**Electronic Health Record-Based Frailty Screening Is Associated with Nonhome Discharge in Patients Undergoing Open Revascularization for Peripheral Vascular Disease**

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**INTRODUCTION:** Frailty reflects physiologic reserve and increased vulnerability to adverse outcomes. Multiple tools exist to screen for frailty; however, most are not clinically practical. This study aimed to evaluate the association between an automated, electronic health record (EHR)-based frailty index on outcomes in patients undergoing elective, open lower extremity revascularization.

**METHODS:** A single-institution, retrospective analysis was completed from 2015 to 2019. We used a previously developed 54-item electronic frailty index (eFI) based on the theory of deficit accumulation, with patients classified as fit (eFI ≤ 0.10), prefrail (0.10 < eFI ≤ 0.21), and frail (eFI > 0.21). Demographic and comorbidity data were collected in addition to revascularization procedure (suprainguinal, femoral, infrainguinal, or extra-anatomic bypass). Outcomes included length of stay, 30-day readmission, and nonhome discharge.

**RESULTS:** Of the 295 included patients, 31% were women, 22% were non-White, and mean age was 65.9 years. Frail patients had higher Charlson Comorbidity Index values and were more likely to be American Society of Anesthesiologist physical status class IV (46% of frail, 18% of fit; p = 0.0012). We did not observe any differences in procedures by group. Frail patients were less likely to be discharged home (31% for frail vs 15% for fit; p = 0.002) and experienced higher rates of 30-day readmission, although this was not statistically significant with the limited sample size. Median length of stay was highest in frail patients, 51% higher compared with prefrail (p = 0.003).

**CONCLUSIONS:** Higher eFI scores are associated with nonhome discharge in patients undergoing elective, open lower extremity revascularization.

**Graft Repair of Arteriovenous Fistula Aneurysms Is Associated with Decreased Long-Term Patency**

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**INTRODUCTION:** Arteriovenous fistula (AVF) aneurysms can be disfiguring, painful, and risk rupture and life-threatening hemorrhage. AVF aneurysms can be repaired via aneurysmorraphy, excision with end to end anastomosis, and grafts.

**METHODS:** Two hundred and ninety-one patients underwent AVF aneurysm repair between 2009 and 2019. Patients with staged repair, a primary graft, and those not using AVF for hemodialysis were excluded. Of the 162 patients included, 87 were repaired with aneurysmorraphy, 50 with excision and anastomosis, and 25 with graft repair. One-way ANOVA, chi-square, and Fisher exact analyses were used to compare demographics. Multivariate logistic regression was used to examine outcomes. Kaplan-Meir estimate was used to illustrate duration of fistula accessibility.

**RESULTS:** Mean age, sex, smoking status, diabetes, hypertension, fistula location, and time from fistula placement to aneurysm repair were comparable between the aneurysmorraphy, end to end anastomosis, and graft repair groups. Compared with aneurysmorraphy, the odds of graft repair patients losing primary patency within 1 year was 3.4 (p = 0.0234). The graft repair group was also 5.9 times more likely to develop an infection within the first 3 months compared with aneurysmorraphy (p = 0.0188). Graft repair also resulted in greater complete loss of access at primary fistula site compared with aneurysmorraphy and end to end anastomosis (Fig. 1; p = 0.034).

**CONCLUSIONS:** Graft repair of AVF aneurysms results in significantly higher rates of infection and decreased primary and ultimate patency of access site compared with aneurysms repaired using aneurysmorraphy and excision with end to end anastomosis. Although some cases might require graft repair due to poor vessel integrity, graft repair should be avoided when possible.

![Figure 1. Kaplan-Meir estimate of access patency after arteriovenous fistula repair among patients who underwent aneurysmorraphy, excision with end to end anastomosis, and graft repair.](image)

**Impact of Race on Door-to-Intervention Time in Ruptured Abdominal Aortic Aneurysm Repair**

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