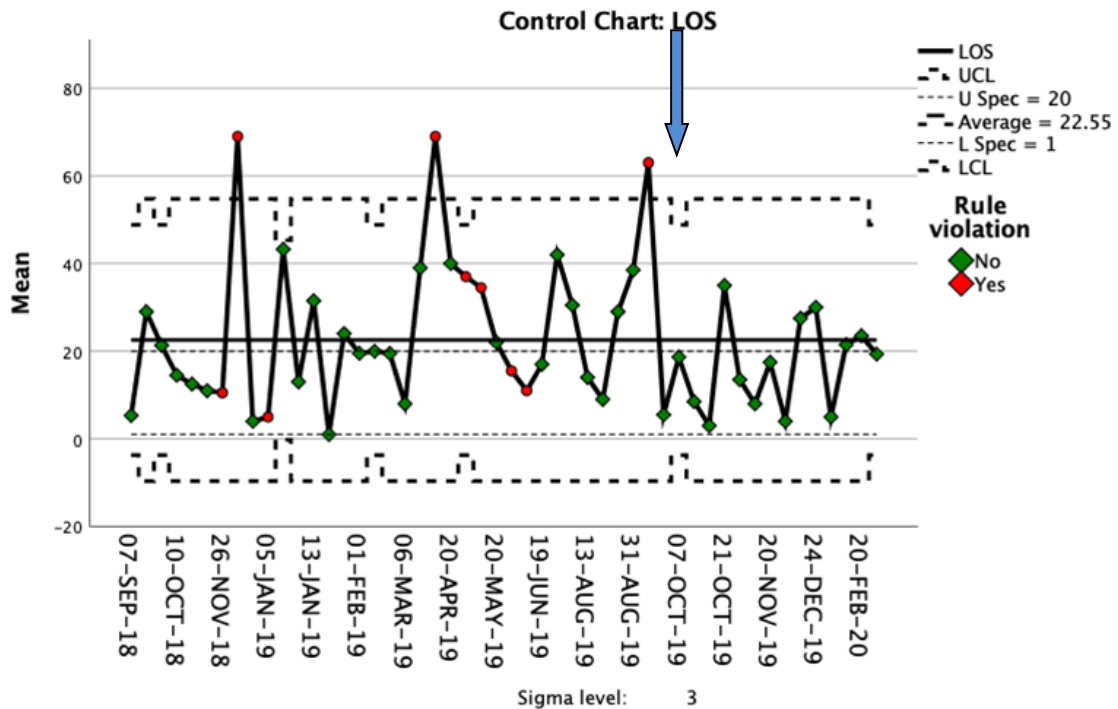
In a more recent study Vascular elective patients were randomised to either POPS or routine preoperative care. The intervention (POPS) group had fewer medical and surgical complications, fewer delays related to discharge and 40% reduction in length of stay (5.5 days versus 3.3 days, p<0.05) (Partridge et al, BJS 2017).



**LOCAL EKHUFT DATA**

POPS started at EKHUFT in Sept 2019. It currently comprises of 1 WTE Consultant, 1 WTE band 7 CNS and 0.6 WTE OT time. The service currently covers inpatient and outpatient Vascular patients and inpatient Urology. Since its initiation, data has been collected which has demonstrated clear benefits. The key benefits are highlighted below:

- **Vascular emergency inpatients:** Median length of stay (LOS) reduction of 7 days within the trust in POPS group, with a 7% reduction in readmissions for medical reasons.

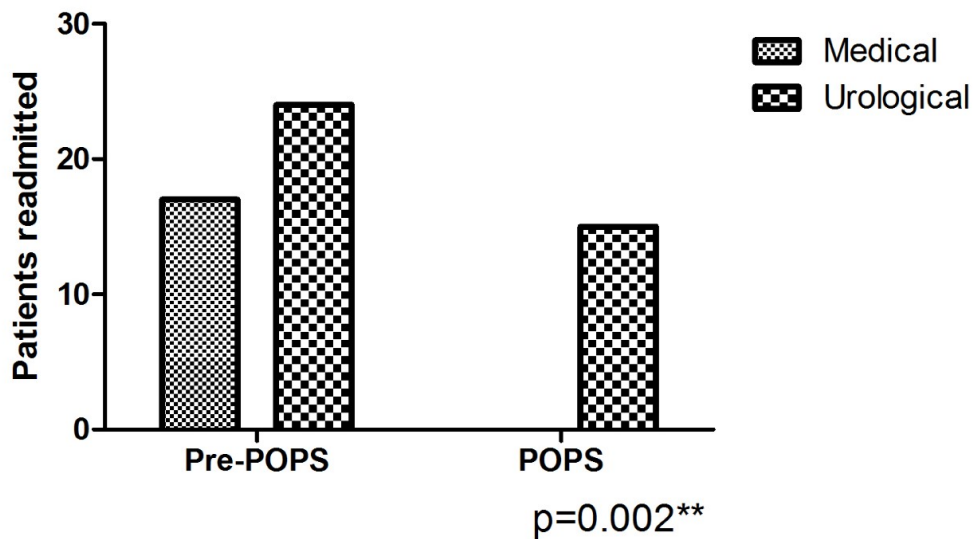


Run chart, from HES data. All emergency Vascular admissions (ALL AGES, excluding 0 LOS). Total LOS within the trust (including any ITU LOS). Arrow indicates start of POPS service at EKHUFT. Since POPS - trend is towards a reducing LOS from Sept 2019.(data pre COVID pandemic)

- Vascular outpatient service:** Allowing patients to make fully informed shared decisions. 114 patients were seen in the first year – this number has been affected by COVID and ability to cover both inpatient and outpatient work with a limited workforce (CNS had to work on ITU during COVID and was only employed 6 months into the service. 40% of those with a surgical option are not for intervention after assessment and shared decision making process. ‘Turn down’ rate reflects patients who are not having inappropriate interventions. 32% had a DNA CPR completed in clinic. 37% had some form of ceiling of treatment or advanced care plan decisions made and documented in clinic. None of the patients seen pre-op by POPS and subsequently operated on, were readmitted for medical reasons post op, suggesting good level of medical optimisation and appropriate patient selection for procedures. Frail patients under surveillance for aneurysms have been sent for a POPS review – most patients have subsequently come off surveillance as they would not want surgery as the results of shared decision making discussions. This has allowed for appropriate resource allocation and most importantly, has put the individual at the centre of their care journey.
- Urology emergency inpatients:** Prospective data was collected over 3 months following introduction of the POPS Service (PS) and compared to 3 months’ retrospective data of the previous standard of no POPS Service (NPS). Results: We assessed 197 patients [PS(n=141)/NPS(n=56)]. Mean age NPS=78yrs Vs. PS 84yrs. Range of length of stay (LOS) decreased from NPS(1-80days) to PS(1-25days). Thirty day readmission rates for “medical reasons” were NPS[41% (17/41)] and PS[0% (0/15)] and “Urological reasons” NPS[59% (24/41)] to PS[100% (15/15)], p=0.002. Mortality rates on readmission improved from NPS[20%(8/41)] to PS[0% (0/15)]. Patients transferred to other speciality teams were halved. This cohort had mean Rockwood (frailty) score 6 (moderately frail), and mean of 7 co-morbidities. Increase in prevalence of fast-track, hospice discharge, and patients achieving end of life at-home was seen. 69% (42/61) of PS cohort returned to usual residence. Recognition and management of delirium and anaemia improved.
- National representation.** Over the last few months POPS at EKHUFT has been working with the SCFN (Specialised Clinical Frailty Network) with the vascular setting. The has allowed for the opportunity for EKHUFT to present their work Nationally on the topic shared decision making as it was felt that our service is leading the way in this area. A talk will also be presented nationally at the British Geriatric Society in Spring 2021 detailing the trust’s work with the SCFN. Close collaboration with the POPS team at GSTT ensures that the service is networked with a mature POPS service, allowing us to develop our resources at speed. The National profile of developments will aid innovation and recruitment.



## Changes in patient readmission reasons



- **Improved recognition and management of medical complications of all surgical inpatients:** the three most common being, anaemia, delirium and respiratory complications.
- **High level of satisfaction from service users.** Small numbers of patient surveys collected pre COVID. Data collection currently resuming.
  - All respondents felt that the outpatient appointment was useful
  - All respondents felt that the outpatient appointment made them more confident in making a decision regarding surgery.
  - All patients felt that the length of appointment was long enough (1 hour allotted).
  - Examples of comments:
    - *Very informative*
    - *Excellent manner and explanation*
    - *All satisfactory*
    - *Doctor and Nurse very nice. Made me feel at ease*
    - *Everything explained in a manner that was understandable. Also saved another couple of clinic appointments*
    - *A very friendly and informative meeting*
- **High level of satisfaction from multidisciplinary team as well as enhanced multidisciplinary working.** Qualitative colleague feedback (multidisciplinary): 41 responses (Vascular and Urology)
  - The following issues that were present pre POPS, have been addressed by the service: Holistic input, medical support, shared decision making, DNA CPR and treatment escalation decisions, delirium and dementia support, discharge planning, clear management plans, communication with relatives, transferring patients across sites for medical input.
  - All respondents felt that the service is beneficial in improving the care of older patients
  - All respondents would recommend the service to colleagues on other surgical wards
  - All respondents felt that the POPS service should be fully integrated into surgery

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	<ul style="list-style-type: none"> <li>○ 95% of respondents felt they had learnt new skills by working with POPS</li> <li>○ All respondents felt that the service would benefit from having doctors in training (currently non allocated)</li> <li>● Addition of pharmacy input will aid in the assessment of our complex patient. Acute frailty services within the trust have invested in pharmacy input to help with de-prescribing and dealing with complex polypharmacy. Within POPS the benefit would also be to help streamline the development of guidelines for both inpatient and outpatient surgical pathways</li> </ul>
<b>2.</b>	<b>How frequently does the issue occur?</b>
	<ul style="list-style-type: none"> <li>● The POPS service is a continuous day to day service providing inpatient and outpatient support to Vascular and inpatient support to Urology.</li> <li>● The current POPS Vascular service has supported 109 outpatient and 234 inpatients during the 1<sup>st</sup> year of the service.the Covid-19 pandemic will have affected the numbers of patients being treated. The POPS CNS was recruited in March and then redeployed to support ITU – the consultant was the only service provider during this time.</li> <li>● A large proportion of the Urology acute take is over the age of 65 – and with increasing age there is a greater possibility of complexity and multi-morbidity.</li> <li>● Currently, the inpatient service for Vascular and Urology is not covered during periods of leave for the POPS consultant.</li> </ul>
<b>3.</b>	<b>What is the severity of the issue - Strategically? (Scope &amp; Risk)</b>
	<ul style="list-style-type: none"> <li>● In terms of sustainability of the POPS service, especially with predicted increase in demand with the regional Vascular hub locating to Canterbury, the severity of the issue is significant.</li> <li>● Other than the current POPS team, there is limited medical cover at the Kent and Canterbury site for surgical patients. Ensuring adequate staff provision will allow sufficient cover to provide ongoing and consistent care to inpatients (emergency or elective admissions) within the whole of Vascular and Urology services as well as the Elective Orthopaedic Centre.</li> <li>● Currently there are gaps with service provision from the current POPS service – as when the consultant (the only doctor member of the team) is on leave, for governance reasons the service stops.</li> <li>● The severity of the issue is also significant in terms of attaining a ‘gold standard’ of care with POPS intervention across other surgical areas and specialties.</li> <li>● Older patients will have deconditioned during COVID – as part of the <u>Restore and Recovery</u> strategy having a POPS service that can help to optimise patients and also help with appropriate shared decision making will aid to improve outcomes for patients and also ensure patients are on waiting lists appropriately. The main aim always being that the patient at the focus of care and decision making.</li> </ul>
<b>4.</b>	<b>What is the severity of the issue - Financially? (Scope &amp; Risk)</b>
	<ul style="list-style-type: none"> <li>● Inadequate POPS support for older complex surgical groups risks increasing LOS, compromising patient safety, worsening readmission rates and risks poorer patient satisfaction with their care.</li> </ul>
<b>5.</b>	<b>What are the risks to the Trust of maintaining the current position – Qualitative?</b>
	<ul style="list-style-type: none"> <li>● When Vascular services merges fully with Medway, the current POPS team will not be able to meet the needs of the increased number of patients through the service. A decision may need to be made about</li> </ul>

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possibly withdrawing input from emergency Urology admissions so that Vascular can be covered sufficiently. This would impact patient safety and care quality in the Urology service.

- The current position would also mean that there will continue to be gaps in the service provided. This too has an impact on patient safety and quality of care.
- Consultant time is not used to its maximum potential as lack of team members means that the consultant is required to do jobs, such as clerk patients and prescribe routine medications.
- Lack of possibility of training perioperative specialists for the future.
- Elective Urology and Orthopaedic patients would not be able to have POPS input and would therefore miss out on the potential benefits described above.
- From the Elective Orthopaedic Centre point of view, lack of adequate medical input at the Canterbury site will limit the number of patients who are ASA3 or higher being operated on safely in this area.
- POPS is a significant selling point in attracting new highly skilled surgeons to the Trust. This opportunity will not be leveraged if the POPS service is not invested in.

<b>Section 2 – Option Appraisal</b>	
<b>Option 1</b>	<b>Do nothing – Maintain the current position</b>
<b>Summary of Option</b>	<b>Continue with our current practice.</b>
<b>Activity Impact</b> (Demand & Capacity)	With the merger of vascular services and increased workload for current team – current urology service may need to be withdrawn.
<b>Workforce Impact</b>	No change to workforce required
<b>Income Impact</b>	Increased readmissions for emergency urology patients as pre POPS status, if POPS urology service needs to be withdrawn.
<b>Cost Impact</b> (Revenue)	NIL
<b>Cost Impact</b> (Capital)	NIL
<b>Savings Impact</b> (CIP)	NIL
<b>Overall Service Level Impact</b> (SLR Profitability)	<b>NIL</b>
<b>Budgetary Impact</b>	<b>NIL</b>
<b>Benefits of Implementation</b>	<b>NIL</b>
<b>Quality &amp; Safety Impact</b>	<b>As workload increase the current team would not be able to provide care for all vascular and urology patients. The quality and breadth of the service would suffer. Elective urology and orthopaedic would have inadequate medical support.</b>
<b>Risks of Implementation</b>	N/A
<b>Proposed Timescale for Implementation</b>	N/A

Option 2	Preferred Option
<b>Summary of Option</b>	Expansion of POPS team at Kent and Canterbury site
<b>Activity Impact</b> (Demand & Capacity)	<b>Medical cover for four inpatient wards – Vascular, Urology and 2 orthopaedic wards. Outpatient review of all three sub-specialities also. Additional 2 clinics per week.</b>
<b>Workforce Impact</b>	New posts: 1x Consultant 10 Pas 2 x WTE Band 7 CNS 1 x WTE POPS SpR (clinical fellow) – potential to create rotational posts with community frailty – helping to foster whole system working 0.4 x WTE band 3 administration/secretarial time 1 x WTE band 7 therapy 1.0 x WTE band 7 pharmacist Service level agreement with GSTT – to help with updating, training and governance of POPS team at EKHUFT 0.5 PA/week
<b>Income Impact</b>	<b>£0.5m over 5 years</b> (416 new appointments 84 FU appointments per year)
<b>Cost Impact</b> (Revenue)	<b>£1.8m over 5 years</b> Pay £1.7m NonPay £0.1m
<b>Cost Impact</b> (Capital)	<b>Nil</b>
<b>Savings Impact</b> (CIP)	<b>NIL</b>
<b>Overall Service Level Impact</b> (SLR Profitability)	<b>£1.3m Adverse over 5 years</b>
<b>Budgetary Impact</b>	<b>£1.8m Over 5 years</b>
<b>Benefits of Implementation</b>	<b>Surgical Outpatients Clinic</b> <ul style="list-style-type: none"> <li>In-patients who are considered 'unfit' or where there is uncertainty about risk/benefit ratio of surgery, a joint review will be undertaken by the POPS and surgical team. This will provide a holistic assessment and facilitate shared decision making with the patient. Such collaborative decision-making has a greater chance of resulting in the right decision for the right patient – for example surgery may not be undertaken in some cases, whereas in others such an assessment may improve access to surgery (which may have previously declined).</li> </ul>

	<p><b>Pre-operative Comprehensive Geriatric Assessment</b></p> <ul style="list-style-type: none"> <li>• The POPS clinic will aim to provide a holistic medical review ensuring assessment, investigation and optimisation across a range of multimorbidity and geriatric syndromes in a 'one-stop-clinic'.</li> <li>• This will reduce the need for multiple specialist appointments preoperatively as all issues will be reviewed by the POPS team.</li> <li>• Thorough review will reduce the chance of late cancellations through recognition and treatment of medical problems, with less chance of the patient presenting 'unfit' and better information provision to patients (for example when to stop particular drugs)</li> </ul> <p><b>Preoperative POPS liaison</b></p> <ul style="list-style-type: none"> <li>• POPS team will coordinate patient care and liaise with all of the relevant teams to ensure an individualised care pathway. This will provide a single point of access for patients and their carers but also for health care professionals improving communication and reducing unnecessary investigations and duplication.</li> <li>• POPS team will take responsibility for the care pathway and reduce chance of patients being 'lost in the system' (attending multiple appointments)</li> </ul> <p><b>Hospital admission</b></p> <p>The POPS team will be single point of access for medical, rehabilitation and discharge processes for in-patients in urology and vascular surgery. This will allow the POPS team to focus on the following areas;</p> <ul style="list-style-type: none"> <li>• Reduce incidence of post-operative complications</li> <li>• Standardise management of post-operative complications (development and implementation of hospital guidelines for common complications)</li> <li>• Reduce demand on general medical teams to provide medical care of surgical patients</li> <li>• Improve discharge planning through establishing links with intermediate care/community</li> <li>• Reduce length of stay</li> <li>• Improve throughput will reduce bed occupancy and facilitate management of the waiting lists for elective surgery.</li> <li>• Improve coding of medical conditions and complications</li> <li>• Improve communication with patients and their relatives by providing a single point of access (supplemented with written information)</li> </ul> <p><b>Post discharge</b></p> <p>The POPS team will aim to</p> <ul style="list-style-type: none"> <li>• Improve communication with GPs and community teams by establishing working groups to review communication processes</li> <li>• Signpost patients to relevant postoperative services (clinics, voluntary sector, long term conditions management)</li> <li>• Provide education to patients and carers on self-management</li> <li>• Provide signposted education to primary care services</li> </ul>
<b>Quality &amp; Safety Impact</b>	As above
<b>Risks of Implementation</b>	<b>Difficulty recruiting POPS team – particularly at consultant level</b>
<b>Proposed Timescale for Implementation</b>	We have gone at risk for 2 posts – 10 PA consultant and 0.4 WTE band 3 administrator We are looking to recruit the additional posts by February 2022 if approval is given in December 2021.

<b>Section 3</b>	<b>Benefits Scoring Model</b>
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INVESTMENT CRITERIA	WEIGHTING	Option 1	Option 2
Generic option description		Do nothing / Do minimum	Preferred Option
Option under consideration		Do Nothing	Expansion of POPS service
<b>QUALITY BENEFITS</b>			
Effectiveness	25	0	8
Experience	20	0	9
Safety	30	0	8
Timeliness	15	0	8
Efficiency	5	0	8
Equity	5	0	9
<b>TOTAL QUALITY SCORE</b>		<b>0</b>	<b>82.5</b>
<b>COMMERCIAL BENEFITS</b>			
EBITDA	40	5	2
RETURN ON CAPITAL EMPLOYED	30	5	5
PAYBACK PERIOD	15	5	3
FINANCIAL RISK	15	0	8
<b>TOTAL FINANCIAL SCORE</b>		<b>42.5</b>	<b>39.5</b>
<b>STRATEGIC FIT</b>			
COMMISSIONING INTENTIONS (ACTIVITY & DEMAND)	20	4	8
BEST USE OF RESOURCES	20	4	8
CLINICAL STRATEGY	20	3	9
WORKFORCE/ DELIVERABILITY	20	8	9
DELIVERING INNOVATION	20	5	10
<b>TOTAL STRATEGIC SCORE</b>		<b>48</b>	<b>88</b>

BENEFIT CATEGORY	Weightings to be applied		
TOTAL QUALITY BENEFITS (UNWEIGHTED) SCORE ACHIEVED	30	0	82.5
TOTAL COMMERCIAL BENEFITS (UNWEIGHTED) SCORE ACHIEVED	40	42.5	39.5
TOTAL STRATEGIC FIT (UNWEIGHTED) SCORE ACHIEVED	30	48	88
<b>OVERALL WEIGHTED SCORE</b>		<b>31.4</b>	<b>66.95</b>

<b>Overall RAG (Red, Amber, Green) Rating</b>	<b>LOW IMPACT</b>	<b>MEDIUM IMPACT</b>
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Case Ref:

<b>Section 4 – Benefits Measures</b>				
<b>Benefit Identified</b>	<b>Baseline Measure</b>	<b>Target Change</b>	<b>How will the Benefit be Delivered?</b>	<b>Person/ Job Role Responsible for Benefit Delivery</b>
Reduced LOS		Reduce by 1 day	Improved preparation for surgery and discharge planning through POPS service	POPS lead
Reduction in cancellations of urology and orthopaedic patients		2022/2023<2018/19 (allowing for COVID changing the way we deliver care)	See above	POPS lead
Reduction in re-admission rates for medical reasons in urology and orthopaedic elective patient after 30 days		Reduce by 20%	See above	POPS lead
On-going benefits to vascular (elective and emergency) and emergency urology patients		Governance mechanisms to be put in place to monitor on-going LOS and readmission	POPS governance structures	POPS lead
Patient satisfaction levels		Target 95%		POPS lead



Case Ref:

## Section 5 – Benefits Summary of Options

Target Indicator	Option 1.	Option 2.
		Preferred
<b>Service Delivery</b>		
LOS	No benefits	Reduce by 1 day
Reduction in cancellations of elective urology and orthopaedic patients	No benefits	2022/23<2018/19 (exclude comparison with COVID period)
Reduction in re-admission rates for medical reasons in urology and orthopaedic elective patient after 30 days	No benefits	Reduce by 20%
Improve coding of medical conditions and complications	No benefits	2021/22>2018/19
<b>Quality Indicators</b>		
Patient satisfaction levels	No benefits	Target 95%
<b>Strategic Benefits</b>		
Reduce demand on general medical teams to provide medical care of surgical patients	No benefits	2-4PA reduction within medicien(by reducing complications and work moving to KCH – elective orthopaedic centre)
<b>Savings (CIP)</b>		
All above	No benefits	Time used for other patients

Case Ref:

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## Section 6 – Financial Summary of Preferred Option

Case Ref:

**Title:**

**Perioperative care of Older People undergoing Surgery (POPS) at Kent and Canterbury Site**

**Start Date:**      **Year:**      2021      **Month:**      July

Income & Expenditure	2021-22	2022-23	2023-24	2024-25	2025-26	Total (5 yr)
<b>Income</b>						
PbR Income		93,346	124,461	124,461	124,461	466,729
Other Income						
<b>TOTAL INCOME</b>		93,346	124,461	124,461	124,461	466,729
<b>Direct Costs</b>						
Pay	70,702	321,296	321,296	321,296	321,296	1,355,886
Non-Pay		17,507	15,530	15,530	15,530	64,098
less: Cost Reductions						
<i>Sub-total</i>	70,702	338,803	336,826	336,826	336,826	1,419,984
<b>Other Costs</b>						
Support Directorates		75,188	100,250	100,250	100,250	375,938
Capital Charges						
<i>Sub-total</i>		75,188	100,250	100,250	100,250	375,938
<b>TOTAL COSTS</b>	70,702	413,990	437,076	437,076	437,076	1,795,921
<b>I&amp;E Surplus/ (Deficit)</b>	<b>(70,702)</b>	<b>(320,645)</b>	<b>(312,615)</b>	<b>(312,615)</b>	<b>(312,615)</b>	<b>(1,329,193)</b>
<b>Discounted Cash Flow (NPV)</b>	<b>(68,312)</b>	<b>(299,322)</b>	<b>(281,948)</b>	<b>(272,413)</b>	<b>(263,222)</b>	<b>(1,185,217)</b>
<b>EBITDA</b>	<b>(70,702)</b>	<b>(320,645)</b>	<b>(312,615)</b>	<b>(312,615)</b>	<b>(312,615)</b>	<b>(1,329,193)</b>
<b>EBITDA %</b>		<b>(344%)</b>	<b>(251%)</b>	<b>(251%)</b>	<b>(251%)</b>	<b>(285%)</b>
<b>Capital Expenditure</b>						
Accommodation						
Equipment						
<b>TOTAL</b>						
<i>Trust Capital Programme (£m)</i>						

## Section 7 – Recommendations

1.	Full implementation of preferred option
2.	
3.	
4.	
5.	

## Section 8 – Sign-Off

Care Group Decision Board	Date:	05.05.2021
Medical Devices Group	Date:	N/A
Strategic Investment Group	Date:	12.11.2021
CEMG	Date:	
Finance & Investment Committee	Date:	N/A
Trust Board	Date:	