

Monroe-Livingston EMS System Performance Measures

Category	Indicator	Definition of Indicator	Rationale Relating Measure to System Quality	Performance Goal
Response Time Reliability	Call Processing Time	Time from 911 call intake (alarm) until unit notification including answering the phone, gathering vital information, and initiating a response by dispatching appropriate units (dispatch).	Communication and Dispatch component plays a major role in the efficiency and overall system deployment and response. Thus the communications component must be measured to assess the quality of its individual operations.	95% of calls processed in less than 90 seconds
	Turnout Time "Chute Time"	Time from response unit notification (dispatch) to vehicle wheels rolling toward the incident location. This includes personnel preparation for response, boarding the responding apparatus/vehicle, placing the apparatus/vehicle in gear for response, and wheels rolling toward the emergency scene.	The time from alert to wheels turning provides an indication of the state of readiness of personnel. Minimizing this time is crucial to an immediate response and minimizing response time.	90% of all Priority 1 and 2 calls turned out in less than 60 seconds.
	Response Time - Urban/Suburban	Time from response unit notification (dispatch) to the arrival of the vehicle on scene at an address/incident location in an urban/suburban environment. This does not include the time to access the patient. **For Monroe County, see EMS Priority Matrix (next page)**	This measurement is indicative of the system's capability to adequately staff, locate, and deploy response resources. It is also indicative of responding personnel's knowledge of the area or dispatcher instruction for efficient travel. **For Monroe County, see EMS Priority Matrix (next page)**	First responder with minimum of BLS capability is on scene 90% of the time in 5:00 for all emergent events (Delta or Echo) where first responder is dispatched
				ALS transport capable vehicle is on scene 90% of the time for Priority 1 calls in 10:00
				ALS transport capable vehicle is on scene 90% of the time for Priority 2 calls in 10:00
				ALS transport capable vehicle is on scene 90% of the time for Priority 3 calls in 15:00
	Response Time - Rural	Time from response unit notification (dispatch) to the arrival of the vehicle on scene at an address/incident location in a rural environment. This does not include the time to access the patient. Rural is defined by population density as determined by the respective County EMS Medical Director. **For Monroe County, see EMS Priority Matrix (next page)**	This measurement is indicative of the system's capability to adequately staff, locate, and deploy response resources. It is also indicative of responding personnel's knowledge of the area or dispatcher instruction for efficient travel. **For Monroe County, see EMS Priority Matrix (next page)**	BLS transport capable vehicle is on scene 90% of the time for Priority 4 calls in 25:00
First responder with minimum of BLS capability is on scene 90% of the time in 8:00 for all emergent events where first responder is dispatched				
ALS transport capable vehicle is on scene 90% of the time for Priority 1 calls in 17:00				
ALS transport capable vehicle is on scene 90% of the time for Priority 2 calls in 17:00				
Back in Service Time "Drop Time"	Arrive at destination until Back in Service Time	The time required to transfer care is representative of the hospital system's ability to receive EMS patients and also of the agency's ability to turn around units for subsequent calls for service.	ALS transport capable vehicle is on scene 90% of the time for Priority 3 calls in 22:00	
			BLS transport capable vehicle is on scene 90% of the time for Priority 4 calls in 32:00	
Call Coverage	Response units are staffed and equipped to respond immediately to a request for emergency medical assistance.	Public service agencies responsible for emergency response must adequately staff mobile units to respond for requests for service in their district in a timely manner.	90% of back in service times are within 30 minutes.	
				95% of calls requesting service in the agency's district are covered by that agency or a formal agreement with an alternative agency(ies) to achieve the response time reliability expectations listed above.

Event Type	Name	Ambulance Type	Initial Recommended Response Mode	Fire/EMS Priority	Ambulance Response Time Urban/Suburban Performance Goal	Ambulance Response Time Rural Performance Goal
ALSA	ALS - Alpha	ALS	Emergent (Lights/Sirens)	1	ALS transport on scene 90% of the time in 10:00	ALS transport on scene 90% of the time in 17:00
MVAIA	MVA with Injuries - ALS Emergent	ALS	Emergent (Lights/Sirens)	1		
MVAPT	MVA with People Trapped	ALS	Emergent (Lights/Sirens)	1		
AIRA	Airplane Crash Not at Airport	ALS	Emergent (Lights/Sirens)	0		
TRAIA	Train Incident	ALS	Emergent (Lights/Sirens)	1		
DRWNA	Drowning	ALS	Emergent (Lights/Sirens)	1		
RESCUE	Rescue: Drowning/Machine/Trench/Rope	ALS	Emergent (Lights/Sirens)	1		
BOATA	Watercraft / Major Incident	ALS	Emergent (Lights/Sirens)	1		
STRCTA (PEOPLE TRAPPED)	Structure Fire with Person Trapped	2 ALS	Emergent (Lights/Sirens)	1		
ACTIVE_ASSAILANT	Active Shooter / Assailant	12 ALS/4 BLS	Emergent (Lights/Sirens)	0		
EMS	Radio Alarm for Ambulance	Dispatcher/Responder Discretion		1	Response Time Incident-Specific	Response Time Incident-Specific
ALSB	ALS - Bravo	ALS	Emergent (Lights/Sirens)	2	ALS or BLS transport on scene 90% of the time in 12:00	ALS or BLS transport on scene 90% of the time in 19:00
BLSB	BLS - Bravo	BLS	Emergent (Lights/Sirens)	2		
IFTA	Interfacility - Alpha	ALS	Emergent (Lights/Sirens)	2		
ALSC	ALS - Charlie	ALS	Routine	3	ALS or BLS transport on scene 90% of the time in 15:00	ALS or BLS transport on scene 90% of the time in 22:00
MVAIB	MVA with Injuries - BLS Routine	BLS	Routine	3		
MHAA	Officer Request for MHA	BLS	Routine	3		
IFTB	Interfacility - Bravo	ALS	Routine	3		
BLSC	BLS - Charlie	BLS	Routine	4	BLS transport on scene 90% of the time in 25:00	BLS transport on scene 90% of the time in 32:00
IFTC	Interfacility - Charlie	BLS	Routine	4		
BLSD	BLS - Delta	BLS	Routine (Delayed)	4	BLS transport may exceed 25:00	BLS transport may exceed 32:00
<i>Note: Ambulance Type, Initial Response Mode, and Performance Goal apply to all event subtypes.</i>						

Monroe-Livingston EMS System Performance Measures

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Safety	Vehicle Failures	Number of Vehicle Failures while in Service.	The number of vehicle failures is directly related to the policies regarding the use of those vehicles and the preventive maintenance program in place at the agency. Vehicle failures have a direct impact on patient care and thus are indicators of quality within the EMS system.	0% of calls result in vehicle failure.
	Vehicle Crashes	Number of Vehicle Crashes while in Service.	The number of vehicle crashes is directly related to the policies regarding the use of those vehicles. Vehicle crashes have a direct impact on patient care and thus are indicators of quality within the EMS system.	0% of calls result in vehicle crash.
	Patient Care Equipment	Number and type of required EMS equipment missing from daily EMS Agency and State Regulatory Inspections.	The availability of required equipment on a vehicle is directly related to the policies regarding daily vehicle inspection and agency policy. Missing patient care equipment has a direct impact on patient care and thus are indicators of quality within the EMS system.	0% of calls have missing patient care equipment.
	Patient Care Device Failures	Number and type of patient care or medical device failures while in use.	The number of patient care device failures is directly related to the policies regarding the use of those devices and the preventive maintenance program in place at the agency. Device failures have a direct impact on patient care and thus are indicators of quality within the EMS system.	0% of calls result in patient care device failure.
	Employee Illness and Injury	Crew members becoming ill or injured as a result of participating in an EMS encounter including employee exposures requiring evaluation or medical follow-up (e.g., needle sticks, blood or body fluid exposure to broken skin or mucous membranes, infectious aerosol exposures in unmasked personnel, and inhaled or dermal hazardous material exposure requiring medical evaluation).	Engineering and procedural precautions against such crew member exposures are required by federal regulation. The health and safety of personnel is fundamental to the quality of an EMS system. Rescuers who become ill or injured cannot care for a member of the public.	0% of calls result in crew member illness, injury, or exposure.

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Quality Assurance	Quality Program	The department operates a complete quality assurance program that includes retrospective chart review as well as direct field observation by a designated medical quality officer or medical director.	An established quality program is an indicator of the system's attention to quality. An established program indicates the agency's effort toward establishing and maintaining quality within the EMS system.	Agency has in place a written Quality Assurance Program that focuses on quality of care and can demonstrate its active use in improving patient care at the agency.
	Patient Care Protocol Compliance	EMS personnel operated or performed patient care according to established protocol. Refer to Patient Care Measures Appendix.	Compliance with established patient care protocols is intuitively related to the quality of the care delivered in the EMS system. The quality of care then relates to the overall quality of the system.	100% patient care protocol compliance for non-specified events; Patient Care Measures Appendix may be used to define more specific protocol compliance.
	Vital Sign Documentation	Documentation of a minimum of one Systolic BP, Diastolic BP, Pulse, Respiratory Rate, Pulse Oximetry, Pain Score (if appropriate), and GCS (if injury).	A complete set of vital signs on every patient encounter represents an objective measure of patient assessment and is a measure of quality within the EMS system.	100% of patient contact PCRs include one complete set of vital signs documented.
	Systematic Users	Patients who request EMS response more than four times in a calendar month.	Repeat calls to a location may be indicative of at risk patients or opportunities for prevention and is a measure of the systems responsiveness to public health need.	100% of repeat call PCRs are reviewed for opportunities for prevention.
	Repeat Patients	Patients who request EMS response more than once in a 72-hour period.	Repeat calls within a short time period by a single individual may be indicative of high risk patients or inappropriate decisions to not transport.	100% of repeat call PCRs are reviewed for protocol and policy compliance.

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Provider Proficiency	Skills Performed	Number of skills performed by each professional. Refer to Skill Matrix Appendix.	Regular and satisfactory skills performance, whether direct or simulated, is important in maintaining proficiency at all provider levels.	Agency should establish target and providers should meet 95% compliance.
	Skill Proficiency	Success rate of skills performed by each professional.	Skill proficiency is equally important to skill performance, and is indicative of additional required training (simulation, etc) to maintain such proficiency.	Agency should establish target and providers should meet 95% compliance.
	Patient Contact Numbers (Crew)	Number of PCR's where EMS personnel are listed as any crew member.	Patient contacts are vital to maintaining the cognitive and procedural skills of an EMS professional. Failure to meet established patient contact numbers should result in additional training (simulation, etc) to maintain those skills.	Agency should establish target and meet 100% compliance.
	Patient Contact Numbers (Primary Caregiver)	Number of PCR's where EMS personnel are listed as the Primary Caregiver.	The frequency of primary caregiver interactions is critical to assure the active practice of prehospital medicine through the assessment, management, and documentation of patient care. Failure to meet established patient contact numbers should result in additional training (simulation, etc) to maintain those skills.	Agency should establish target and meet 100% compliance.
Critical Patient Indicators	Defibrillation Availability	Defibrillator-trained emergency response personnel and a defibrillator is available for use from the time of 911 call receipt.	Early defibrillation is the Standard of Care for patients with cardiac arrest; therefore, defibrillation availability is indicative of EMS system quality.	50% of first shocks delivered in 5:00 or less from the time of 911 call receipt.
	CPR Interval	Time of 911 call receipt until initiation of chest compressions.	Measuring the interval from 911 activation to initiation of chest compressions is an indicator of community training in CPR.	90% of cardiac arrests receive CPR within 3:00 of call Intake.
	Scene Time	Time of patient contact to time of departure to hospital.	Minimizing scene time for critically ill patients is a measure of the crew's situational awareness and teamwork; risks of lights and sirens use must be balanced by risk to patient and responder.	Those patients requiring the use of Red Lights and Siren transport to the hospital are enroute to the appropriate facility within 10 minutes of the time of arrival exclusive of access/extrication delays; all use of lights and siren with a patient on board are reviewed by the agency Medical Director.