Introducction: Cardiac surgery has increased in the elderly due to demographic and surgical advances. Longer recovery and higher morbidity and mortality have been reported, raising concerns that risk assessments do not identify those vulnerable to poor outcomes. Frailty status may be a more sensitive indicator of vulnerability to poor outcomes. A biopsychosocial model incorporating concepts of the geriatric syndrome and complexity science was utilized. This pilot study examined frailty in older adults undergoing cardiac surgery. Aim 1: Determine the prevalence of frailty. Aim 2: Describe characteristics of those classified as frail or non-frail. Aim 3: Examine outcomes (post-op complications, length of stay, death) based on frailty status.

Methods: A convenience sample of older adults scheduled for cardiac surgery (revascularization, valve repair, both) were recruited in a university-affiliated medical center. Interviews were conducted to collect sociodemographic, clinical (HADS, PROMIS Fatigue Short Form, OARS, KATZ, NAGI Disability Scale) and performance data. Frailty criteria were 1) weight loss, 2) hand grip strength (dynamometer), 3) exhaustion (CES-D, “Everything I did was an effort”, “I could not get going”), 4) gait speed, and 5) inactivity.

Results: In a sample of 15 patients (5 women, 2 African American (AA), mean age,76.86, SD, 5.33), almost half (n=7, 47%) were frail; 4 of 6 women were frail. Both AAs were frail; they were female, younger, had greater disability, and post-op complications. The frail and nonfrail were similar in comorbidity and ratings for health status, depression, and anxiety, but had greater fatigue, slightly worse physical function and disability, and were more inactive. Complications occurred in 8 (57%, n=14) and 4 (50%) were frail. Length of stay was higher in the frail. There were no deaths.
**Discussion & Conclusions:** Discussion: Findings suggest that frail elders, especially women and AAs, had greater functional limitations, inactivity, fatigue and longer length of stay that represent potential threats to recovery. Further research on frailty risk assessment is needed to identify elders who are vulnerable to poor outcomes in order to tailor pre- and post-op interventions that maximize optimal recovery.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

**Financial Disclosure:**
No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

**FDA Disclosure:**
I will not be describing any pharmaceutical and/or medical device.

**Non-Exclusive License:**

**Submitted by:**
Lekan001@mc.duke.edu