Overall Cardiac Arrest Survival

Desired Outcome	As many patients as possible who are treated for cardiac arrest by EMS are discharged alive from the hospital.
Standard	No standard has been defined for this measure.
Acceptable Quality Level	No acceptable quality level has been defined for this measure.
Monitoring Method	Run Chart updated by 10th business day each quarter.

Measure Description

Indicator Description	The percent of patients discharged alive from a receiving hospital following treatment by ATCEMS personnel for cardiac arrest.
Question Indicator Answers	How many patients treated for cardiac arrest by ATCEMS are discharged alive from the hospital?
Patient / Customer Need	Patients who have a return of pulse prior to their arrival at a hospital have an increased chance of survival from their cardiac event.
Type of Measure	Outcome
Objective	As many patients as possible who are treated for cardiac arrest from cardiac etiology by EMS are discharged alive from the hospital.
Data Provided By	CARES data registry
Reporting Values	Percentage of patients presenting in cardiac arrest from a presumed cardiac cause (etiology) who are discharged alive from the receiving hospital.
Limitations	This data is based on system reporting to the national Cardiac Arrest Registry to Enhance Survival (CARES). It may not reflect all cardiac arrest resuscitations attempted by ATCEMS. Receiving facilities enter patient outcome data directly into the CARES registry. Delays in providing this data will result in reporting delays.
Notes	The Cardiac Arrest Registry to Enhance Survival (CARES) is a national out of hospital cardiac arrest registry based at Emory University. This data only includes patients who have an out of hospital cardiac arrest that is deemed likely due to a cardiac type of problem (as reported by participating agencies).

Cardiac arrest is a fatal event unless medical care is provided quickly. The CARES registry allows us to compare our performance against other systems. This data is important in understanding cardiac arrest and looking at ways to improve how we care for patients with cardiac arrest.

Measure Calculation

Formula Description		The count of patients meeting CARES inclusion criteria that are discharged alive from the receiving hospital is divided by the count of all patients meeting CARES inclusion criteria. The resulting value is reported as a percentage.
Indicator Formula		$$Percentage = \frac{count([Patients\ discharged\ alive])}{count([All\ Patients])}$$
Data Filters		Patients in cardiac arrest, meeting inclusion criteria according to CARES.
Interval Calculation		Not applicable.
Numerator	*Population*	Patients in cardiac arrest discharged alive from the receiving hospital.
	Inclusion	Presumed cardiac etiology Meet other CARES inclusion criteria
	Exclusion	Meet CARES exclusion criteria
	Data Source	CARES Data Registry report
Denominator	*Population*	All patients in cardiac arrest
	Inclusion	Presumed cardiac etiology Meet other CARES inclusion criteria
	Exclusion	Meet CARES exclusion criteria
	Data Source	CARES Data Registry report
Aggregation		Aggregate patients based on date/time of phone pickup in Communications Center for incident.
Stratification		None

Minimum Sample Size	None
Data Lineage	Cardiac arrest patients are identified from ATCEMS ePCR data. Records are retrieved and audited for inclusion in system CARES reporting by ATCEMS System OMD personnel. Once data is uploaded to the CARES registry, receiving hospital personnel enter patient outcome data into the system.

Reporting

ATCEMS Scorecard	**Medium**: Web site chart **Orientation:** External **Format**: Run chart containing quarterly data values for most recent 9 quarter period. **Update Frequency**: Quarterly **Data Source**: Data retrieved from CARES registry by ATCEMS BAR team personnel.

Metadata

Pillar / Strategic Objective Links	S1: To be an organization that strives to improve the lives of people in our community. S2: To have a service delivery model that best serves the needs of our community. S3: To be an organization that puts service before self. F2: To be an organization that provides value to the community. F3: To provide quality cost efficient service to the community.
Development Status	Actively reporting
References	Perberdy MA, et al, "2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science; Part 9: Post–Cardiac Arrest Care." *Circulation*, 2010; 122: S768-S786. Available on-line at https://circ.ahajournals.org/content/122/18_suppl_3/S768.full Eftestøl T, et al, "Effects of Cardiopulmonary Resuscitation on Predictors of Ventricular Fibrillation Defibrillation Success During Out-of-Hospital Cardiac Arrest." *Circulation,* 2004; 110: 10-15. Available

	on-line at http://circ.ahajournals.org/content/110/1/10.long.
Best Practices	None referenced
Definition Version Info	Version A; 2015-03-01