EN-728-04: USE OF ARTIFICIAL INTELLIGENCE (AI) TO IDENTIFY PATIENTS AT RISK FOR SUDDEN CARDIAC ARREST (SCA) ADDRESSING HEALTHCARE DISPARITIES

Douglas Steven Beinborn and Logan Brigman

Background: Estimated 356,0001 experience Sudden Cardiac Arrest (SCA) annually in US. SCA often associated with signs of low EF, heart failure, myocardial infarction. Published data shows 85% of individuals meeting AHA/ACC/AHA guidelines do not receive a device implant.2 Population largely underserved due to barriers including: Patients’ primary care provider is engaged outside of EP/Cardiology practice, Providers not understanding HRS/ACC/AHA guidelines, Patients lost to follow-up during 40-90-day waiting periods

Objective: Reduce deaths, hospitalizations, and suffering, use artificial intelligence to identify patients at risk proper EP consultation, assist hospitals to meet clinical guidelines, appropriate use, and healthcare disparities

Methods: Through utilization Mpirik’s Cardiac Intelligence® software, cardiovascular reports and clinician free text notes aids to identify patients with characteristics of SCA risk without appropriate consultation. Through the Cardiac Intelligence® real-time platform, clinicians can view patient populations, manage identified patients with the purpose of eliminating undertreatment, and receive automated alert notifications on patients identified with no appropriate follow-up plan.

Results: During 60-day period, 4,042 patients underwent cardiac function evaluation at a single site. Patients identified at risk for SCA was 176 (4.35%), of those patients 38 (21.6%) did not have appropriate follow-up. This equates to 228 primary prevention ICD patients annually.

Conclusion: Utilization of artificial intelligence shows clear early value in identifying patients at risk for SCA. Cardiac Intelligence’s EMR agnostic platform promises creative options to address healthcare disparities. For 2022, a minimum of 7 medical institutions will be fully operational and authors will provide further detail and impact.

ABSTRACT AP-519: After ablation: Advancing our approach to Atrial fibrillation patient care

Sunday, May 1, 2022
1:00 PM - 2:00 PM

AP-519-01

A MULTIDISCIPLINARY APPROACH TO SAME DAY DISCHARGE OF PATIENTS POST ATRIAL FIBRILLATION ABLATION

Alanna Miller MSN, CRNP; Kimberly Leotta MSN, CRNP; Todd Mendelson MD and Benjamin Dsouza MD, FACC, FHRS

Background: The COVID-19 pandemic created an increased need for inpatient hospital beds. This need along with advances in AF ablation technology led us to develop a program to discharge patients the same day as their AF ablation.

Objective: To develop and implement a protocol to allow safe Same Day Discharge (SDD) of eligible patients after AF ablation.

Methods: A multi-disciplinary team of providers and nurses developed an institutional-wide protocol to identify patients for safe SDD. Eligibility was based on comorbidities, home support, and distance from hospital. Adjusted procedural workflow included use of vascular closure devices to decrease bedrest time, avoidance of urinary catheters, and careful monitoring of volume status. A post discharge automated call system was developed to trigger nurse-level outreach to identify and treat potential post-operative complications. A retrospective analysis was performed to review enrollment and complications to ensure safety of the program.

Results: SDD for AF ablation was performed in 113 patients in 2020. There was 1 complication in the immediate post-op period due to traumatic foley insertion, 1 visit to urgent care for pericarditis, and 1 hospital readmission within 30 days due to volume overload; a total complication rate of 2.7%. There was no mortality observed and no major complications. Average general anesthesia time was 168.7 +/- 58.5min and average procedural time (vascular access to reversal) was 105.6 +/- 53.1 min.

Conclusion: A safe and effective same day discharge program was developed for patients undergoing AF ablation by a multidisciplinary team. This program resulted in improved patient satisfaction and had favorable impacts on healthcare utilization.