

# Quantifying the impact of establishing a new perioperative frailty service: a two-year study profiling cholecystectomy patients

e-poster

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## Introduction

Older people living with frailty and undergoing surgery can be complex and multimorbid with a high risk of complications. Comprehensive geriatric assessment (CGA) in such cases is invaluable to provide equitable care.

A growing evidence base demonstrates that perioperative frailty screening is essential to improve postoperative outcomes, yet it is underutilised in many hospitals. Recent studies such as the SNAP-3 show that the majority of hospitals in the UK do not adequately screen surgical patients for frailty<sup>1</sup>. This fact is becoming recognised, and new initiatives such as the POPS-SUp study launched in 2024 are aimed to evidence the impact of CGA based perioperative frailty services<sup>2</sup>.

In 2022, Swansea Bay University Health Board launched its first POPS service with a pilot project focussing on elective laparoscopic cholecystectomy patients, as described below.

## Method

2022 - a quality improvement project to establish a POPS team was undertaken and a designated junior clinical fellow appointed to work alongside a POPS consultant.

The waiting list for elective laparoscopic cholecystectomy patients in SBUHB was profiled for frailty. All patients age  $\geq 65$  years were sent a satisfaction survey by post. They were then contacted by telephone with a set questionnaire to generate a clinical frailty score (CFS) and a comprehensive risk assessment and needs evaluation (CRANE).

A multidisciplinary team then discussed all cases and triaged into appointment type for appropriate assessment. Frailty was defined as CFS  $> 4$  or frailty syndromes on CRANE assessment (e.g. falls, urinary incontinence, cognitive decline).

Patients were either offered a virtual or a face-to-face clinic appointment based on their frailty needs. For patients assessed as not living with frailty, no appointment was offered.

## Results

The cholecystectomy waiting list contained a total of 256 patients age  $\geq 65$  years (34% of the entire list). Of these 256 patients, 66 (25.8%) were uncontactable and so 190 (74.2%) underwent telephone frailty assessment and subsequent triage. 98 patients (38.2%) responded to the initial satisfaction survey.

### Satisfaction prior to POPS intervention:

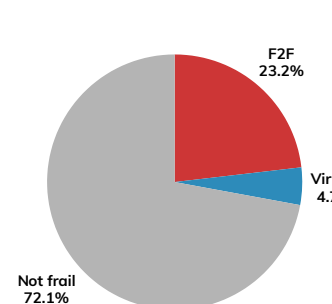
- 57 (58%) of the 98 patients who completed the survey described health deterioration since listing.
- 17 (18%) had unmet care needs.
- 68 (69%) were dissatisfied with the service.

### POPS intervention:

- 190 patients assessed.
- 100% of people who attended clinic reported it as a useful or very useful experience.

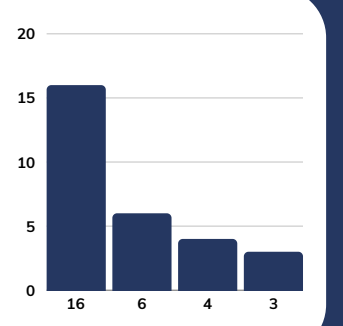
### POPS Appointments

- 44 (23.2%) F2F
- 9 (4.7%) virtual
- 137 (72.1%) not frail



### POPS Action

- 16 (8.4%) Investigations
- 6 (3.2%) Medication optimisation
- 4 (2.1%) Speciality referral
- 3 (1.6%) Memory clinic referral



### 2+ years of data:

Data for each patient journey was tracked from inception of the POPS service in 2022 to present day (June 2025 cut off), giving between 2 to 3 years of post-intervention outcomes per case:

### POPS Off listing

- Total 50 (26.3%) patients off listed
- Equates to an estimated saving of £175,000

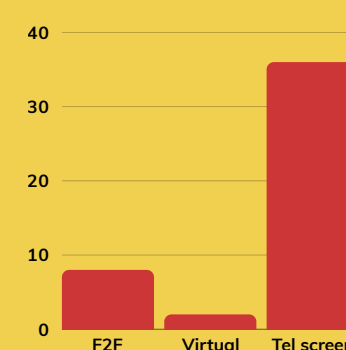
### Of the 50 patients off listed

- 1 (2.0%) since been relisted, stable
- 6 (12.0%) now deceased, non-biliary

### Off listing process

46 (24.2%) of 190 were off listed at initial assessment:

- 8 (4.2%) from F2F
- 2 (1.1%) from virtual
- 36 (18.9%) from tel. screen



### Of the 144 patients not off listed

- 4 (2.8%) off listed by POPS at a later date
- 52 (36.1%) received cholecystectomy:
  - 2 (1.4%) had a major complication
  - 4 (2.8%) had a minor complication
  - All recovered
- 9 (6.3%) now deceased, non-biliary
- 41 (28.5%) since off listed by surgeons

## Conclusion

The project we describe here exemplifies the feasibility of establishing an effective POPS service, with objective data demonstrating positive impact in multiple domains spanning a two-year follow-up period. This highlights the potential to deliver better patient-centred care, whilst simultaneously improving outcomes, cutting unnecessary costs, and empowering patients through shared decision-making.

## References:

1. Swarbrick J, Williams K, Evans B, et al. Postoperative outcomes in older patients living with frailty and multimorbidity in the UK: SNAP-3, a snapshot observational study. Br J Anaesth. Available at: <https://doi.org/10.1016/j.bja.2025.04.026>.
2. Dhese J, et al. POPS-SUp: Implementation of Comprehensive Geriatric Assessment based perioperative medicine services to improve clinical outcomes for older patients undergoing elective and emergency surgery with cost effectiveness. KCL online. Available at: <https://www.kcl.ac.uk/research/pops-sup>