UC San Diego Health

Improving Frailty Screening for General Surgery Procedures

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Background

- Frail patients are at high risk of major postoperative complications and mortality.[1-2]
- The Risk Analysis Index (RAI) Frailty Index is a validated tool to assess preoperative frailty.[3]
- In the Veterans Affairs (VA) system, preoperative frailty documentation is now required for all surgical patients.

Low-Risk Surgery 30-day Mortality in National VA Cohort[1]

Not frail: 0.22%

Frail: 1.55%

Severely Frail: 10.34%

SMART Aim

- Increase documentation of preoperative RAI frailty scores among general surgery patients from 0% to 25% over the first quarter.
- Prospective goal of increasing frailty scoring by 25% every quarter for a goal of >90% by 1 year.

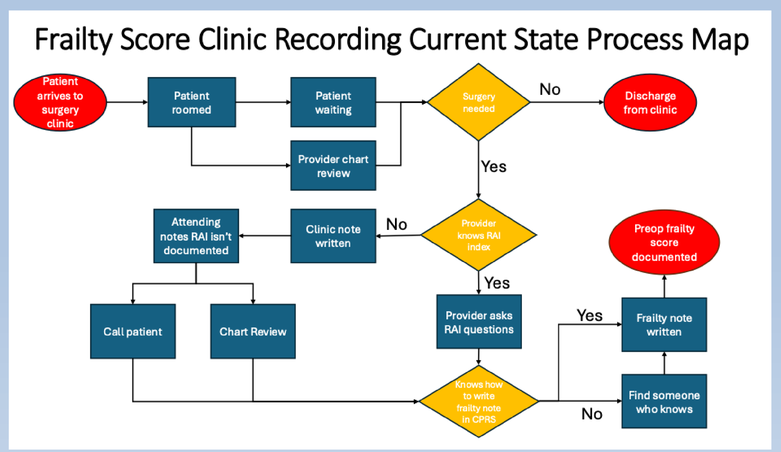

Figure 1. Current state process map for recording frailty data from clinic patients.

Intervention

- A patient-facing questionnaire piloted in general surgery clinic.
- A frailty note template was introduced in the electronic medical record.
- Primary outcome was percentage of general surgery cases with a documented frailty index.
- The process measure was the number of completed surveys. Balancing measure of clinic workflow impact was assessed qualitatively.

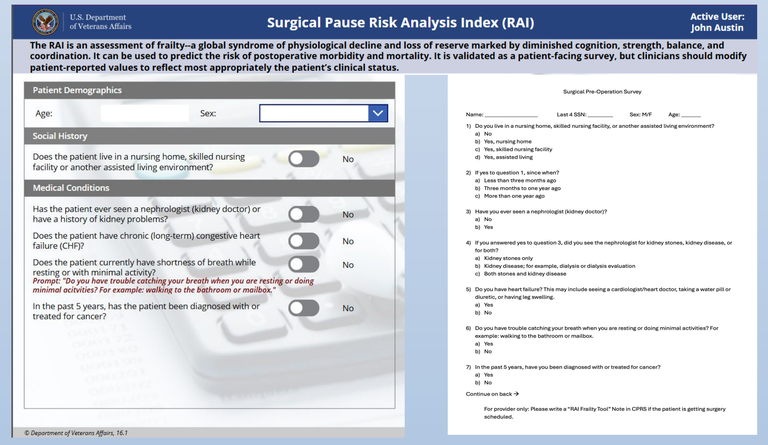

Figure 2. Excerpts from the online VA RAI calculator and the patient-facing clinic questionnaire

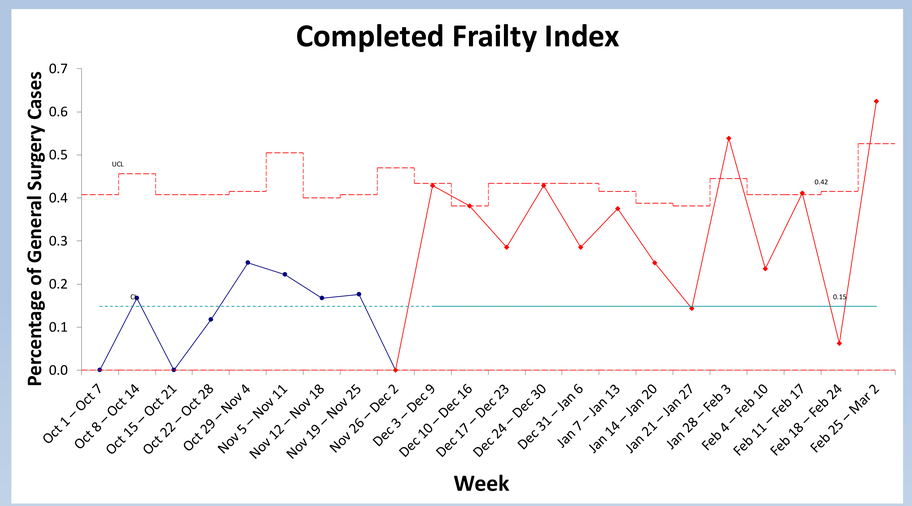

Figure 3. Proportion chart (p-chart) of completed frailty indexes. CL = Center Line; UCL = Upper Control Limit

Results

- From February 1, 2026 to February 28, 2026, 63 eligible patients were identified and booked for surgery.
- 20 patients had a recorded frailty index, representing a 31% increase from baseline.
- 100% of preoperative general surgery patients were receiving and filling out surveys.
- Residents and clinic staff appreciated easy integration to clinic workflow.
- Recording inconsistencies after implementation attributable to team turnover and inconsistent access to the frailty calculator.

Conclusion

- A patient facing questionnaire plus clinic education and workflow integration can lead to improved frailty screening.
- Embedding the intervention within existing team roles maximized success.
- The questionnaire will be expanded to all surgical services and preoperative patients.

References

1. Shinall MC Jr, Arya S, Youk A, et al. Association of Preoperative Patient Frailty and Operative Stress With Postoperative Mortality. *JAMA Surg*. 2020;155(1):e194620. doi:10.1001/jamasurg.2019.4620
2. Varley PR, Buchanan D, Bilderback A, et al. Association of Routine Preoperative Frailty Assessment With 1-Year Postoperative Mortality. *JAMA Surg*. 2023;158(5):475-483. doi:10.1001/jamasurg.2022.8341
3. Hall DE, Jacobs CA, Reitz KM, et al. Frailty Screening Using the Risk Analysis Index: A User Guide. *Jt Comm J Qual Patient Saf*. 2025;51(3):178-191. doi:10.1016/j.jcjq.2024.12.005