



We've Got the Beat!

In the EMS industry, there are traditionally two metrics used as the key indicators of success: response time compliance and return of spontaneous circulation (ROSC). ROSC occurs when the heart of a patient in cardiac arrest begins beating on its own. In EMS cases, this is most often due to CPR, medications or defibrillation so the number of ROSC cases measures the effectiveness of a system's cardiac protocols. What ROSC really measures is the lifesaving difference an EMS system can make for patients in their community.



Without doubt, cardiac arrest cases have among the highest mortality rate of all EMS calls. However, new techniques and approaches to care are making significant differences in ROSC and longer-term survival rates at MedStar.

Since 2008, MedStar has increased the ROSC rate from 9.5% to 37.4% of cardiac arrest calls, which represents an increase of almost **270%**.

Additionally, the percentage of cardiac arrest patients treated and transported by MedStar who leave the hospital neurologically intact is almost **twice the national average**.

Check the next issue of StarLite to learn more about the programs and techniques MedStar is using to achieve these dramatic results!

Missed it By *That* Much!

2 late calls. 3 seconds total.

Seriously, that's the hair's breadth difference by which MedStar missed Priority 1 call compliance in the month of August.

The month saw record-high call volume and soaring temperatures which each present significant challenges for the team.

However, close doesn't cut it at MedStar. We are already reviewing processes and staffing levels to be sure to hit 90% for September.

System Performance Month-to-Date Aug 1– 31 2010

Call Priority	# of Calls	On Time %	Avg. Resp. Time
1	2,062	89.9%	5:29
2	3,665	89.2%	6:03
3	2,870	84.4%	8:30
Total	8,597		

Response time goals (90% of time):	
Priority 1	9 min. or less
Priority 2	11 min. or less
Priority 3	15 min. or less

From the Field—Treating Broken Hearts

By John Farris
MedStar Paramedic

From the Field is a new column by contributing editors from among MedStar's EMT and Paramedic staff.

Having a patient's heart in my hands is one of the most important responsibilities I face as a paramedic in the field. When the heart stops beating, a patient's chance of survival drops by 10% every minute, so seconds really do count when trying to assess and treat cardiac distress. At MedStar, we rely not only on our skills and knowledge in emergency medicine but also on some highly specialized equipment.

A heart monitor is one of the most essential devices used by MedStar field teams because it provides key information about a patient's heart function. Once multiple electrodes have been placed in specific locations on the patient's body, this portable monitor will display the heart's electrical activity on a graph, called an electrocardiogram – or EKG.

The modulation, frequency and regularity of the EKG's pattern reveal whether the chambers of the heart are beating normally and if not, whether medications, defibrillation or other interventions are needed. This data can also be sent directly to hospital staff in preparation for arrival at the emergency room.

Medical professionals often say that "time is tissue," which underscores the importance of working quickly when a patient's heart is at risk. For a patient in cardiac distress, the EKG and heart monitor provide medics critical information that help us give them the best fighting chance.

An EKG Read Out

