device implant, with 1.36% of readmissions being procedural related. At 30 days post-implant and after discharge, 0.25% of patients needed a new pacemaker and 0.18% had pericardial complications.

**Conclusion:** We found the rate of complications related to leadless pacemakers placement to be slightly higher than post-approval registry studies, but the rate of serious complications remained relatively low in a high-risk population with multiple comorbid conditions.

**PO-632-04**

**PATTERNS OF DEVICE-RELATED INFECTION IN DE NOVO TRANSVENOUS IMPLANTABLE CARDIOVERTER-DEFIBRILLATOR MEDICARE PATIENTS WITH UNDERLYING RENAL DISEASE**

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**Background:** Renal disease is a risk factor for device infection in transvenous implantable cardioverter-defibrillator (TV-ICD) implants.

**Objective:** Since chronic dialysis treatment for advanced renal disease creates a portal of entry for bacteria that can seed indwelling devices, we hypothesized that infection risk could accelerate after TV-ICD implantation in renal patients, especially dialysis dependent (DD) patients.

**Methods:** Medicare 100% administrative and claims data were used to identify patients who underwent de novo TV-ICD implantation (7/2016-12/2018). Patients were followed up to 540 days post implantation. Baseline characteristics, including renal disease (none; renal-non-DD; and renal-DD), and device infection during follow-up were identified using claims diagnosis and procedure codes. Statistical analysis consisted of Poisson regression with restricted cubic splines, followed by plotting predicted hazard ratios (HR) for TV-ICD infection in renal-non-DD and renal-DD patients to identify changes in infection risk over time.

**Results:** 42,200 TV-ICD patients were included (9,151 [22%] renal-non-DD; 1,832 [4%] renal-DD), with 809 (2%) device infections. The HRs for infection (Figure) increased with time in both renal disease groups: 2.5-fold in renal-non-DD patients over 18 months; and almost 10-fold in renal-DD patients before leveling off after approximately 12 months.

**Conclusion:** The risk of infection following TV-ICD implantation is significantly higher in patients with underlying renal disease and increases over time, particularly in patients who are dialysis dependent.

**PO-632-05**

**LONG-TERM FOLLOW-UP ON PERFORMANCE OF SINGLE-CONNECTOR (DF4) IMPLANTABLE DEFIBRILLATOR LEADS: EXPERIENCE FROM A SINGLE TERTIARY CARE/REFERRAL CENTER**

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**Background:** Single-connector (DF4) defibrillator electrodes, introduced 10 years ago, eventually became the predominantly implanted trans-venous ICD leads. Assessment of their long-term performance comes primarily from manufacturer database analyses.

**Objective:** We describe the long-term performance of DF4 defibrillator leads in a cohort of patients implanted and followed in a single tertiary-care referral center.

**Methods:** A review of device interrogation reports in 5284 patients who received DF4 leads between 2011 and 2021 determined the frequency of lead-related abnormalities. We defined failure/malfunction as an electrical abnormality requiring revision to address a sudden increase (>2X) in stimulation threshold, a discrete jump in high-voltage impedance, or sensing of non-physiologic intervals or noise. We documented time to failure and the management for electrodes supplied by Boston Scientific, Medtronic, and St. Jude/Abbott.

**Results:** The cohort included 33.8% women with a mean age at implant of 60.6 years [95% CI 46.3-74.8]. The patients received an average of 2.0 ICD leads. We followed them for 3.0 years [0.2-5.9]; 30% of them for > 5 years. 82 (1.6%) leads demonstrated electrical abnormalities requiring revision. 64/82 leads that failed underwent explanation/extraction and replacement; we abandoned and replaced the other 18 (22%). Kaplan Meier survival curve shows an overall lead survival rate of 98.5% at 10 years, with no difference between manufacturers in unadjusted analyses. Multivariate analysis identifies younger patient age at implant as an increased risk of failure (OR = 1.03 per year younger age at implant, 95% CI 1.01-1.04). Cox-regression models adjusted for age at implant, gender, and the presence of additional leads, identifies Abbott leads as developing a