2.4 Sudden Cardiac Arrest and Automated External Defibrillators (AED)

Automated External Defibrillators or AEDs have become increasingly popular because of their ease of use, reliability, and effectiveness in providing prompt, possibly lifesaving, treatment for people experiencing symptoms of sudden cardiac arrest. AEDs are now available to the general public at relatively affordable prices. The Savoy on Palm Condominium Association has purchased two AEDs: Philips Onsite Model 5066A units.

2.4.1 Location of AEDs in the Savoy Building

One AED is located to the right of the Concierge desk as one faces the front door of the building. A second unit is located in the 3^{rd} floor exercise room on the wall next to the south exit from the room to the 3^{rd} floor outside deck.



Figure 2.4.1 AED at Front Desk



Figure 2.4.2 AED in Exercise Room

The cabinet doors may be opened without a key. When doing so, please note that a shrill alarm will be activated when doing so. The alarm is silenced automatically in about 1 minute or alternatively by closing the cabinet door. The alarm may be deactivated with the use of a key placed into the key slot in the upper left corner of the cabinet at rotated $\frac{1}{4}$ turn clockwise. In the interest of time the alarm should be ignored when using the device to treatment someone in distress.

2.4.2 Description and Use of the AEDs

The first step to take in the event of a person experiencing a sudden cardiac arrest is to call 911. Landline telephones are available at the front desk and in the exercise room near the sink.

At 3.3 lbs., the defibrillator can be easily carried to the patient's side. Using clear, natural voice instructions, the OnSite Defibrillator provides guidance through each step of defibrillation and CPR. Integrated pads placed on the patient's bare skin transmit information to the defibrillator, which senses and adapts to the user's actions every step of the way.



Figure 2.4.3 AED removed from red case

The OnSite defibrillator includes technologies for heart rhythm assessment and defibrillation energy delivery. It can be used to treat adults, *as well* as infants and children. Special pads are

inside the cabinets for use with children. The AED automatically checks for the presence of an implanted Pacemaker or Defibrillator and will not operate if those devices are present.

Using the OnSite defibrillator is straightforward. Pulling the green handle activates the defibrillator and voice instructions. These instructions are paced to user actions, to help guide the user through the entire process, from placing pads on the patient to delivering a defibrillation shock.

The defibrillator determines if a heart rhythm is subject to shock treatment:

- If a shock is indicated, the defibrillator directs the user to press the flashing orange "Shock" button. Then, the defibrillator delivers a dose of low-energy biphasic therapy, a highly effective defibrillation waveform that is also gentle to the heart.
- If a shock is not indicated, the defibrillator instructs the user to assess the patient and to perform CPR when necessary. While performing CPR, the defibrillator's voice instructions can be activated to coach the user on the frequency and depth of compressions.

2.4.3 AED Maintenance

Between uses, the defibrillator performs daily, weekly, and monthly self-tests of its electrical components, subsystems, and battery to help ensure continued reliability and readiness. A pads integrity test, which checks daily that the cartridge is properly installed and that the defibrillator pads are in working order, provides an additional level of assurance. The units are powered by an internal, non-rechargeable battery. Battery life expectancy is about 5 years. BCM maintenance staff checks the unit periodically.

As long as the green "Ready" light on the defibrillator is blinking, the Onsite unit has passed its last test and is ready for use. If a self-test finds that the defibrillator needs attention, the "Ready" light turns off and the unit emits a chirping sound. Pressing the flashing blue "Information" button provides verbal guidance to help identify and correct the situation.

The unit also provides a reminder to call emergency medical services (EMS). Should EMS personnel require a summary of care, this information may be retrieved from the defibrillator's internal memory. This is done by pressing the "i" button, activating a voice response summary of all events from the last clinical use.

The resident authority on the use of AEDs is Dr. Robert Lindeman MD (retired), Unit 903.