Identifying Patients for Comprehensive Geriatric Assessment: Medical Student-Led Frailty Recognition in General Surgery

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Key messages :

1. Targeted teaching + system-based QI produced **sustainable improvement in frailty identification** for patients aged ≥65 years **(10.7% to 54.5%)**
2. Improved identification of frailty **facilitated targeted CGA**, increasing the number of patients with frailty seen by the POPs team
3. Improved identification of frailty at a resident doctor level **increased the TEP completion rate from 23.1% to 40%** for patients aged ≥65 years

Background and aims

- Older adults living with frailty admitted under General Surgery frequently have poorer surgical outcomes. Patients should be identified through clinical frailty scoring (CFS). Comprehensive Geriatric Assessment (CGA)-based perioperative services are therefore recommended.[1-4]
- Baseline data showed **limited frailty recognition and no geriatrician-led reviews** despite substantial unmet need and an established geriatrics liaison service.
- A medical student-led quality improvement project was undertaken during the wider development of a General Surgery Perioperative Medicine for Older People undergoing Surgery (POPS) service as part of the POPS-SUp programme.[5]
- This quality improvement project **aimed to improve identification of frailty using CFS in General Surgery to support provision of POPS services.**

SCAN ME!

Methods

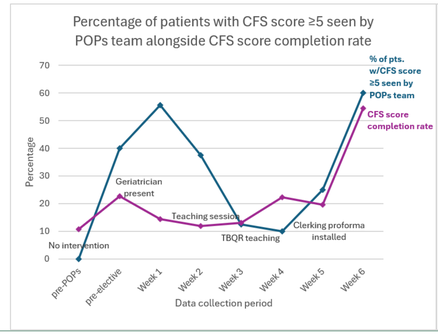
- Baseline data was collected across two weeks in December 2025 on emergency general surgery admissions ≥75 years old.
- A test of change aimed to improve identification of patients most likely to benefit from CGA through CFS screening.
- Primary outcome measures included CFS completion, CGA reviews, numbers of treatment escalation planning (TEP) decisions and general surgical team member satisfaction.
- Prospective data was collected for all patients aged ≥65 admitted to general surgery across eight weeks.

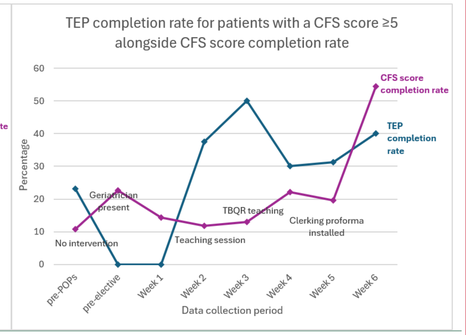
PDSA cycles:

1. *Visibility of POPS team in general surgery ward*
2. *Improved clerking proforma*
3. *Targeted frailty teaching sessions for resident doctors*
4. *'G-POPS Frailty Hunters' branding*

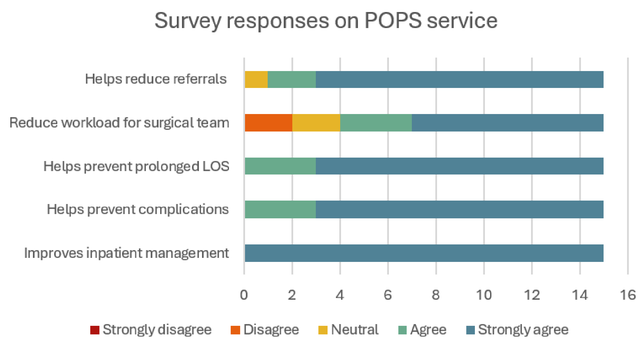
Results

- Following implementation, overall **CFS completion increased** from 10.7% (3/28) at baseline to 54.5% (12/22).
- 62 patients aged ≥65 years with CFS ≥5 were identified over six weeks, and by week six **60% (6/10) had received POPS/geriatric liaison review**. TEP completion for those with CFS ≥5 increased from 23.1% (3/13) to 40% (4/10).





When comparing the outcomes of patients ≥75 living with frailty, **length of stay (LOS), inpatient mortality rate, and 14-day readmission rate showed no consistent trend**.



15 MDT members on the general surgery ward completed a service evaluation survey. **All 15 responses rated the service "excellent".**

" ...made a massive improvement to our patient care .... so essential and has helped get lots of patients discharged home earlier. "

" well-rounded care and great advice. "

Strengths

- Focuses on a clearly identified and persistent problem identifying frail patients in general surgery for geriatric liaison/ POPS services.
- Mixed methods quantitative and qualitative evaluation provides multi-dimensional overview of POPS service and QIP effect.
- Weekly data collection across PDSA cycles allows analysis of the impact of each intervention.

Limitations

- The short duration of data collected is not long enough to show consistency or identify barriers to sustaining improvement.
- Retrospective data does not include 65–75-year-old patients and therefore is not fully comparable with the cohort observed in the prospective data.
- Although for the secondary outcomes of LOS, mortality and readmission rates, no clear trends were observed, early data grouping a general surgery and orthopaedics POPS-SUp related project showed a decrease in LOS and re-admission rates: further evaluation of this needed.

Next steps

1. *Longer study period to observe impact on LOS, IP mortality, and 14-day emergency readmission rate.*
2. *Track improvement across more resident doctor changeovers.*

Conclusions

- Improved identification of patients living with frailty facilitated targeted CGA and improved TEP completion.
- The POPS service was widely appreciated by the General Surgical team, both for its accessibilty and its impact.
- **This demonstrates the value of student-led quality improvement as part of service transformation.**
- Further work is required to determine the impact of improved identification of frailty on secondary outcomes for patients living with frailty admitted to the general surgery ward.

References

1. NCEPOD. An Age Old Problem: A review of the care received by elderly patients undergoing surgery. London: National Confidential Enquiry into Patient Outcome and Death; 2010.
2. R Griffiths 1, F Beech, A Brown, J Dhesi, I Foo, J Goodall, et al. Peri-operative care of the elderly 2014: Association of Anaesthetists of Great Britain and Ireland. Anaesthesia. 2014;69 Suppl 1:81-98.L, Hall N, Healey A, et al. Perioperative Medicine for Older People Undergoing Surgery Scale Up (POPS-SUp): study protocol. BJS Open. 2025;9(6):zraf063. doi:10.1093/bjsopen/zraf063
3. Rockwood K, Song X, MacKnight C, Bergman H, Hogan DB, McDowell I, et al. A global clinical measure of fitness and frailty in elderly people. CMAJ. 2005;173(5):489-95.
4. Partridge JSL, Harari D, Martin FC, Dhesi JK.The impact of pre-operative comprehensive geriatric assessment on postoperative outcomes in older patients undergoing scheduled surgery: a systematic review. 2014;69 Suppl 1:8-16.
5. Dhesi JK, Partridge JSL, Strasser BC, Bearne L, Hall N, Healey A, et al. Perioperative Medicine for Older People Undergoing Surgery Scale Up (POPS-SUp): study protocol. BJS Open. 2025;9(6):zraf063. doi: 10.1093/bjsopen/zraf063