

EARLY DEFIBRILLATION PROGRAM

Keith R. Bushey

George Mason University

The Safety Office at George Mason University in conjunction with the Human Resources Department developed an automatic external defibrillator program. Salary savings from the Safety Office combined with money collected from a consortium composed of several other departments was used to purchase the equipment. Extensive guidance was developed and published in accordance with state regulations and the training of operators was done in house. The joint effort will result in the fielding of twelve defibrillators during the initial phase of the program

Introduction of the Organization

George Mason University is a distributed university with three campuses in Fairfax, Arlington, and Prince William counties, and two satellite sites in Herndon and Reston. At each campus, students and faculty have access to all the university's resources, while duplication of programs and support services is minimized through the use of technology. The university's more than 900 full-time instructional and research faculty members are experts in a broad range of fields, have published widely, contributed to major research findings, and consulted with government and business.

The majority of the university's 28,000 students are from Virginia, with all 50 states, the District of Columbia, and 130 countries and regions represented in the student body. While full-time undergraduates, 18 to 24 years in age, make up the largest student group, part-time graduate and undergraduate students account for nearly half of the student population.

George Mason University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's, and doctoral degrees.

Problem/Initiative

Sudden cardiac arrest is a major cause of death in the United States with an estimated 220,000 lives lost each year. Abnormal heart rhythms cause most sudden cardiac arrests. When the heart rhythm becomes chaotic, often without warning, the heart will stop abruptly. Death usually follows unless responders restore a normal rhythm within 5-7 minutes. The American Heart Association states that survival from SCA depends directly on the speed in administering a defibrillation shock in an attempt to restore normal heart functioning. Every minute in delay reduces the chance of recovery by 7 – 10%.

In addition to its student population of over 28,000 George Mason University employs over 3000 full and part time individuals and hosts over a million visitors a year at concerts, sporting events and in the physical fitness centers. Since May 2002, there have been three incidents of sudden cardiac arrest at the university. One of particular not involved a twenty-two year old student athlete who collapsed while playing in a pick-up basketball game. The time lag between the initial 911 call and the arrival of Emergency Services at the victim's side was over six minutes. This time lag is not unusual on college campuses where buildings tend to be clustered around common areas making access of emergency vehicles difficult.

Design

As early as 2000, the Human Resources Department began including the purchase of defibrillators in the annual budget request. Unfortunately, the economy in Virginia led to a reduction in allocations to all state universities and it was difficult to start new programs when old programs were struggling to survive. In late 2002, the Safety Office recognized that approximately \$15,000 in salary savings would accrue due to a decision to hold a newly authorized position vacant. The Safety Officer, after clearing the proposal with the Senior Vice President and Budget Officer, suggested that the money be

applied to the defibrillator program since it was an important project, but not one that would likely be funded through the normal budget process. The university's Risk Manager and Occupational Health Manager accepted the challenge to establish a program using available resources.

Implementation

After the first meeting of the Human Resources and Safety Office ad hoc task it was apparent that the amount of money available solely from the Safety Office's salary savings was inadequate to provide any more than very minimal defibrillator coverage. All members of the task force contacted various members of the university community to engage them in supporting the program. The contacts in the intercollegiate athletic area were especially supportive due to their experiences with the student athlete. Likewise several academic departments whose leadership had personal knowledge of the effectiveness of the defibrillators were also supportive. The end result was a "war chest" of over \$23,000 with which to start the program.

Beyond funding, there were several key requirements to the program that needed to met. First was

Retrospect

Without trying to seem boastful, the only thing we might have done differently was to produce the handbook earlier.

