

YOUR GUIDE TO HELPING SAVE LIVES



VENTRIA
THE HEART OF LIFE

ABOUT VENTRIA

As an AED (Automated External Defibrillator) solutions provider, it is our mission to help save lives by making as many AEDs available to the public as possible.

As an AED (Automated External Defibrillator) solutions provider, it is our mission to help save lives by making as many AEDs available to the public as possible. It is our philosophy that we can make a difference by creating a customised innovative service offering, that truly meets all needs and overcomes current barriers.

“OFFERING
CONTINUOUS
CAREFREE MANAGED
AED SERVICES.

DELIVERING TRUSTED
TECHNOLOGY,
SECURED ACCESS
AND ENSURED
READINESS TO HELP
SAVE LIVES. ANYTIME.
ANYWHERE.”



We strongly believe that we have an important task to educate government authorities, companies and communities on what it really takes to successfully help save lives, by making AEDs available.

Through Ventria you will have **Trusted Technology** with **Secured Access** and **Ensured Readiness**, backed by our **Carefree Managed AED Services Program**. We offer full assistance

from planning to implementation, program management and post-event support at a single site, nationwide or worldwide.

At Ventria we believe that we truly understand what is needed to confidently help save a life. Next to offering trusted technology, knowing and managing risks that can potentially cause life-threatening malfunction of an AED is vital to help save a life anytime, anywhere!



“WITH THE RIGHT
EQUIPMENT AND
SUPPORT, EVERYONE
CAN HELP SAVE A LIFE.”



SUDDEN CARDIAC ARREST CAN HAPPEN TO **ANYONE, ANYTIME, ANYWHERE.**



Sudden cardiac arrest is the most common cause of out-of-hospital death in the western world¹.

Sudden cardiac arrest is caused by an acute and unexpected malfunction of the heart. In most cases, an erratic heart rhythm called ‘ventricular fibrillation’ is diagnosed. The heart stops pumping blood, the person loses consciousness and stops breathing. If the patient is not immediately treated with early defibrillation, their chance of survival is very low. The emergency services usually arrive too late to administer life-saving techniques, so early defibrillation by people already at the scene can be life-saving.

The most important element in the treatment of SCA is to provide a rapid shock to their heart called defibrillation.

An automated external defibrillator (AED) helps ordinary people to provide defibrillation quickly.

You don’t have to be a doctor to save a life our simple to use technology makes it possible. While we recommend that everyone receive training in CPR and the operation of an AED, they are designed to coach you through the process - even if you haven’t had training. The device determines if a shock is necessary and if it is, a calm, clear voice explains exactly what to do. It actively adapts the instructions to keep you on track. Intelligent sensors assess and automatically deliver the right shock at the right time - personalised to every man, woman, or child.

FOR EVERY SINGLE MINUTE WITHOUT DEFIBRILLATION, THE CHANCES OF SURVIVAL DROP BY 7%-10%.²⁻⁸

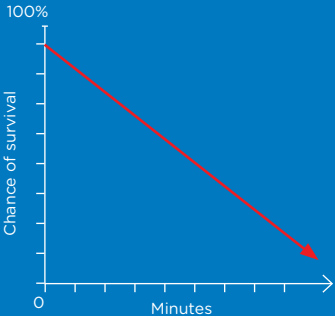
AFTER 10 MINUTES WITHOUT DEFIBRILLATION THERE IS ALMOST NO REALISTIC CHANCE OF SURVIVAL.

THERE IS UP TO 75% CHANCE OF SURVIVAL WITH IMMEDIATE DEFIBRILLATION.²⁻⁸

Response time is a crucial factor in survival

It might take more than 10 minutes to:

- Discover the incident
- Call the emergency services
- Arrival of the emergency services
- Analyse and treat patient



AFTER 10 MINUTES THE CHANCE OF SURVIVAL IS LESS THAN 5%. HAVING AN AED AVAILABLE IS BETTER THAN ONLY WAITING FOR THE EMERGENCY SERVICES.

References:
1. Best Practice British Medical Journal, Epidemiology of cardiac arrest <http://bestpractice.bmj.com/best-practice/monograph/283/basics/epidemiology.html>; 2. Perkins GD, Cooke MW. Variability in cardiac arrest survival: the NHS Ambulance Service Quality Indicators. Emerg Med J 2012;29:3-5 doi:10.1136/emmermed-2011-200758; 3. Nolan JP, Soar J, Zideman DA, Biarent D, Bossaert LL, Deakin C, Koster RW, Wyllie J, Böttiger B. European Resuscitation Council Guidelines for Resuscitation 2010 Section 1. Executive summary. Resuscitation 2010;81:1219- 76. 4. Yu T, et al. Adverse Outcomes of Interrupted Precordial Compression During Automated Defibrillation. Circulation 2002;106:368-372. 5. Eftedal T, Sundt K, Steen PA. Effects of Interrupting Precordial Compressions in the Calculated Probability of Defibrillation Success During Out-of-Hospital Cardiac Arrest. Circulation 2002;105:2270-2273. 6. Snyder DE and Morgan C. Wide Variations in Cardiopulmonary Resuscitation Intervals Among Commercially Available Automated External Defibrillators May Affect Survival Despite High Defibrillation Efficacy. Critical Care Medicine 2004;32 7:Supplement:S421-S424.9. American Heart Association Guidelines 2010. Circulation 2010;122:S706-S719. 8. Edelson D, et al. Effects of compression depth and pre-shock pauses predict defibrillation failure during cardiac arrest. Resuscitation 2006;71:137-145.11.

AED AVAILABILITY AND ACCESSIBILITY

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“MANY FACTORS PLAY A SIGNIFICANT ROLE TO POTENTIALLY CAUSE LIFE-THREATENING MALFUNCTION OF AN AED.

TO ENSURE AED READINESS, SECURED ACCESS, CONTINUOUS MONITORING, REGULAR MAINTENANCE, AS WELL AS REPLENISHMENTS AND EFFICIENT AED PROGRAM MANAGEMENT ARE KEY.”

Sudden Cardiac Arrest is a leading cause of death. Survival from it depends on having quick access to an AED and the reliable operation of the device.

Unfortunately, studies and real-life stories show that in number of cases AEDs were either not available or accessible, or AED failures occurred in the time of need.

Most common causes not surviving a Sudden Cardiac Arrest are:

- No AED available in near vicinity
- No access or quick access to AED
- Battery power issues
- Problems with pads
- Failing attempt to charge and deliver shock

AEDs are like any other piece of medical equipment and can experience unexpected failures. To help save a life AEDs need to be ready and accessible at all times. Being prepared for a Sudden Cardiac Arrest is not only about the acquisition and installation of an AED. Many factors play a significant role to potentially cause life-threatening malfunction of an AED.

To ensure AED readiness, continuous monitoring and maintenance are key.

TRUSTED TECHNOLOGY

PHILIPS

With an AED anyone can help save a life as it is a life-saving medical device that comes with responsibility. It needs to be rescue-ready at all times and to deliver fast treatment in order to maximise chance of survival! We take this responsibility very seriously. First responders should be able to rely on the device and trust that the technology will deliver what it is designed for.

The following criteria are key when selecting an AED is:

- Reliability** - Who is the manufacturer? Is the technology proven? History of problems with batteries and pads? Failed attempts to charge and deliver shock?
- Safety** - Built-in security systems that provide complete safety of operations, and prevent any damage to a cardiac arrest patient - even when used by a layperson.
- Speed** - During a cardiac arrest, fast defibrillation of the heart is crucial for patient survival.
- Ease-of-Use** - Even people with no training should be able to use the AED confidently. It should be easy to use, providing clear and simple instructions.

Based on this criteria, we have chosen the Philips HeartStart defibrillator. It's reliable - providing the confidence needed to help save a life.



AED OPTIONS

Both the **HeartStart HS1** and **FRx** are made for people who have never used a defibrillator before.

Philips Healthcare is a global AED market leader and is well-known for its quality and R&D investments. More than 1.6 Million AEDs have been sold worldwide. Studies have proven that the HeartStart defibrillator is designed to be the easiest to use and most reliable.¹⁻⁵ It is among the fastest in its class with confident shock delivery within 8 seconds. Effective analysis and shock delivery is proven by more than 40 published, peer-reviewed studies.² The HeartStart AED performs more than 80 self-tests, including pads presence and function. It features pacemaker detection and is safe to use on conductive surfaces.

LIFE GUIDANCE, GUIDES YOU THROUGH A CARDIAC EMERGENCY.

Philips AEDs are designed with Life Guidance, a simple step-by-step process designed to help you act confidently and decisively.

Life Guidance acts as your personal coach to guide you through a cardiac emergency, including detailed CPR coaching. If needed, the prompts will automatically be repeated or rephrased, and may include additional instructions to help you understand.

QUICK SHOCK REDUCES THE CRITICAL TIME FROM CPR TO SHOCK.

Studies show that minimising time to shock after CPR may improve survival.⁶⁻¹⁰ With patented Quick Shock, HeartStart is among the fastest in its class at delivering shock treatment after CPR, typically in just eight seconds.

SMART ANALYSIS.

SMART analysis automatically assesses the victim's heart rhythm. Whether the victim is a man, woman, or child, it delivers the right amount of therapy when needed. Even if you press the shock button, it will only deliver therapy if the rhythm is determined to be shockable.

PERSONALIZED THERAPY. ENHANCED CARE.

A high current with low energy delivers the right shock every time. The two most common ways to talk about AED shock strength are by current (measured in amps) and energy (measured in joules). It is a common assumption that energy is the most important measurement but that is incorrect. You defibrillate a heart by driving current through it.

HeartStart AEDs are designed to deliver high current in their low-energy shocks to maximise effectiveness from the very first shock dose.

HEARTSTART HS1



HEARTSTART FRX (Rugged design)



1) Andre A, et al. Automated External Defibrillator Use by Untrained Bystanders: Can the Public-use Model Work? Prehospital Emergency Care 2004;8:284-291. 2) Mosesso Jr. V, et al. Effects of AED device features on performance by untrained laypersons. Resuscitation 2009;80:1285-1289. 3) Fleischhackl R, et al. Differing operational outcomes with six commercially available automated external defibrillators. Resuscitation 2004;62:167-174. 4) Eames P, et al. Comparison of ease of use of three automated external defibrillators by untrained lay people. Resuscitation 2003;58:25-30. 5) Shortening the interval between the last compression and the shock even by a few seconds can improve shock success (defibrillation and ROSC). American Heart Association. American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Circulation. 2010;122 (suppl 3): S706-S719. 6) Yu T, et al. Adverse Outcomes of Interrupted Precordial Compression During Automated Defibrillation. Circulation 2002;106:368-372. 7) Eftesol T, Sundh K, Steen PA. Effects of Interrupting Precordial Compressions in the Calculated Probability of Defibrillation Success During Out-of-Hospital Cardiac Arrest. Circulation 2002;105:2270-2273. 8) Snyder DE and Morgan C. Wide Variations in Cardiopulmonary Resuscitation Intervals Among Commercially Available Automated External Defibrillators May Affect Survival Despite High Defibrillation Efficacy. Critical Care Medicine 2004;32(9): Supplement:S421-S424. 9) American Heart Association Guidelines 2010. Circulation 2010;122:S706-S719. 10) Edelson D, et al. Effects of compression depth and pre-shock pauses predict defibrillation failure during cardiac arrest. Resuscitation 2006;71:137-145.

SECURED ACCESS SAFEBOX



This cabinet secures the AED, and is easily accessible to everyone.

Compared to cabinets with code-locks or keys that take time to enter, the SafeBox is a unique storage option. With SafeBox the AED can be safely stored while maintaining emergency access.

The cabinet features a release trigger behind a small panel of glass so it can

- Secured storage with easy access to AED
- Patented emergency access
- Model for indoor and outdoor (heated)
- Slim design

be opened when needed. SafeBox has been installed at numerous sites worldwide, including corporations, airports, shopping malls, public buildings, schools and sporting venues etcetera. We also supply a heated and weather sealed version depending on the environment.



ENSURED READINESS SMARTLINK

- 24/7 remote monitoring; AED check, pads, batteries, temperature
- Motion detection
- Hands-free voice connection for live dispatch support
- GPS tracking
- Wireless connection GSM and mobile 2G/3G communication
- Own power source

SmartLink is a revolutionary new tool that comes ready installed inside the carry case of the AED. It automatically monitors the status of the AED. It is wireless, connects over a mobile network and contains its own power source. A weekly AED status report is sent by email with an immediate alert in case the daily check shows any irregularities.

SmartLink is useful in all kinds of situations, whether in a public access AED project or when an organisation has multiple AEDs across several different sites. In fact, it even works across different countries. SmartLink is able to connect to various networks, therefore offers extremely high availability.



Offering continuous **Carefree Managed AED Services**. Delivering **Trusted Technology, Secured Access** and **Ensured Readiness** to help save lives. Anytime. Anywhere.

VENTRIA - THE HEART OF LIFE

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“COMMITTED TO BEING PREPARED FOR SUDDEN CARDIAC ARRESTS IS NOT ONLY ABOUT ACQUISITION AND INSTALLATION OF AN AED. THE KEY RESPONSIBILITY IS DELIVERING CONTINUOUS ACCESS AND ENSURED READINESS.”

CAREFREE OUTSOURCING - MANAGED AED SERVICES



Providing the confidence to be adequately prepared for an emergency.

Setting up, operating and maintaining an AED program is complex. Keeping track of key areas will help keep AEDs ready: battery and electronic function, condition of electrode pads, physical condition of the AED, AED life cycle/age, and tools that can track and manage all the details.

“The Resuscitation Council UK and British Heart Foundation (Guide to AEDs, April 2017) advise that those who own an AED should have a process in place for it to be checked regularly and frequently - ideally daily.” It may be the difference between life and death!

Our Managed AED Services offer the monitoring of all key areas on a daily basis!

As an alternative, Ventria offers an attractive managed equipment solution. This is a provision and service agreement rather than a pure financing agreement.

Maintenance, services and financing is included under the terms of the agreement. There are no additional charges to remotely monitor the unit and it includes the replacement of pads and batteries before they expire.

Ventria's Managed AED Services:

- Carefree
- No investment required
- Pre-paid or monthly fee
- Worldwide coverage

Services also include:

- Replenishment pads and batteries
- Always have an AED on site (in case of defect or upgrade)
- Free mandatory guideline updates
- Full warranty during contract term
- Trade-in flexibility
- AED upgrade flexibility

We'll take care of your AED program and offer full assistance from planning to implementation, program management and post-event support at a single site, nationwide or worldwide.

**SERVICES
START AT
R22 A DAY!**

Please contact us for
your customised offer.

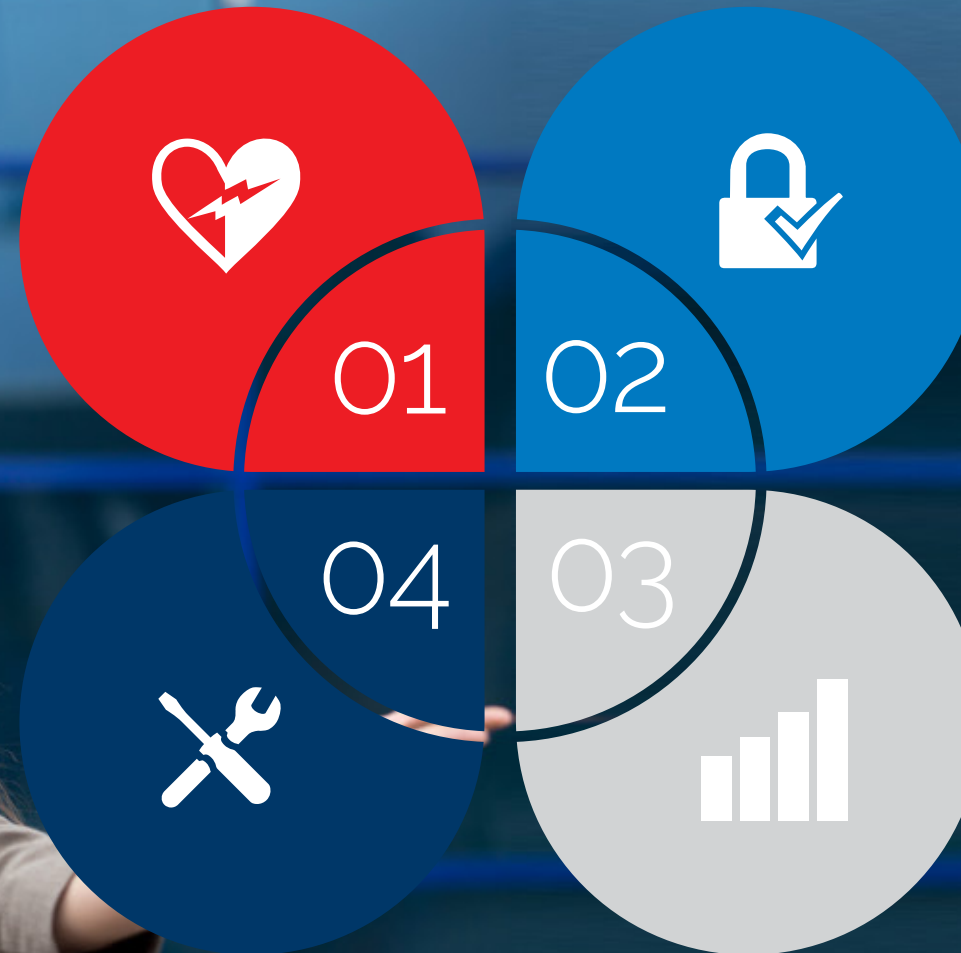
OFFERING CONTINUOUS CAREFREE MANAGED AED SERVICES

TRUSTED TECHNOLOGY HEARTSTART

SECURED ACCESS SAFEBOX

ENSURED READINESS SMARTLINK

CAREFREE OUTSOURCING MANAGED AED SERVICES



01

TRUSTED TECHNOLOGY HEARTSTART

- Global Market Leader (Over 1.6M AEDs sold)
- Designed to be the easiest to use and most reliable¹⁻⁵
- Fast confident shock delivery in less than 8 seconds
- Instructions that adapt to your pace
- Personalised low-energy therapy (150J)

02

SECURED ACCESS SAFEBOX

- Secured storage with easy access to AED
- Patented emergency access
- Model for indoor and outdoor (heated)
- Slim design

03

ENSURED READINESS SMARTLINK

- 24/7 remote monitoring; AED check, pads, batteries, temperature and motion detection
- Hands-free voice connection for live dispatch support
- GPS tracking
- Wireless connection GSM, mobile power source and 2G/3G communication

04

CAREFREE OUTSOURCING MANAGED AED SERVICES

- Carefree
- No upfront investment required
- Pre-paid or fixed fee per month
- Worldwide coverage

References:
1) Andre A, et al. Automated External Defibrillator Use by Untrained Bystanders: Can the Public-use Model Work? Prehospital Emergency Care 2004;8:284-291. 2) Mosesso Jr. V, et al. Effects of AED device features on performance by untrained laypersons. Resuscitation 2009;80:1285-1289. 3) Fleischhackl R, et al. Differing operational outcomes with six commercially available automated external defibrillators. Resuscitation 2004;62:167-174. 4) Eames P, et al. Comparison of ease of use of three automated external defibrillators by untrained lay people. Resuscitation 2003;58:25-30. 5) Shortening the interval between the last compression and the shock even by a few seconds can improve shock success (defibrillation and ROSC) - American Heart Association. American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Circulation. 2010;122 (suppl 3): S706-S719.



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