

Appendix A

HOW TO MANAGE, BUY AND MAINTAIN AN AED

The following are a few extracts around buying, managing and maintaining an AED in the community. This will include costs and estimated running costs. Communities wanting to buy an AED can approach EMAS for support and advice. They will also be able to benefit from discounts on an AED and cabinet. The AED document covers the following common questions that someone might have when starting the process of putting an AED in their community

Question
Do I have to have one?
Why wouldn't you have one?
What is an AED?
What are others doing?
Is a rescuer likely to be sued?
What does the Law say?
What are my responsibilities if I do have an AED?
Should I organise training?
How often should AED's be serviced?
Where do I put it?
What are the most common places?
Can I adopt a phone box?
Do I need planning permission?
Should I have a locked or unlocked cabinet?
What else should I consider about the cabinet?
Which AED should I have?
What will it cost initially?
What other costs might there be?
Can I get funding?
What does the EMAS need to know about the project?
Do I have to link it to the 999 services?
How do I get it linked to the 999 services?
What happens in an emergency?
What happens after an emergency?
How do I get started?

The following are the questions around purchasing and AED.

WHERE DO I PUT IT?

The siting of each unit is important and there are a couple of things that you will need to bear in mind:

- Population density – Consider where the groups of people tend to meet or the densest population in the community.
- Accessibility – clearly you need the AED in a location that is accessible 24 hours a day.
- Lighting – if you have a locked cabinet can you see the key pad easily
- Ease of access – Try not to put too many barriers in the way of access it.
- Power supply – there needs to be a small power supply to the cabinet so somewhere to enable this to be connected.
- Range – The AED will only be deployed if the incident is within 500m of the cabinet. So to cover as much of the town as possible this radius needs to be taken into account.
- Storing inside or out of a building – If you store an AED on the inside you restrict its use to the community as it will generally only be available when the building is open and this may mean that it is only available to cardiac arrests at the premises.
- Who owns the building or site? If you don't then you are going to need to enter into negotiations with the owner and this is going to have an impact on the time it takes to get your AED up and running.

WHAT ARE THE MOST COMMON PLACES?

The locations of AEDs in the community are numerous and vary – the following are some examples of where some AED are stored:

- Phone box.
- Village and Church halls.
- Libraries.
- Village shops.
- Sports centres.
- High foot fall walkways, popular parks.
- Public Houses

WHICH AED SHOULD I HAVE?

There are many AEDs on the market that are designed to work with cardiac arrests. The costs vary enormously but we have selected three by way of example. We have included some technical things and are happy to explain them.

An Ingress Protection (IP) rating looks at the ability of the AED to stand up to the rigors of working in outside conditions. For example, IP54 states that the container has a high level of protection against particles, and a fair amount of protection against water. IP55 demonstrate almost complete protection from particles and a good level of protection against water. Both are acceptable but IP55 is slightly more robust.

	Cardiac Science Powerheart G5	Physio-Control Lifepak CR2	WelMedical IPAD SP1
Warranty	8 years	8 years	10 years
Battery life	4 years	4 years	5 years
Carry case	No	No	Yes
Operation	Auto/semi auto	Auto/semi auto	Auto/semi auto
Spare pads included	No	No	Yes
Rescue kit included	No	No	Yes
IP rating	IP55	IP55	IP55
Governance	Manual checking process needed	Manual and WIFI processes.	Manual checking process needed
Charge delivery	Biphasic	Biphasic	Biphasic
Charge energy	200, 300, 354 Joules	200, 300, 360 Joules	150 Joules
Paediatric mode	Pads required	Built in	Built in
Paediatric pads required	Yes	No	No
Pads life	2 years	2 years	2 years minimum
CPR coaching language	English	English + 1	English
Patient assessment	2 mins interval	2 mins interval	2 mins interval
ECG assessment	Stop CPR	Whilst CPR on-going	Stop CPR
Storage temperature	-40 to 60 degrees	-30 to 60 degrees	-40 to 60 degrees
Operating temp'	0 to 50 degrees	0 to 50 degrees	0 to 40 degrees

All of the AEDs are acceptable and are supported by EMAS. There are other AEDs available on the market place. Even though there are a few technical things listed, EMAS is happy to explain the differences. Depending on what you are trying to achieve or concerned about then one might be better than another.

WHAT WILL IT COST INITIALLY?

The costs of AEDs are falling all the time and new versions are coming to the market regularly. Below are some example costs of running AEDs.

	Cardiac Science Powerheart G5	Physio-Control Lifepak CR2	WelMedical IPad SP1
AED Cost	£995 + VAT	£999 + VAT	£795 + VAT
Running Costs – assuming no use (VAT Included)			
Year 1	£0	£0	£0
Year 2	£39	£77	£35
Year 3	£0	£0	£0
Year 4	£259	£250	£35
Year 5	£0	£0	£183
Year 6	£39	£77	£35
Year 7	£0	£0	£0
Year 8	£259	£250	£35
Year 9	£0	£0	£0
Year 10	£39	£77	£218
Totals			
Year 8	£596	£654	£323
Year 10	£635	£731	£541
Separate costs			
Mild steel locked heated cabinet	£419 + VAT	£419 + VAT	£419 + VAT
Stainless steel locked heated cabinet	£479 + VAT	£479 + VAT	£479 + VAT
Plastic heated locked cabinet	£470.80 + VAT	£470.80 + VAT	£440 + VAT
AED and Cabinet bundle price			
Discount package price with mild Steel cabinet	£1214 + VAT	£1409 + VAT	£1194 + VAT
Discount package price with Stainless Steel cabinet	£1274 + VAT	£1469 + VAT	£1254 + VAT
Discount package price with plastic cabinet	£1265.80 + VAT	£1460.80 + VAT	£1149 + VAT

Consumables and optional extras			
New pads	£39	£77	£35
Paediatric pads	£65	Not required	Not required
Carry case	£50	£69	Included
Rescue Kit	£23.74	£24.72	£5.94

WHAT OTHER COSTS MIGHT THERE BE?

After the initial outlay of buying the AED and the cabinet, there is likely to be a cost for the installation of the cabinet and attaching it to a power supply.

On-going costs associated with the AED are listed above and there is likely to be a small cost for the electricity. The cabinets have a thermostat that keeps the temperature of the cabinet at least zero degrees. To give you an idea – we understand that the average running costs of a cabinet is about £12 - £15 per annum depending upon the winter weather.

If the AED is used on a patient, then there will be a need to replace the pads – the costs are above.

This page is intentionally left blank