Guidelines for consideration of provision of Automatic External Defibrillators (AED) within University Facilities

Preface

There have been an increasing number of enquiries in relation to provision of AEDs within the University. We currently have a number of AEDs in University premises, some of which are primarily for teaching purposes but most intended for use by First Aiders in the event of someone experiencing cardiac arrest. Many other HEIs are also considering this issue currently, and this guidance is based largely on similar guidance in place at Cardiff University. Its purpose is to help Service, Schools and Research Institutes determine whether or not it would be of benefit to install AEDs in any of their buildings, and also explains the other necessary commitments around their ongoing maintenance and use.

What is an AED?

An AED is a device which enables the general public to attempt to restart a heart after a cardiac arrest. They are designed to be simple to operate; the device has a computer programme which reads the heart rhythm and only discharges (automatically) if it is correct to use a shock in that set of circumstances. They are available in a variety of community settings perceived to have the potential for high risk activities, settings or occupants/ visitors, and may be positive in terms of preventing avoidable deaths.

Should you install them in your facility?

The following information may help in considering whether this is a viable option for your location(s).

At present there is no statutory legal requirement under law to provide a defibrillator.

Purchase of an AED should be considered in the context of the risk of a member of staff, student or member of the public sustaining a cardiac arrest at any given facility balanced against the ease and speed of access to NHS emergency services, the cost of purchase, installation, and maintenance of AEDs, and of initial and ongoing training of staff to use the devices.

Risk assessment should be used as the basis on which to determine the need for AED's within any School, Research Unit or Service. This assessment should include the following factors:

- The frequency of cardiac arrest at the site; The Resuscitation Council guidelines indicate that if the frequency is 1 arrest every 2 years then evidence supports the use of AEDs.
- The likely time between call out and arrival of a paramedic unit. If this is greater than 5 minutes then AED's *may* be a relevant consideration.
- The time between collapse of a victim and the availability of the on-site AED. If this is going to be greater than the time for a paramedic to arrive, it is of little benefit installing an AED, or it might mean locating multiple AEDs within the facility. (For remote facilities, AEDs are clearly of greater benefit, but practicalities of installation/ manning/ maintenance may be more problematic)
- The overall risk of the various sites e.g gyms and leisure centres have a higher risk of experiencing a cardiac arrest
- The population being served. Within the University there are a high percentage of young people who have a low risk of cardiac arrest. Also the working population

(including University employees) has a better health profile than the general population which reduces the likelihood of cardiac arrest episodes. However, this population may be much more varied and unpredictable in risk profile for some groups, e.g. those visiting such venues as the Hunterian and the Art Gallery.

Other factors that will have to be considered in deciding on the use of AEDs include

- Training. There will be a commitment to training both initially and ongoing. Any training must comply with the guidelines of the Resuscitation Council UK.
- Cost of AEDs. This will include the initial cost (about £1000 per unit) and the ongoing maintenance (calibration, servicing, batteries etc).
- Routine upkeep of the AEDs. They must be kept available, fully charged and with appropriately trained people available to administer treatment with them at all times.
- Selection of individuals trained in the use of AEDs and their distribution in the workplace
- Monitoring of the system. Medical advice is recommended to oversee the provision. This may be provided by appropriately qualified medical staff within the University, which could include clinicians within the Barclay Practice and/or Occupational Health or the Medical School or associated Research Institutes.
- Legal implications. Legal action may ensue following the use of AEDs and compensation sought (This is similar in the case of a First Aider administering First Aid). A person who attempts resuscitation will only be liable for damages if negligent intervention directly causes injury which would not otherwise have occurred or if it exacerbates an injury. If circumstances arise whereby without resuscitation the casualty would almost certainly die, the risk of incurring such liability is extremely small. If, however, a resuscitation procedure is carried out negligent procedure, a rescuer may be held liable for substantial damages if the standard of care he or she employed fell below that which could be expected in the given circumstances. This applies whether he or she is a health-care professional, a non-professional volunteer first-aider or simply an unskilled member of the general public.

It is possible that if a rescuer performs a procedure negligently others may, additionally or alternatively, be pursued for damages in respect of the injuries that the casualty suffers. In this context there is a potential liability for those who train rescuers in resuscitation techniques, those who provide or maintain resuscitation equipment and those who administer the system under which rescuers operate. This is similar to a wide variety of health and safety related risks.

For more information,

You might like to visit the Resuscitation Council UK website at http://www.resus.org.uk/SiteIndx.htm