Title: Increasing the physical frailty screening rates in a clinic: A quality improvement experience.
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Abstract (259 words)

Introduction: Frailty is a clinically recognised state of diminished strength and functional reserves, increased vulnerability to stressors and exposing the individual to a higher risk of morbidity and mortality. Dietary supplementation, rehabilitation and reducing polypharmacy are some interventions shown to improve frailty. To delay the transition from robust to pre-frail to frail, it is crucial to first identify if a patient has frailty.

Objective: The aim of this quality improvement project was to increase the rate of physical frailty screening for elderly patients attending a community hospital outpatient clinic from 0% to 50% in a 6-month period.

Methodology: First, the baseline frailty screening rate was determined at 0%. Various quality improvement tools were utilised. Root cause analysis was performed with the fishbone diagram (Figure 1) and after plotting them on the pareto chart (Figure 2), the main causes identified were lack of a screening tool, lack of knowledge on frailty and lack of collaboration amongst the healthcare professionals to identify the frailty state. Targeted interventions were selected with the PICO method (Figure 3) and implemented. Multiple PDSA (plan, do, study, action) cycles were subsequently performed.

Results: Frailty screening rates increased to 65.7% in 3 months and was sustained at 56.7% after 6 months. Prevalence of frailty was 50.5% and pre-frailty was 29%.

Conclusion and Significance: Frailty is prevalent in the elderly patient population of the community hospital outpatient clinic. Frailty screening rates were low but increased with tackling of the root causes. These identified frail or pre-frail patients can then be followed up and offered interventions to improve frailty.

Images

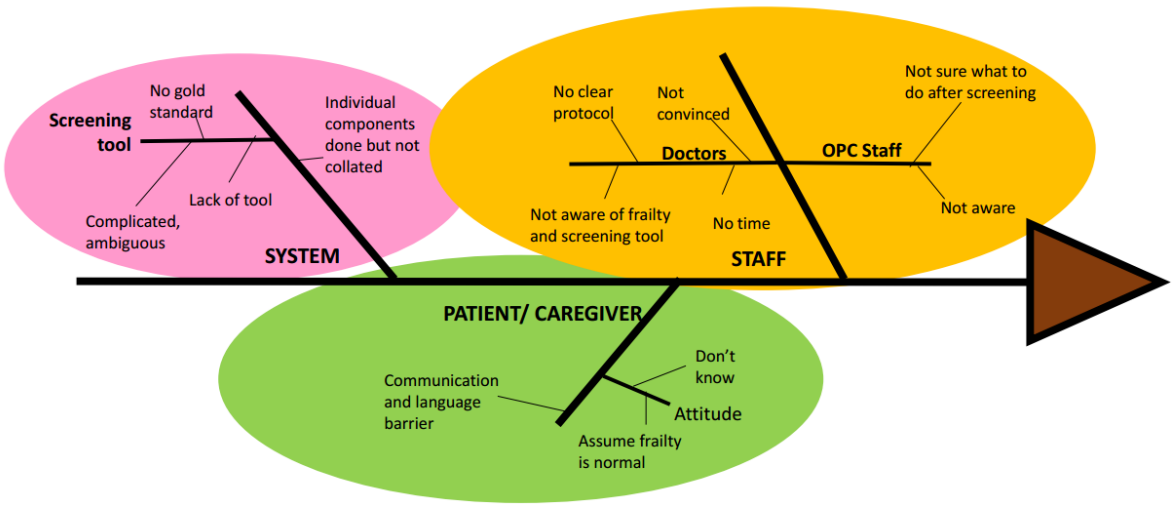


Figure 1. Fish bone diagram for root cause analysis

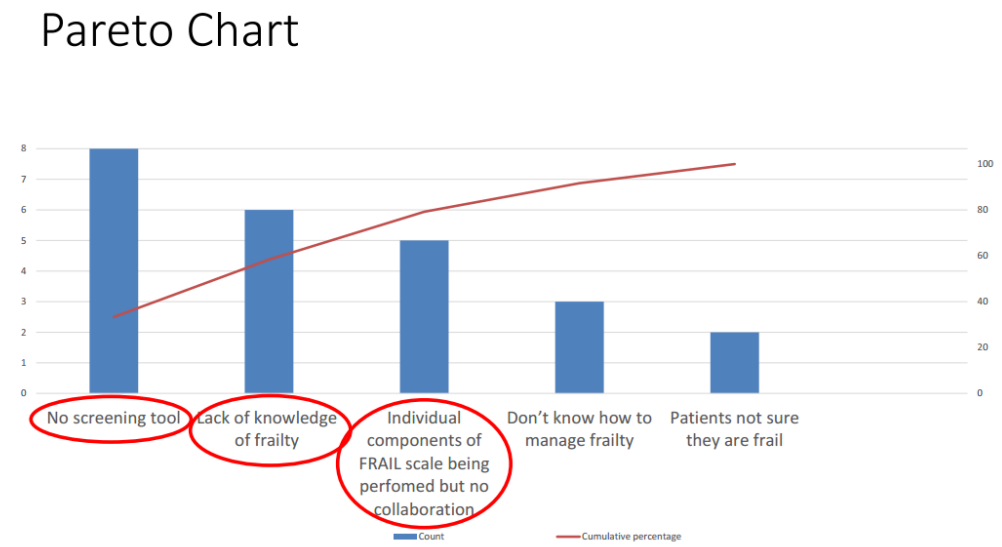


Figure 2: Pareto chart for top causes

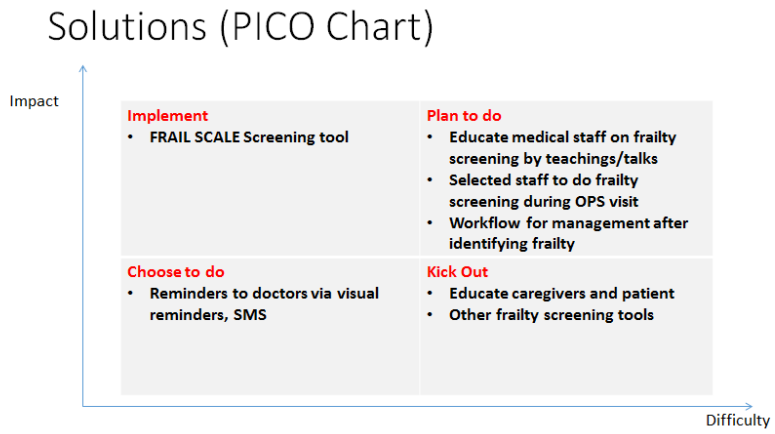


Figure 3: PICO chart to select interventions