Section 400 – Emergency Operations

Emergency Medical Response – 403.00		
S.O.P. # 403.15	**High Quality Continuous CPR**	PAGE: 1 OF 5
EFFECTIVE: 07/01/2013	Authorized: John Filer, Chief	
REVISED: 09/04/2014	Authorized: William Stephens, Director	

403.15.01 Purpose

The purpose of this SOG is to provide guidance to all public safety personnel and responders regarding the procedures for, responding to; the provision of medical care and the management processes for patients in cardio pulmonary arrest. By implementing these policies and procedures, it is the goal of the County to improve the successful outcome of out-of-hospital cardio pulmonary arrest patients in Charles County through the performance of High Quality Continuous Cardio Pulmonary Resuscitation (HQC-CPR) and effective resource management.

403.15.02 Applicability

This SOG applies to all public safety personnel and responders to include but not limited to law enforcement officers, firefighters, EMS providers, first responders and 911dispatchers.

403.15.03 Definitions

1. **Code Resource Manager (CRM)** – The CRM is the provider tasked with the management of personnel and/or approved devices performing HQC-CPR as well as documenting all interventions performed on the patient. The CRM keeps the "pace" of the HQC-CPR process, ensures the quality of CPR being performed is to standard and indicates when CPR providers should rotate at 2 minute intervals.
2. **CPR** – Cardio Pulmonary Resuscitation
3. **EMD** – Emergency Medical Dispatch
4. **Family Advocate** – The Family Advocate is the provider tasked with comforting family members and/or bystanders as well acting as the liaison between the providers and the patient's family.
5. **HQC-CPR** – High Quality Continuous Cardio Pulmonary Resuscitation
6. **IC** – Incident Command or Incident Commander
7. **ICS** – Incident Command Structure as prescribed by the National Incident Management System (NIMS).
8. **Public Safety Personnel/Responder** - Personnel involved in the prevention of and protection from events that could endanger the safety of the general public from significant danger, injury or harm. These persons include but are not limited to police officers, firefighters, EMS providers, animal control officers and public safety dispatchers.
9. **ROSC** – Return of Spontaneous Circulation

10. **Time on Chest** – Is the amount of time a provider actually spends performing chest compressions on a patient in cardio pulmonary arrest. The goal of each provider on the compression team is to have a 95% time on chest rate interrupting CPR for no more than ten (10) seconds.
11. **UMCRMC** – University of Maryland Charles Regional Medical Center

403.15.04 Policy

1. **Dispatch Assignment** – Each cardiac arrest assignment will receive a minimum staffing of ten (10) personnel in the following recommended manner:

Resource	Staffing
First Due Fire Company	Minimum personnel
BLS Transport Unit	2 personnel
BLS Transport Unit	2 personnel
First Due ALS Transport Unit	2 personnel
Support ALS Chase/Transport Unit	1 to 2 personnel depending on asset
EMS Duty Officer	1 person

2. Based off of apparatus staffing levels Charles County 911 Communications will continue to dispatch additional resources until the assignment has been filled.
3. An assignment will be considered filled with a minimum of one (1) ALS transport unit, one (1) ALS resource, one (1) EMS Duty Officer, one (1) BLS transport ambulance and any other combination of resources available to reach the minimum staffing requirement of ten (10) personnel.
4. The first arriving unit shall begin the HQC-CPR process.

    i. The IC position should only be established once a significant number of personnel are on scene and HQC-CPR has been initiated.

5. Without interruption of HQC-CPR, roles and responsibilities should be assigned to personnel as follows:

Assignment	Number of Personnel Needed	Responsibility	Minimum Qualification
Incident Commander (IC)	1	Overall management of the scene and personnel/asset involved	Highest ranking responder sufficiently experienced to manage the scene.
Compression Team	4	Perform HQC-CPR.	Combination of any four (4) qualified providers.
Airway	1	Manage the patients airway	Advanced life support provider for advanced airways, basic life support provider for basic airway management.
IV & Medications	1	Establish an IV and administer ACLS medications per MD Protocol	Advanced life support provider.
Cardiac Monitoring	1	Monitor cardiac rhythm and initiate shocks as advised/indicated.	Advanced life support provider.
Family Advocate	1	Provide comfort to family members and/or bystanders as well act as the liaison between the providers and the patient's family	Law Enforcement Officer, EMS Duty Officer or an appropriately trained EMS provider as designated by the IC.
Code Resource Manager (CRM)	1	Management of personnel and/or approved devices performing HQC-CPR as well as documenting all interventions performed on the patient. The CRM keeps the "pace" of the HQC-CPR process, insures the quality of CPR being performed is to standard and indicates when CPR providers should rotate at the 2 minute intervals.	EMS Duty Officer or most qualified provider as designated by the IC.

6. All attempts and considerations should be made to work the patient where they experienced their cardiac event so long as the location is conducive to performing HQC-CPR and patient care.
7. Performance of uninterrupted HQC-CPR is to be administered on-scene for a period of fifteen (15) minutes as prescribed by the Maryland Medical Protocols or until the patient experiences ROSC.
8. Compressions should not be interrupted for more than ten (10) seconds.
9. Each provider performing compressions should attempt to perform HQC-CPR with a 95% time on chest percentage.
10. If the use of a mechanical CPR device is available, the transition from manual to mechanical CPR should be rapid and performed at a natural break in the HQC-CPR cycle taking no more than ten (10) seconds to complete.
11. If criteria for the Termination of Resuscitation have not been met according to the Maryland Medical Protocols and the patient is going to be transported with full resuscitation measures performed in route, the following staffing/roles should be assigned for transport.

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Assignment	Number of Personnel Needed	Responsibility	Minimum Qualification
Compression Team	2	Perform HQC-CPR.	Combination of any two (2) qualified providers.
Airway / Code Resource Manager (CRM)	1	Manage the patient's airway / Management of personnel and/or approved devices performing HQC-CPR as well as documenting all interventions performed on the patient. The CRM keeps the "pace" of the HQC-CPR process, insures the quality of CPR being performed is to standard and indicates when CPR providers should rotate at the 2 minute intervals.	Advanced life support provider for ALS support and overall code management.
ALS Skills	1	Provision of all ALS skills including medication administration and cardiac monitoring.	Advanced life support provider.

12. When criteria for the Termination of Resuscitation have been met according to the Maryland Medical Protocols, the deceased should be left in the care of law enforcement personnel. There may be times, however, when leaving the deceased on-scene may not be the most appropriate course of action even when criteria for the Termination of Resuscitation have been met. Scenarios that might necessitate transport of the deceased may include but not be limited to:

    ii. Situations in which the safety of personnel is in question,
    iii. Environmental situations which prohibit leaving the deceased on-scene;
    iv. Family disposition which prohibits leaving the deceased on-scene;
    v. Situations in which the deceased is an occupied public location which is in common sight or has the potential for common sight;
    vi. Any time when the provider's judgment indicates that the patient should be transported.

13. Patients left on the scene should be placed in a position of perceived comfort for the family, cleaned if necessary and covered with a clean sheet or blanket and left with all medical interventions in place.
14. All trash, debris and medical waste generated from the event should be picked up, packed appropriately and removed from the scene by the EMS providers.
15. The final determination to leave the deceased on location should be made jointly by the highest ALS provider, the Incident Commander, the Family Advocate and law enforcement personnel.
16. After termination of HQC-CPR, it is the role of the FA to consider any additional needs of the family such as crisis intervention services or referral to the Washington Regional Transplant Consortium (WRTC: 1-866-BE-A-DONOR).

403.15.05 Termination of Life Sustaining Efforts Where a Patient Must be Transported

1. Once the decision to transport the deceased patient has been communicated to the crew, resuscitative efforts may be continued while the patient is being loaded into the BLS ambulance.
2. Transfer of care may be transitioned to the BLS crew with resuscitative efforts being continued until the crew feels that they are safe.
3. Once the situation has been deemed safe, the transporting crew will perform a medical consult and continue the transport to the designated facility in a non-emergency priority three (3) mode.
4. The designated facility of transport for patients meeting the aforementioned criteria is UMCRMC in La Plata.
5. Upon arrival at UMCRMC, the BLS crew will transport the deceased patient directly to the morgue.
6. Once at the morgue it will be the responsibility of law enforcement personnel to register the patient with UMCRMC, identify the patient and then apply the patient's identification tag.
7. Once this process has been completed, transporting personnel will be cleared to return to service.

403.15.06 Quality Assurance

All incidents within the scope of this SOG shall be reviewed by the Charles County Quality Assurance Program.

1. ALS Providers must transmit the code summary to ***Code Stat*** for review.
   A copy of the *Code Resource Worksheet* shall also be submitted for QA review.
2. The County Quality Assurance Officer will provide performance feedback to each participating crew after a full QA review has been performed.