



# Wearable Cardioverter Defibrillator Vest

## History

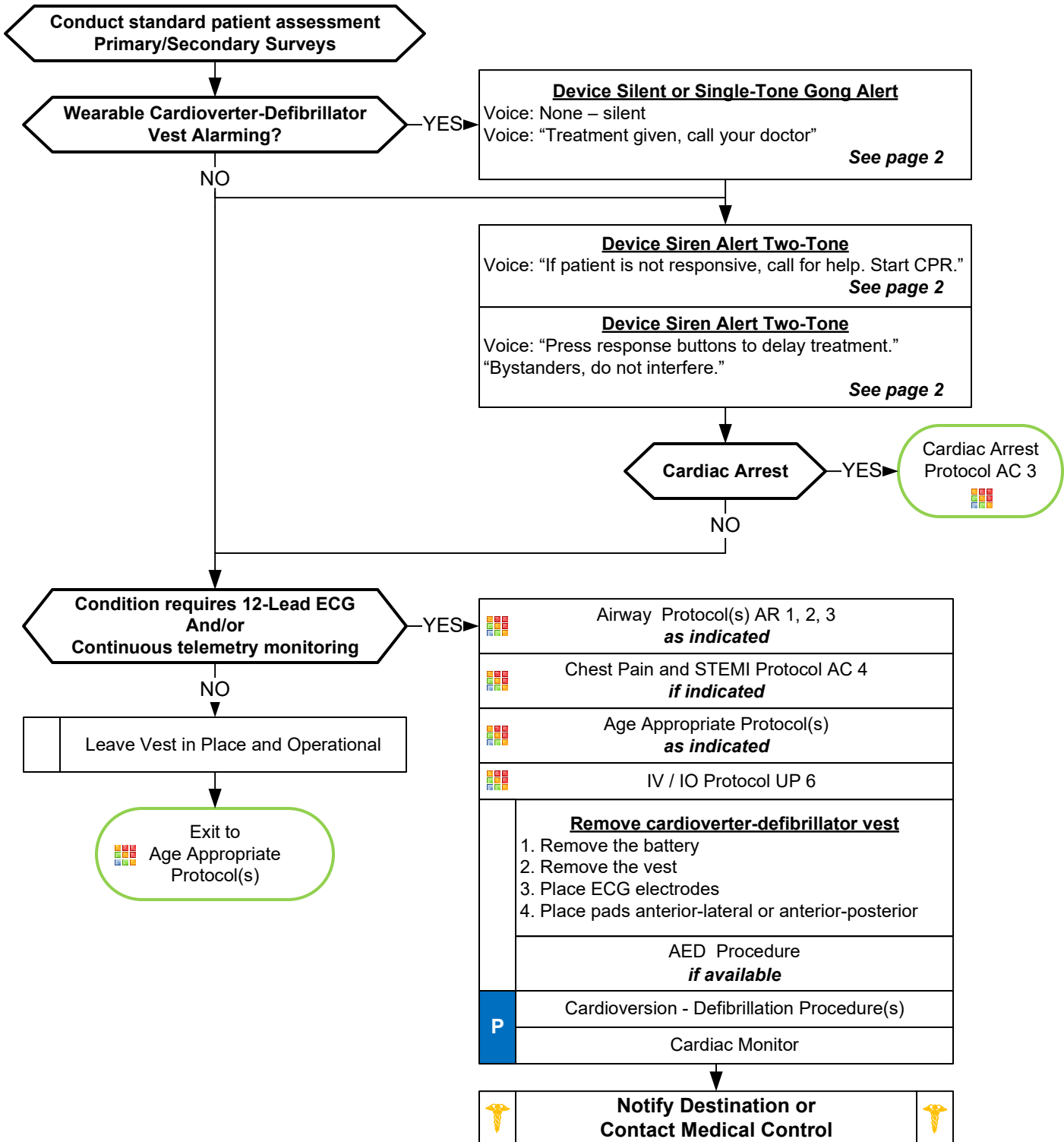
- SAMPLE
- Known risk for Sudden Cardiac Death
- Risk for life-threatening arrhythmia
- No implanted defibrillator
- Heart failure – cardiomyopathy
- Decreased ejection fraction

## Signs and Symptoms

- Chest pain, dyspnea
- Palpitations
- Received shock from vest
- Poor capillary refill / skin color
- AMS or decreased mental status

## Differential

- See Reversible Causes below
- Arrhythmia
- Infection/Sepsis
- Hypovolemia
- Cardiac arrest
- Hemorrhage





# Wearable Cardioverter Defibrillator Vest



## 1. Garment

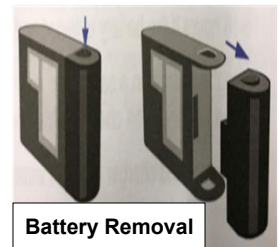
- Worn under your normal clothing, directly against skin
- Includes the electrode belt

## 2. Electrode Belt

- Designed to detect dangerous heart rhythms and deliver a treatment shock

## 3. Monitor

- Worn around waist or with shoulder strap
- Continuously records heart rate



## Pearls

- **Recommended exam: Mental status, skin color, capillary refill, peripheral pulses, blood pressure.**
- **Wearable Cardioverter-Defibrillator Vest:**
  - **Device is preparing to delivery a shock to the patient:**
    - Before device delivers a shock, it tests to see if patient is conscious – voice prompt instructs patient to press the “response” button (see diagram above).
    - Only the patient should press the “response” button.
    - Once a treatable arrhythmia is detected it takes between 25 and 60 seconds to deliver the shock.
- **Audible and tactile warning system:**
  - The device will provide a vibration, a siren tone, and voice prompts to check if the patient is conscious and give them an opportunity to press the “response” button to abort a shock.
  - See audible warning system above.
- **Reasons for use:**
  - Currently only device on the market is the Zoll LifeVest.
  - Worn by patients at risk of sudden cardiac arrest or risk of abnormal and/or lethal arrhythmia.
- **Blue gel on the patient’s skin from the device:**
  - Electrode pads release a blue gel prior to treatment to improve shock conduction and reduce burning.
  - Do not remove the gel if the vest is left in place during treatment.
  - Remove gel if vest is removed for prehospital care.
- **Shock to providers:**
  - Do not touch the patient when the device is instructing you that a shock will be delivered.
  - Providers can be shocked by the device during energy delivery if provider is touching the patient.
- **Removing the device for prehospital care:**
  - The device should only be removed when ECG monitor and defibrillator is available.
  - Continuous ECG monitoring and electrode pads should be in place when vest is removed.
- **Defibrillation/cardioversion with vest in place:**
  - Disconnect the device from the vest before you deliver a cardioversion or defibrillation
- **Transcutaneous Pacing:**
  - May be utilized with vest in place – disconnect the device from the vest before you perform transcutaneous pacing.