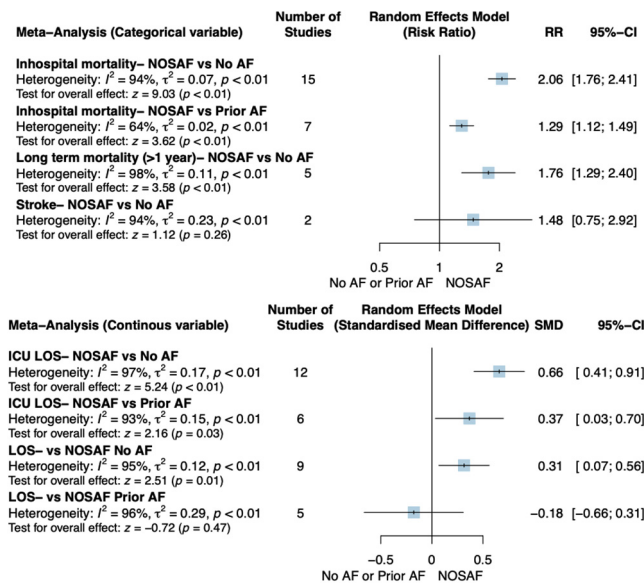




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of AF) is also associated with increased long-term mortality. Early recognition and management of NOSAF may improve patient outcomes.



B-PO04-197

COMPARISON OF POST-PROCEDURE CARDIAC TAMPONADE IN CORONARY INTERVENTIONS AND CARDIAC ELECTROPHYSIOLOGICAL PROCEDURES

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Background: Percutaneous cardiac procedures are on the rise with increasing complexity of procedures with newer innovations. Both coronary interventional (CI) electrophysiology and (EP) procedures can be complicated by pericardial effusions and tamponade requiring interventions.

Objective: We intend to compare CI and EP intervention associated cardiac tamponade (CT) and the outcomes, namely requirement for surgical interventions and mortality.

Methods: The patients who received CI or EP interventions were abstracted using the International Classification of Diseases, Ninth Edition and Tenth Edition, Clinical Modification (ICD-9-CM and ICD-10-CM) code on Nationwide Inpatient Sample (NIS) database. The basic characteristics (e.g., age, sex and race) of the patients, presence of comorbidities, CT-related events and in-hospital death were determined.

Results: During 2010 to 2017 there were 58,761,097 admissions for cardiac-related reasons out of which 288,101 admissions were considered for analysis. The frequency of CT-related events in the patients with CI and EP interventions ranged from 4.7% to 6.0% and 4.0% to 4.7%, respectively. Overall CT-related events can be significantly predicated by increasing age (CI: OR [95% CI]: 1.17 [1.14-1.20], $p < 0.0001$; EP: OR [95%CI]: 1.04 [1.02-1.07], $p = 0.001$) and female sex in both the groups. Surprisingly, presence of diabetes (CI: OR [95%CI]: 0.83 [0.78-0.88] and EP: 0.82 [0.77-0.87], $p < 0.0001$; both) and hypertension (CI: OR [95%CI]: 0.86 [0.81-0.92], $p < 0.0001$; EP: 0.92 [0.87-0.97], $p = 0.002$) were found to be lower in both the groups with CT-related events. The frequency of mortality in the patients with CI was significantly higher than EP intervention group (8.5% vs. 2.4%, $p < 0.0001$) in the patients with CT-related events and the presence of coagulation defects (Coronary: OR [95%CI] 5.75

[4.07-8.13], and EP: OR [95%CI] 4.06 [2.08-7.90]; $p < 0.0001$ both) predicted higher mortality.

Conclusion: In the real-world setting, CT-related events and mortality were lower in EP interventions as compared to CI. Patients with hypertension and diabetes were found to have lower CT-related events in both groups.

B-PO04-198

ATRIAL FIBRILLATION ABLATION SHARED DECISION-MAKING TOOL IMPROVED PATIENT KNOWLEDGE BUT NOT SATISFACTION WITH THE DECISION-MAKING PROCESS

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Background: Shared decision-making (SDM) tools are increasingly employed for procedural decisions. SDM tools are required prior to implantable cardioverter defibrillator and Watchman implantation, though their benefit beyond traditional pre-procedural counseling is uncertain.

Objective: We developed a SDM tool for atrial fibrillation ablation (AFA), then tested its impact on patient procedural knowledge and patient satisfaction with decision-making involvement.

Methods: Patients scheduled for an initial AFA were included. Each patient had previously participated in a traditional office visit discussion reviewing risks, benefits, and alternatives. Patients were randomized to experimental and control groups. A separate pre-procedure virtual visit allowed physician and patient to review the SDM tool or a control tool. The control tool outlined the patient experience during the ablation, without additional risk/benefit information. The assigned tool was then mailed to the patient. All patients completed a quiz immediately pre-ablation including 10 true-false questions testing AFA risk and benefit knowledge, and 5 questions assessing patient satisfaction and perceived involvement in procedural decision-making. Student's t-tests were used to compare groups.

Results: 16 patients were randomized to the SDM tool and 11 to the control group. The two groups were similar in age, educational level, and ethnicity. The experimental group included 31% women, the control group, 55% ($p = 0.25$). Virtual visit duration was 10.8 minutes for SDM patients and 8.6 for controls ($p = 0.04$). The experimental group performed better on knowledge-based questions (66% correct vs 54% correct, $p = 0.04$). Patient satisfaction did not differ significantly between groups, with the experimental group averaging 4.69/5 and the control 4.45 ($p = 0.08$).

Conclusion: The AFA SDM tool significantly improved patient procedural knowledge compared to traditional pre-procedural discussion alone. Virtual visits with SDM patients were longer than control patient visits, with the SDM tool triggering additional discussion. Prolonged virtual visits and improved patient understanding did not significantly enhance patient satisfaction with the decision-making process.

B-PO04-199

COVID-19 RISK WITH ELECTROPHYSIOLOGY PROCEDURES DURING THE PANDEMIC

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Background: Coronavirus disease (COVID-19) has overwhelmed healthcare systems worldwide often at the cost of patients with serious non-COVID-19 conditions. Outcomes and risks of contracting COVID-19 in patients hospitalized during the pandemic are unknown.

Objective: To report our experience in safely performing electrophysiology procedures during the COVID-19 pandemic.

Methods: We examined non-COVID-19 patients who underwent electrophysiology procedures during the peak of the pandemic between March 16, 2020 and May 11, 2020 at seven Northwell Health hospitals. We developed a priority algorithm to stratify inpatients and outpatients requiring electrophysiology procedures and instituted a protocol to minimize hospital length of stay (LOS). All patients underwent post discharge 30-day telehealth follow-up and chart review up to 150 days.

Results: A total of 217 patients underwent electrophysiology procedures, of which 86 (39%) patients were outpatients. A total of 108 (49.8%) patients had a LOS less than 24 hours, including 74 device implantations and generator changes, 24 cardioversions, five ablations, and one electrophysiology study. There were eleven (5.1%) procedure or arrhythmia related re-admissions and two (0.9%) minor procedural complications. Overall average hospital LOS was 83.4 ± 165.1 hours and a median of 24.0 hours. For outpatient procedures, average hospital LOS was 9.4 ± 13.4 hours and a median of 4.3 hours. Overall follow-up time was 83.9 ± 42 days and a median of 84 days. During follow-up, two (0.9%) patients tested positive for COVID-19 and recovered uneventfully. No deaths occurred.

Conclusion: During the peak of the COVID-19 pandemic, patients safely underwent essential electrophysiological procedures without increased incidence of acquiring COVID-19.

B-PO04-200

GEOGRAPHIC VARIATION IN ANTICOAGULATION AMONG MEDICARE BENEFICIARIES WITH NON-VALVULAR ATRIAL FIBRILLATION IN THE UNITED STATES

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Background: Little is known about the geographic variation in oral anticoagulant (OAC) use throughout the United States (US) since the approval of direct oral anticoagulants (DOACs) as safe and effective alternatives to warfarin for the treatment of non-valvular atrial fibrillation (NVAF).

Objective: Our study evaluates the geographic variation of OAC use among NVAF patients in the US by 3-digit zip code.

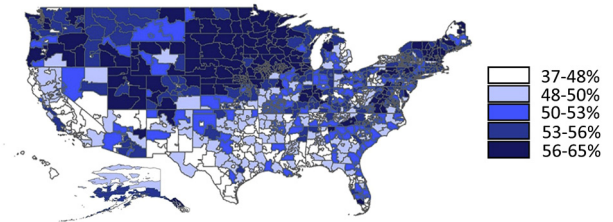
Methods: Patients with NVAF were selected from the US Centers for Medicare & Medicaid Services claims database from January 1, 2013 to December 31, 2016. 12 months of health plan enrollment was required before and after the NVAF diagnosis to evaluate baseline characteristics and outcomes, respectively. OAC treatment was measured among those patients with a CHAD₂S₂-VASc ≥ 2 during the baseline period. Each patient was assigned to a 3-digit zip code based on their primary residence and geographic variation was visualized using ArcGIS Pro software.

Results: Over 2.8 million patients with NVAF were identified, of which 97% were at higher risk for stroke with CHAD₂S₂-VASc ≥ 2 . Among this high-risk group of patients, nationwide, approximately 50% of patients with NVAF were prescribed an

OAC, with treatment being most common in the Mountain region of the US (Figure).

Conclusion: OAC use varies considerably by 3-digit zip code in the US and almost half of patients with NVAF at high risk were not prescribed an OAC. The additional granularity provided in this analysis may help clinicians and other key decision makers identify regions with undertreatment in order to improve patient outcomes.

Figure. Geographic Variation of OAC Treatment During the Follow-up Period Among Medicare Beneficiaries with NVAF from 2013-2016



B-PO04-201

IMPACT OF PSORIATIC ARTHRITIS ON ATRIAL FIBRILLATION HOSPITALIZATIONS: ANALYSIS OF NATIONAL INPATIENT SAMPLE 2007-2014

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Background: Patients with inflammatory arthropathies have an increased risk of arrhythmias, which has been linked to the direct effect of inflammation on the myocardium's electrical stability.

Objective: We aim to assess the impact of co-existing psoriatic arthritis (PsA) on outcomes in patients with atrial fibrillation (AF).

Methods: We conducted a retrospective analysis of adult (age ≥ 18) discharges from the National Inpatient Sample database between 2007 and 2014. The ICD-9-CM codes were used to identify those with AF and PsA. The primary outcome was inpatient mortality. Weighted multivariate logistic regression analysis was used to adjust for several patient-level and hospital-level characteristics.

Results: A total of 28419475 hospitalizations with AF were identified. A diagnosis of PsA was present in 21990 hospitalizations. Hospitalizations for AF with PsA had lower in-patient mortality [3.21 % vs 4.92%, adjusted odd's ratio (aOR) 0.76, 95% CI 0.64-0.90, p 0.001], compared to those without PsA. There were no differences in odds of ischemic stroke [aOR 0.88, p 0.177], hemorrhagic stroke [aOR 0.73, p 0.126], implantable cardioverter defibrillator implantation [aOR 0.83, p 0.318], acute kidney injury [aOR 1, p 0.946] and vasopressor requirement [aOR 0.89, p 0.536], however odds of undergoing pacemaker implantation [aOR 0.71, p 0.008] and cardiac arrest [aOR 0.61, p 0.006] were lower.

Conclusion: Our analysis showed a decreased mortality in hospitalizations with AF and PsA compared to those without PsA. This could be due to the protective effect of the anti-inflammatory medications used in PsA or under coding of PsA in hospitalized patients, leading to skewed results.