

CardioCare 2026: Innovations in Cardiovascular Health and Treatment

Conference Proceedings

May 26, 2026 - (Virtual)

Keeping People in Rhythm Electronically - An Overview of Cardiac Rhythm Management Devices

Dr. Asma Syed

Electrophysiology Director | Associate Director, Arrhythmia Service | Clinical Associate Professor, USA

Abstract

Use of Outside Energy to Stimulate the Heart - For Pacing and Defibrillation.

The history of cardiac rhythm devices reflects a remarkable evolution in cardiovascular medicine, driven by technological innovation and a deepening understanding of electrophysiology. The journey began in the 1950s with the invention of the first implantable pacemaker, a groundbreaking solution for bradyarrhythmia's. Over the decades, cardiac rhythm management (CRM) devices have expanded to include implantable cardioverter-defibrillators (ICDs), cardiac resynchronization therapy (CRT) devices, and leadless pacemakers. These advancements have been fuelled by improvements in battery life, miniaturization, telemetry, and device programming. Modern devices not only correct life-threatening arrhythmias but also provide real-time diagnostics and remote monitoring capabilities. This overview traces the historical milestones and technological advancements that have shaped cardiac rhythm devices, highlighting their growing role in improving patient outcomes and quality of life in those with heart rhythm disorders.