

**BACKGROUND** Medicare’s Post-Acute Transfer (PACT) policy costs hospitals nationwide penalties following transcatheter aortic valve replacement. While discharging home without home services avoids PACT policy activation, its impact on 30-day outcomes following transcatheter aortic valve replacement (TAVR) is not well known. We aimed to evaluate the impact of discharging home without services on 30-day outcomes in adults undergoing TAVR with contemporary valves.

**METHODS** The study population included 177 consecutive patients who underwent TAVR with a contemporary valve [Sapien 3 valve (Edwards Life Sciences, Irvine, CA) or Corevalve Evolut R or Evolut Pro (Medtronic, Minneapolis, MN) from December 2015-October 2017 at an academic tertiary medical center. Baseline and clinical characteristics, procedural data, and clinical outcomes were recorded.

**RESULTS** Of the 177 patients, 49 (27.7%) were discharged home without services while 128 (72.3%) were not. Of these 128 patients, 35 (27.3%) were discharged to a skilled nursing facility and 93 (72.7%) were discharged home with home services. Patients who were discharged home without services were younger (78 vs 81 years,  $p=0.017$ ) with lower Society of Thoracic Surgeons (STS) risk score (4.9% vs 7.0%,  $p=0.018$ ). They had higher hemoglobin (12.4 vs 11.5 g/dl,  $p=0.007$ ), serum albumin (4.1 vs 3.8 mg/dl,  $p=0.002$ ) and creatinine clearance (68 vs 57 ml/min,  $p=0.031$ ). While no significant difference in medical comorbidities were noted, patients who were discharged home without home services had lower rates of right bundle branch block (2.6% vs 16.4%,  $p=0.028$ ) and atrioventricular block (2.7% vs 19.5%,  $p=0.010$ ) prior to TAVR. With respect to 30-day outcomes, patients who were discharged home without home services had significantly lower rates of new pacemaker (2.3% vs 13.5%,  $p=0.043$ ) and a trend toward lower all-cause readmission (6.1% vs 17.3%,  $p=0.089$ ). No significant difference in stroke (0% vs 1.6%,  $p=1.000$ ) was noted between both groups.

**CONCLUSIONS** In this observational study of adults undergoing TAVR with contemporary valves, discharging home without home services was not independently associated with 30-day all-cause readmission or new pacemakers. Further studies are warranted to better understand the impact of discharge services in patients undergoing TAVR in order to optimize clinical outcomes in this population.

**CRT-700.05**

**Impact of Spironolactone on Heart Failure Readmission after Transcatheter Aortic Valve Replacement**



Ikenna Erinne, Varun Maheshwari, Ravi Parikh, Mukta Srivastava, Anuj Gupta  
University of Maryland Medical Center, Baltimore, MD

**BACKGROUND** Thirty-day readmission rates are a performance benchmark in contemporary evaluation of cardiovascular procedures. Trans-catheter aortic valve replacement (TAVR) has been widely adopted since initial Food and Drug Administration approval in 2011; however, re-admission rate following TAVR remains high. Amongst cardiac etiologies for re-admission post-TAVR, heart failure is the most common precipitant. In randomized controlled trials, spironolactone has been shown to reduce heart failure readmissions in patients with heart failure with reduced ejection fraction (HFrEF) as well as with preserved EF (HFpEF). We sought to examine the impact of spironolactone therapy on the rate of heart failure readmissions in patients discharged after TAVR at our institution.

**METHODS** We analyzed all TAVR patients receiving balloon-expandable Sapien (Edwards Lifesciences, Irvine, California) or self-expanding CoreValve (Medtronic, Minneapolis, Minnesota) valves from March 2012 to April 2017 at the University of Maryland Medical Center, Baltimore, MD. Patients discharged from the hospital following the TAVR procedure were grouped into two categories: those who received spironolactone (either prescribed prior to the procedure and continued upon discharge or newly initiated on spironolactone) and those who did not, based on physician discretion. The primary outcome evaluated was 30-day readmission for heart failure.

**RESULTS** 270 patients who underwent TAVR (132 Sapien, 138 CoreValve) were included for analysis. The mean age was  $80.7 \pm 9.5$  years, 52% were men, 89% were Caucasian race, and 24% were on

spironolactone at time of hospital discharge. A total of 52 (19%) patients were re-admitted within 30 days of discharge and among those, 21 (8%) were re-admissions for decompensated heart failure. Of those re-admitted to the hospital with heart failure, 9% were on spironolactone compared to 7% who were not ( $p=0.65$ ).

**CONCLUSION** Our retrospective analysis did not demonstrate an impact of spironolactone on the likelihood of readmission for heart failure (both HFpEF and HFrEF sub-types) following TAVR. Further prospective studies are required in order to assess clinical benefits of adding post-procedure spironolactone.

**CRT-700.06**

**The Association Between Contrast Dose and Renal Function in Transcatheter Aortic Valve Replacement**



Abdulah Alrifai, Fergie Ramos, Edwin Grajeda, Mohamad Kabach, Jesus Pino, Pradeep Dayanand, Swethika Sundaravel, Eduardo Venegas, George Daniel, Eric Heller, Lawrence Lovitz, Mark Rothenberg, Cristiano Faber, Roberto Cubeddu, Robert Chait, Marcos Nores  
University of Miami/JFK Medical Center, Atlantis, FL

**BACKGROUND** Transcatheter aortic valve replacement (TAVR) is recommended for high and intermediate risk severe aortic valve stenosis (AS). The impact of contrast volume reduction during TAVR on creatinine (Cr) and estimated glomerular filtration (eGFR) is not well studied.

**METHODS** We did a retrospective analysis of total of 570 patients with severe AS who underwent TAVR between March 2013 and March 2016. We included only patients who had Cr and eGFR values at baseline, discharge and at 3-month follow up. Our primary outcome was the impact of TAVR on RF after 3 months. We used 2-sample independent t-test.

**RESULTS** A total of 378 patients were included in the analysis. At baseline there was no significant difference in baseline characteristics in regards of age, race, gender, or baseline characteristics including hypertension, hyperlipidemia, diabetes or coronary artery disease. Mean contrast dose was reduced significantly between 2015 and 2016 (107.24 ml vs. 87.6 ml;  $P < 0.001$ ). There was a significant reduction in the mean difference at 3 months in eGFR between 2015 and 2016 (-4.9 vs 1.8 mL/min;  $P < 0.001$ ) and Cr (-0.14 mg/dL vs -0.02 mg/dL;  $P = 0.04$ ).

**CONCLUSIONS** Reduction in contrast volume during TAVR achieved improvement in Cr and eGFR at 3-month follow-up. The benefits of TAVR on renal function should be further considered.

