Who Best Predicts Future Health Service Use? A mixed-methods prospective study in Primary Care

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INTRODUCTION: Population aging is leading to an increasing incidence of frailty and associated negative health outcomes. The Frailty and Vulnerability Evaluation (FAVE) tool is a self-administered tool designed to capture medical, functional, and important social risks. We aimed to assess correlations between a patient's complexity score (sum of the number of chronic conditions and medications), their own and their family physician (FP) ratings of current, future frailty, and vulnerability with future healthcare utilization.

METHODS: Using a prospective, mixed-methods design, we surveyed 274 patients aged 65+ across 10 primary care practices in urban, suburban, and rural Ontario. Chart data was abstracted 1-year after FAVE administration to assess healthcare utilization, including FP and specialist visits (SP), labs, imaging, ER visits, and hospitalizations. In addition, chronic conditions and medications data were retrieved. FP judgements regarding their patients' future frailty and vulnerability were obtained through the Rockwood Clinical Frailty Scale, with a chart audit at 1-year follow up, using composite outcome incidence (COI) (i.e., if patients experienced ER visit, hospitalization, and/or death). The primary outcome was the correlation of a patient's complexity score (CS), their own and FP's clinical judgments of frailty and future vulnerability, with 1-year healthcare utilization (COI).

RESULTS: Preliminary data of 201/274 patients [mean age, 80.12 ± 6.67 years; 41% male; 59% female] demonstrated an average CS of 16.54. Physicians (n=178) who rated patient's future functional risk as high, had the greatest COI (62.3%), while patients who rated their future health as poor demonstrated the greatest COI (57.5%). Additionally, increased clinical frailty was associated with a higher COI (57.1%).

CONCLUSION: Our data demonstrates patient and physician rating of clinical frailty and future health service utilization do not display significant incongruency. This suggests patient and physician ratings along with clinical tools may be useful predictors of clinical frailty and overall healthcare utilization.

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