



## Application for 2008 Outstanding County Program Awards

County (if multi-county entry, list all): McDowell County

Submitted by: Chuck Abernathy Title: County Manager

Address: 60 East Court Street Marion, NC 28752

Phone: 828-652-3982 E-mail: charlesa@mcdowellgov.com

The Association encourages electronic submissions. E-mail the application and project/program description to Todd McGee at [todd.mcgee@ncacc.org](mailto:todd.mcgee@ncacc.org). You can also fax your entry to (919) 733-1065 (attn. Todd McGee), or mail it to: NCACC, 215 N. Dawson St., Raleigh, NC 27603. Applications must be postmarked by **Friday, March 13, 2009**.

Projects/programs must have been implemented between Jan. 1, 2007, and Dec. 31, 2008. For additional information and category criteria, visit [www.ncacc.org/awards/ocpa/about.html](http://www.ncacc.org/awards/ocpa/about.html).

Project title: Therapeutic Hypothermia

Category (you may check more than one):

General Government       Human Services       Public Information/Participation

Address each of the following questions in a typed program/project summary in a separate Word document attached to this application form. Limit your responses to two pages. Use single-spaced lines and 12-point, Times New Roman font. Supporting materials may be submitted, but due to time constraints, judges may not review the materials.

1. What are the purpose, history, timeline and budget of the program/project? Will the county realize any projected cost savings? (For public information/participation programs, please try to estimate participation levels).
2. What makes the program/project unique? How does it differ from similar projects in your county or in other counties?
3. How well did the program use available resources, given the limitations on such resources?
4. Can this project be duplicated in other counties? If another county wanted to do a similar project, what advice would you give them to minimize obstacles and problems?
5. How did the project involve collaboration with other agencies, jurisdictions, nonprofits, businesses, etc.? How well did this collaboration work and is it on-going?

**McDowell County Emergency Medical Services**  
**60 East Court Street**  
**Marion, NC 28752**  
[www.mcdowellems.com](http://www.mcdowellems.com)

Application for 2008 Outstanding County Program Awards

Project Name: Therapeutic Hypothermia

Project Coordinators: Director William Kehler  
Major Eugene Edwards

- 1) On October 27 of 2008 McDowell County EMS started performing therapeutic hypothermia on cardiac arrest victims that are resuscitated in the pre-hospital setting. This cutting edge procedure is designed to drop a patient's core body temperature to 93 degrees after the patient is resuscitated. The goal is to prevent brain damage as well as reduce injury to major organs within the body. McDowell EMS Training Committee began researching this procedure in early 2008 and started constructing policies and procedures to allow McDowell County Paramedics to perform therapeutic hypothermia. The startup cost was very minimal to the county, only 25.00 per ambulance as most major pieces of equipment were already in place. The startup cost allowed for purchase of special thermometer probes and additional ice packs.
- 2) This project is unique as McDowell County EMS is the first county in Western North Carolina and the first rural county in North Carolina to implement this procedure. Therapeutic hypothermia is cutting edge medicine new to hospitals and EMS agencies throughout the United States. In November 2008 EMS Magazine estimated only approximately 100 EMS agencies in the nation were providing this level of care.
- 3) McDowell EMS was able to implement this procedure using resources already purchased and carried on our ambulances. One piece of equipment required to perform this procedure is a device that will monitor internal core body temperature. This piece of equipment represents the largest cost to an EMS agency. McDowell County EMS purchased cardiac monitors in 2001 that were equipped with internal temperature monitors.

Extensive training was required to train McDowell Paramedics on how to perform this procedure as well as the indications and contraindications for this procedure. Partnering with McDowell Tech Community College we were able to have Jim Mobley, Director of Air Medical Services for Regional One Helicopter conduct multiple training sessions for McDowell Paramedics free of charge to the county. Mr. Mobley is recognized as an expert in the field of therapeutic hypothermia.

- 4) Therapeutic hypothermia treatment is recognized and recommended by the American Heart Association. While this procedure is cutting edge medicine it is certainly increasing in popularity among hospitals and EMS agencies. An agency that is interested in offering this procedure must be willing to partner with other medical facilities, research this procedure, create protocol and procedure documents as well as ensure strict quality assurance oversight.

Our advice to other agencies that may be considering therapeutic hypothermia is to work very closely with receiving hospitals that agree to accept these patients and ensure cooling measures are continued. With this procedure being very new to many healthcare providers ensuring training of staff and cooperation at the receiving hospital should be a high priority to ensure there is no lapse in patient care once EMS arrives at the receiving facility.

- 5) This project was enacted to increase the resuscitation rate of patients that experience cardiac arrest. It is estimated that less than 5% of patients that go into cardiac arrest in the pre-hospital setting will be resuscitated. While this project is aimed at allowing EMS Paramedics to treat patients with cutting edge procedures the agency took an additional step to involve the community. The agency released a Community CPR Initiative to work in conjunction with therapeutic hypothermia to save lives. Partnering with local churches, businesses, volunteer fire departments, and civic groups the agency is conducting free CPR classes within each community in McDowell County. Classes are being offered to increase the number of cardiac arrest victims that receive CPR prior to EMS arrival therefore increasing the chance of survival in the patient.

The overall project which still continues today requires collaboration with our local hospital, local fire / rescue personnel, community leaders, local and regional media outlets, regional hospitals, North Carolina Office of EMS, Wake County EMS (1<sup>st</sup> EMS Service in North Carolina to provide this treatment), regional air medical programs, and our local community college. The partnership and collaboration between our agency and those listed above has translated into an increase in public awareness on cardiac arrests as well as the services offered by local governments in relation to Emergency Services.