As we all know, medical emergencies within dental practices are rare; the most common problems being fainting, hypoglycaemia, choking, seizures, asthma and anaphylaxis, even rarer are cardiac problems such as angina, heart attacks and cardiac arrest.

However, despite the rarity of these problems, medical emergencies can happen at any time in a dental practice, so we all need to be prepared to deal with them should they occur and the GDC is very clear in its expectations.

- All members of staff need to know their role in the event of a medical emergency
- At least two people are available to deal with medical emergencies when treatment is planned to take place
- Members of staff need to be trained in dealing with such an action

There is also an expectation from our customers and members of the public that dental practitioners and dental care professionals are competent in dealing with medical emergencies.

Back in July 2006, the UK Resuscitation Council released recommendations regarding standards for managing resuscitation and medical emergencies for dental practitioners and dental care professionals in general dental practice.

The recommendations include the following regarding AED availability and training:

- All clinical areas should have immediate access to an AED
- Dental practitioners and dental care professionals should all undergo training in Cardio Pulmonary Resuscitation (CPR), basic airway management and use of an AED.

Hew Mathewson, now past President of the GDC “Welcomes these guidelines and congratulates the authors on their considerable work that has led to the publication” (March 2006).

Dealing with medical emergencies is just one of the recommended core subjects per CPD cycle with a suggested minimum number of 10 hours (defibshop.co.uk offer CPD accredited training in the use of an AED including CPR which takes four hours every 12 months and is worth four verifiable CPD points).

Sudden Cardiac Arrest can happen to anyone at anytime and the only effective treatment is an electric shock delivered by an AED.

The time from arrest to delivery of the first shock is the single most important determinant factor in survival. For every minute that goes by the patient’s chance of survival reduces between seven - 10 per cent.

“When the shock is delivered within five minutes of the sudden cardiac arrest, 50 percent of individuals survive,” said Deborah DiSanzo, vice president and general manager of cardiac resuscitation at Philips Medical Systems, manufacturer of the popular HS1 & FRx defibrillators.

So the question that needs addressing is “Why wouldn’t your practice purchase an AED?”

They are very simple to use, with only one or two buttons to operate.

Once activated the AED will provide clear voice prompts, reminding the user to call for the emergency services and where the electrode pads should be placed.

As soon as the pads are attached to the patient the AED will monitor the patient’s heart rhythm and decide whether to deliver a shock or not.

Some machines (semi automatic) will instruct the user to push a button whilst others will deliver the shock automatically (fully automatic).

Most defibrillators also provide clear verbal instructions on how to perform CPR during that part of the rescue protocol, the Lifeline View from Defibtech even has a small LCD screen with a colour video to prompt the rescuer. How amazing is that!

Not having an AED available to use on a collapsed patient may result in a member of the dental team being challenged if it can be shown that it could have favourably influenced the outcome, especially if the action of a dental care professional differs from the recommendation / guidelines from
such an authoritative body as the Resuscitation Council. defibshop.co.uk offer more than 10 different defibrillators for less £1,000, and if you choose to lease that could be as little as £1.48 a day so again the question that needs addressing is “Why wouldn’t your practice purchase an AED?”

We can’t think of a reason………..can you?

Lots of defibrillators to choose from and here are six of the most popular.

**Cardiac Science Powerheart G5 Plus**
The Powerheart AED G5 Plus is the newest defibrillator offered by Cardiac Science and is available in semi automatic or fully automatic versions. “Rescue Coach” intuitive prompts are designed to guide the rescuer through the rescue process and provide instructions. Prices start from £1,000 + vat.

**Defibtech Lifeline (Standard five year battery option)**
Defibtech Lifeline AED is a robust one piece unit built for real life situations. Built to US military standards for ruggedness and exceeds standards for splash and dust resistance.

The Lifeline AED is lightweight at only two kg, pads are pre-connected (adult or paediatric) and is also available in semi automatic or fully automatic versions.

Zoll AED Plus Lay Responder
The Zoll AED Plus is the only AED on the market which offers a full rescue capability providing the rescuer with feedback to assist in CPR and is aimed at both basic life support users and healthcare professionals. The AED Plus is easily distinguishable by its lime green colour and use of a single electrode rather than two. Zoll were recently awarded the national defibrillator contract from the British Heart Foundation. Prices start from £1,000 + vat.

**Medtronic Lifepak CR Plus**
Medtronic Lifepak CR Plus is available in either semi automatic or fully automatic versions.

It is designed to be used by the minimally trained rescuer with the semi automatic version only requiring three steps to a potentially life saving defibrillation shock whilst the fully automatic version only requires the rescuer to apply the pads. Prices start from £1,295 + vat.

**Heartsine Samaritan PAD**
The only UK manufactured defibrillator on the market this fantastic defibrillator only uses three simple icons and verbal instructions, the Samaritan PAD will clearly guide the rescuer through each step. The Samaritan PAD is activated by pressing the green on button. The pads and battery pack are packaged together (one expiry date to track) and the unit prompts the rescuer visually and verbally. Prices start from £799 + vat.

**Philips / Laerdal Heartstart First Aid HS1**
A compact semi automatic unit aimed at individuals trained in basic life support but who would be expected to use the equipment infrequently.

Clear calm voice instructions guide the rescuer through each step of defibrillation including CPR coaching.

**CPD Accredited AED / CPR training**
defibshop.co.uk offer CPD accredited training in the safe use of the defibrillator you choose to purchase and CPR.

Our experienced trainers come to your practice to train your staff in as little as two hours if you choose our e-learning option for the theory element of the course. If you prefer pure instructor led training the course lasts up to four hours and cost the same only £390 + vat if ordered at the same time as you purchase your defibrillator.

Email Paula Leech or Margaret Green for a full copy of the Resuscitation Council Guidelines and to register for our newsletter and information on defibrillator special offers savealife@defibshop.co.uk or call 0845 071 0830.

**About the author**
David Howarth is the Managing Director of defibshop.co.uk the UK’s number one online distributor of defibrillators, consumables and CPD verifiable training. Established in 2005 defibshop offers impartial advice on which defibrillator best meets your company’s needs and budget, and remains the only distributor of every manufacturer’s defibrillators in the UK. The defibshop website is the most comprehensive resource for defibrillators on the web and it includes, 580 degree images, full technical specifications, comparison tables, videos, cost of ownership over five years graphs and latest news articles.

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Are you equipped for an emergency?
Saving minutes, saves lives

Dental Defibrillator Package – Quote reference RF269 for special offer
Includes free carry case, rescue ready kit, 2 sets of adult pads & 1 set of paediatric pads

For further information, contact:
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Phone 0161 930 6100, bochealthcare.uk@bo.com, www.bochealthcare.co.uk or www.defibshop.co.uk

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