

**EMBARGOED FOR RELEASE UNTIL TUESDAY, MAY 5, 2020 AT 5:00 P.M. EST**

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**NEW STUDY UNCOVERS SEX AND RACE DISPARITIES AROUND TREATMENT  
PATHWAYS FOR HIGH-RISK CARDIAC PATIENTS**

*Results indicate patients at high-risk for cardiac arrest overall show low use of potentially life-saving implantable cardioverter defibrillators*

**WASHINGTON, D.C., May 5, 2020** – Results of a clinical trial released today show stark disparities in the use of life-saving implantable cardioverter defibrillator (ICD) interventions based on sex and race, suggesting potential bias in care pathways by electrophysiologists (EPs). The study was presented today as part of Heart Rhythm Society 2020 Science.

Among high-risk patients who have survived a life-threatening cardiac event, and therefore meet indications for ICDs, only 41 percent get ICDs. Patients who could use ICD therapy as primary prevention of a cardiac event, only get an ICD 8.3 percent of the time. As most ICDs are recommended and implanted by EPs, this study sought to examine real-world data to see how EP consultations impact disparities in ICD use by sex and race.

The trial included 159,009 patients (following screening procedures on electronic health records (EHR) of 2.9 million patients with any cardiac disease, arrhythmia or syncope, from 47 U.S. healthcare systems) and included data on diagnoses, procedures, measures, prescriptions, labs and encounters. These were de-identified EHR data curated by Optum®, where both the patient and providers were anonymous. Patient inclusion criteria included: new Class I or IIa indication for ICDs or CRT-D from 2012-2016; had >1 year of records prior to indication; aged <79 years. The trial looked at study groups, including differences in EP visits race and sex.

When looking at EP visits by sex, the trial found that among the 159,099 patients with a guideline directed device therapy (GDDT) indication, more men (54.7 percent) than women (51.2 percent) saw an EP. Among the 84,943 patients seen by an EP, more men (28.1 percent) than women (23.0 percent) received GDDT. When looking at the same information by race, the majority of White patients (55.5 percent) saw an EP, while patients of other races, including Asian, Black and Hispanic, (46.9 percent) did not. Among patients seen by an EP, fewer White patients (25.9 percent) received GDDT than patients of other races (27.9 percent).

“When you consider the number of patients overall who are at risk of a cardiac event or have already survived a life-threatening cardiac event, the use of implantable cardioverter defibrillators is staggeringly low, and the disparities in use by sex and race are unmistakable,” said lead author Anne Curtis, MD, MACP, FACC, FHRS, FAHA, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo. “Our hope is that these results will help physicians better identify patients who would benefit from guideline-directed device therapies and make sure that they receive this indicated and life-saving intervention.”

The authors of this study call for quality improvement programs to be developed in healthcare systems. Through additional research, the authors also hope to continue analyzing the data to discover additional insights on the use of ICDs.

**Sessions details:**

“Real World Outcomes of Patients with an ICD: *Does Consultation With An Electrophysiologist Impact Disparities In Implantable Cardioverter Defibrillator Use By Sex And Race?*” [May 5, 2020, 5:00 p.m. EST]

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About the Heart Rhythm Society

The Heart Rhythm Society is the international leader in science, education, and advocacy for cardiac arrhythmia professionals and patients and is the primary information resource on heart rhythm disorders. Its mission is to improve the care of patients by promoting research, education, and optimal health care policies and standards. Incorporated in 1979 and based in Washington, D.C., it has a membership of more than 7,000 heart rhythm professionals in more than 70 countries around the world. For more information, visit [www.HRSonline.org](http://www.HRSonline.org).