

## 3 MARKET OVERVIEW

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### KEY FINDINGS

- The global market for cardiac monitoring and cardiac rhythm management devices was valued at \$18,156 million in 2011, and is expected to reach \$23,330 million in 2017 from \$18,442 million in 2012 at a CAGR of 4.8%
- Major factors driving the growth of this market are increasing incidences of cardiovascular diseases, technological advancements, and government regulations in favor of cardiac monitoring
- The economic downturn and market saturation in developed regions like North America and Europe will be the major restraint for the market. Unstable reimbursement policies will further restrict market growth
- The emerging markets of India, China, and Brazil offer significant growth opportunity
- Key players in the cardiac monitoring and cardiac rhythm management devices market are Medtronic , St. Jude Medical , Boston Scientific , Philips Healthcare , GE Healthcare , Cardiac Science Corporation , Spacelabs , Schiller , Welch Allyn , and ZOLL Medical Corporation

### **3.1 INTRODUCTION**

The cardiac monitoring and cardiac rhythm management devices market is classified into conventional cardiac monitors and cardiac rhythm management devices (CRM-D). While monitoring devices only supervise heart activity and aid in the diagnosis of ailments, CRM devices have therapeutic applications as well. The conventional cardiac monitoring devices market comprises of a range of devices used to monitor patients' heart rhythms, electrical activity, and cardiac output. The CRM-D market consists of defibrillators, pacemakers, and cardiac resynchronization therapy devices. Over the years, cardiac monitoring and cardiac rhythm management has evolved greatly by offering devices of smaller sizes, increasing utility, sensitivity, automation, and performance. The number of patients adopting wireless devices has increased due to ease of use and portability of devices. These monitoring devices can be transported from hospital to home, have longer battery duration, and offer large memory storage. The increased acceptance of wireless devices by physicians and patients has led to a visible growth in this segment. In addition, the rise in CVDs and lifestyle diseases, and increase in treatment costs has prompted patients to monitor heart diseases and keep a check on these ailments.

Modern cardiac monitors are highly adaptable for both hospital and home monitoring, as patients insist on hospital grade devices at home. Remote patient monitoring, in spite of being a nascent area, continues to progress due to strict government regulations that impose penalties on hospitals for frequent re-admission of patients.

**TABLE 2**

**GLOBAL CARDIAC MONITORING AND CARDIAC RHYTHM  
MANAGEMENT DEVICES MARKET, BY SEGMENT,  
2010 – 2017 (\$MILLION)**

Segment	2010	2011	2012	2017	CAGR% (2012-2017)
Cardiac Monitoring	3,515	3,724	3,946	5,315	6.1
Cardiac Rhythm Management	14,419	14,432	14,496	18,015	4.4
Total	17,933	18,156	18,442	23,330	4.8

Source: Annual Reports, SEC Filings, World Heart Federation, European Resuscitation Council, Asian EMS Council, American Heart Association, Heart Rhythm Society (U.S.), The British Cardiac Patients Association, AHA Journals, PubMed, Expert Interviews, MnM Analysis

The CRM devices market accounted for 78.6% of total market in 2012, with value worth \$14,496 million. CRM devices such as ICD, and CRT defibrillators have high implantation rate and high cost, owing to which the CRM market size is large. However, the market for conventional cardiac monitoring devices will grow at a higher CAGR of 6.1%, the growth driven by Holter monitors and ECG devices.