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## **MEDICAL DIRECTIVE**

### **Automated External Defibrillation (AED)**

**Approved by/Date: Medical Advisory Committee – June 28, 2011**

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#### **Preamble**

Automated external defibrillation is an intervention utilized to restore an effective cardiac rhythm in a situation where a ventricular fibrillation or pulseless ventricular tachycardia arrest has occurred. (Bloorview, 2009).

An automated external defibrillator (AED) is a device containing sophisticated electronics used to identify cardiac rhythms, and to deliver a shock to correct ventricular tachycardia and fibrillation. It will only advise the individual using the device to deliver a shock if the heart is in a rhythm, which can be corrected by electrical defibrillation. (RVHS, 2006).

#### **Authorizing physician(s)**

*Medical Director of Critical Care and Resuscitation*

#### **Authorized to who**

Any Health Professional regulated by the RHPA who has successfully completed the bi-annual certification process for Basic Cardiac Life Support certification inclusive of education in the application and use of automated external defibrillator (AED).

#### **Patient Description / Population**

Any patient or non-patient in a pulseless cardiac arrest situation.

#### **Medical Directive Description/Physician's Order**

Staff will immediately commence cardiopulmonary resuscitation upon discovery of a cardiac arrest situation.

Once available, turn on the automated external defibrillator (AED) and follow the verbal instructions.

\*apply the defibrillation pads to the patient's bare chest, ensuring that there is minimal interruption to chest compressions. Follow all verbal instructions as the AED will automatically analyze the cardiac rhythm and advise the appropriate action. If a shock is advised, the Health Professional must call out "**ALL CLEAR**" as indicated by the AED. The Health Professional will conduct a visual check to ensure that no one is in physical contact with the patient before the shock is delivered. Continue to follow the instruction provided by the AED.

#### **Specific conditions/circumstances that must be met before the Directive can be implemented**

The patient must have absent vital signs.

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### **Contraindications to the implementation of the Directive**

A clearly expressed and documented advanced directive from the patient to not have resuscitation attempted as per the Resuscitation Status Policy.

The personalized preferences in accordance to the patient (or substitute maker) instruction that a defibrillation device not be utilized in the attempted resuscitation as per the Resuscitation Status Policy.

Immediate danger to the rescuers is present due to environment, patient's location or patient's condition.

### **Identify relevant Delegated Control Act or Added Skill associated with this Directive**

To enact the Automated External Defibrillation (AED) medical directive, Health Professional will have successfully completed the bi-annual basic cardiac life support education inclusive of the application and use of automated external defibrillator (AED).

The application or ordering the application of a form of energy prescribed by the regulations under the Regulated Health Professions Act 1991.

### **Documentation requirements**

Documentation of the 'medical directive – Automated External Defibrillation (AED)' will be provided on the physician order sheet and in the health professional's documentation section of the patient chart.

Document on the Code Blue Record.

### **Review/Evaluation Process (how often/by who)**

The medical directive will be reviewed every two years by the Resuscitation Committee and the Medical Director of Critical Care and Resuscitation.

### **Related Documents**

Resuscitation Status Policy

<http://172.16.17.81/intranet/dmFrame.asp?Display=12073>

### **References**

- American Heart Association (2006). *Advanced cardiovascular life support provider manual*. p 35.
- Bloorview Kids Rehab (2008) Automated External Defibrillation – Either Auto or Semi-Auto, Medical Directive.
- Chan P., Krumholtz H., Nichol G., & Nallamothu, B., (2008). *Delayed time to defibrillation after in-hospital cardiac arrest.*: New England Journal of Medicine, 358: 9-17.
- College of Nurses of Ontario (2007). AEDs: What nurses should consider. *The Standard* winter 2007. p.18.

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College of Nurses of Ontario (2009). *Legislation and Regulation RHPA: Scope of practice, controlled acts model. Reference document*. Retrieved from College of Nurses of Ontario Web site: [www.cno.org/publications](http://www.cno.org/publications) .

Kayser, R, Ornato, J. & Peberdy, M. (2008). Cardiac arrest in the emergency department: A report from the National Registry of Cardiopulmonary Resuscitation. *Resuscitation*, 78(2), 151-160.

Rouge Valley Health System (2006). Electrical defibrillation using automated external defibrillator (AED) in a cardiac emergency. Medical Directive.

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**Approvals and Signatures: (Original signatures document available in Medical Affairs Office)**

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