

# Improving the quality of perioperative care for older patients: introducing routine pre-operative frailty screening

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## Introduction

- Frailty is a distinctive, modifiable, age-related syndrome, with multi-systemic involvement.<sup>1</sup>
- The elective surgical population is seeing increasing numbers of older, frail patients, who are at greater risk of complications.
- Identifying frailty pre-operatively is essential to improve outcomes.
- The formal assessment of pre-existing frailty is a nationally set standard.<sup>1,2</sup>
- Prior to this project, no formalised pre-operative screening existed at our hospital.

## Aims

S	M	A	R	T
To improve the frailty screening process for elderly patients undergoing elective surgery	by measuring the percentage of patients >60y who have a pre-operative, frailty screening	and increase it from 1% (baseline) to 40%	In order to improve the overall perioperative care of elderly patients	To be completed by August 2021

## Methods

- Prospective plan using driver diagram (Fig 1) and PDSA cycle (Fig 2).
- Baseline data was collected for all patients aged greater than 60-years, undergoing elective surgery between October to December 2019.
- The percentage of patients within this cohort who had a formal frailty assessment was recorded.

## INTERVENTION

- Frailty screening using the FRAIL scale (Fig 3) was introduced as a mandatory part of the pre-assessment for all elective surgery patients, aged 60-years or more
- After implementing this, data was again analysed over a 4-month period (May to August 2021).

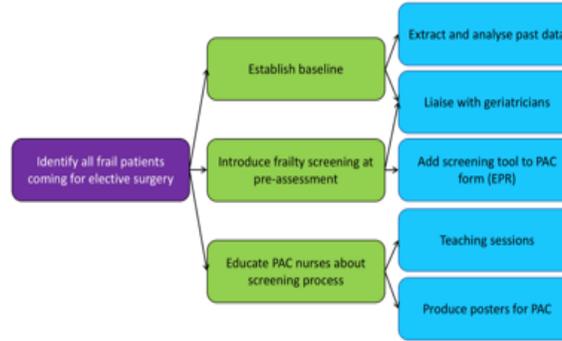


FIGURE 1: Driver diagram for project (focussed on frailty screening)

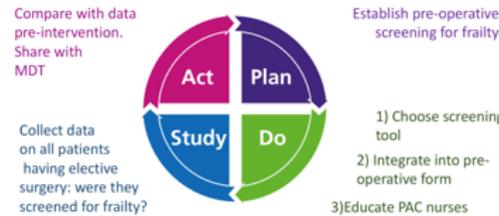


FIGURE 2: PDSA cycle

## The "FRAIL" Questionnaire Screening Tool

Fatigue: Are you fatigued? Yes=1 No=0	Scoring: 0: Robust 1 or 2: Prefrail 3 to 5: Frail
Resistance: Cannot walk up 1 flight of stairs? Yes=1 No=0	
Aerobic: Cannot walk 1 block? Yes=1 No=0	
Illnesses: Do you have more than 5 illnesses? Yes=1 No=0	
Loss of weight: Have you lost more than 5% of your weight in the past 6 months? <i>Percent weight change is computed as: [(weight 6 months ago - current weight)/weight 6 months ago] * 100</i> Yes=1 No=0	

FIGURE 3: FRAIL Scale tool

## Results

- Pre-intervention data included 297 patients.
- Pre-intervention, only 1% (n=3) patients had a documented formal frailty assessment in the pre-operative period.
- Post-intervention data included 402 patients

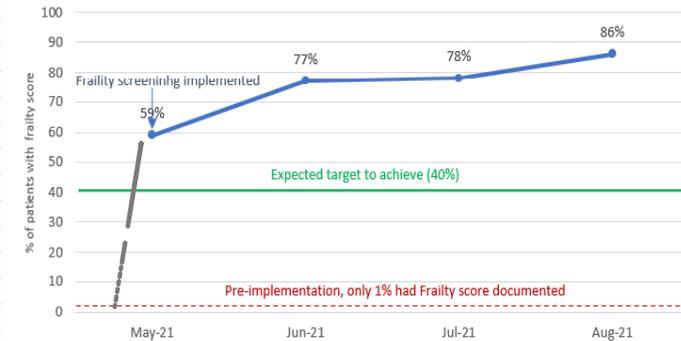


FIGURE 4: Frailty score documentation after the introduction of frailty screening

- Following our interventions, there was a progressive increase in frailty screening from 1% to 86% by August 2021 (Fig 4).
- Of those screened, 6% (n=13) were found to be frail (FRAIL scale 3-5)
- Of those frail patients, 3 underwent major surgery.

## Conclusion

- Frail, older patients have complex needs, and providing personalised, safe and respectful care may be challenging.
- Identifying frail patients helps improve their subsequent management.
- Since this intervention, there has been an 80-fold increase in screening, identifying a significant number of frail patients.
- We anticipate an improvement in their surgical outcome with a collaborative approach.

## Acknowledgements

No affiliations to declare. With thanks to Dr H. Arunachalam & M. Garside

## References

- 1) Centre for Perioperative Care, British Geriatric Society. (2021). Guideline for Perioperative Care for People Living with Frailty Undergoing Elective and Emergency Surgery. First Edition.
- 2) Royal College of Anaesthetists. (2020). Raising the standards. Fourth Edition.