

## **FACT SHEET: Wearable Cardioverter Defibrillator (WCD)**

The Wearable Cardioverter Defibrillator (WCD) is a device that is worn by patients at risk for sudden cardiac arrest (SCA), providing protection during their changing condition and while permanent SCA risk has not been established. The WCD allows a patient's physician time to assess their long-term arrhythmic risk and make appropriate plans. The WCD does not require bystander intervention and has a 98 percent first treatment shock success rate for resuscitating patients from SCA.



The WCD is lightweight and easy to wear, allowing patients to return to their activities of daily living, while having the peace of mind that they are protected from SCA. The WCD is non-invasive and consists of two main components – a garment and a monitor. The garment, worn under the clothing, detects arrhythmias and delivers treatment shocks. The monitor is worn around the waist or from a shoulder strap and continuously monitors the patient's heart.

If a life-threatening heart rhythm is detected, the device delivers a treatment shock to restore normal heart rhythm. The entire event, from detecting a life-threatening arrhythmia to automatically delivering a treatment shock, usually occurs in less than a minute. Timely defibrillation is the single most important factor in saving a SCA victim's life. A treatment shock must be delivered within a few minutes after an event to be effective; with each passing minute, a patient's chances of survival drops 10 percent.

The WCD is manufactured by ZOLL in its Pittsburgh, PA facility. The device was approved by the FDA in 2001 and is marketed as the LifeVest®. The LifeVest is the first and only WCD.

The WCD is prescribed by a physician as part of the continuum of care for patients at risk for SCA. It is used for a wide range of patient conditions or situations, including following a heart attack, before or after bypass surgery or stent placement, as well as for those with cardiomyopathy or congestive heart failure that places them at particular risk for SCA. The WCD is covered by most health plans in the United States, including commercial, state, and federal plans.

### **How is the WCD different from an automatic external defibrillator (AED)?**

Use of an AED requires bystander assistance. The bystander operates the AED by applying the electrodes to the patient and following instructions.

By contrast, the WCD requires no bystander intervention. The WCD protects patients when they are alone or sleeping. The WCD provides constant monitoring, immediate protection, and offers peace of mind for patients. In addition, the WCD offers peace of mind for family members who may worry about awaiting EMS personnel arrival or having to resuscitate a loved one themselves.