



North Carolina EMS Performance Improvement Guidelines

The purpose of this guideline is to provide direction to EMS Agencies with respect to patient care based quality management and performance improvement. Each of these topics address either an EMS Service Delivery, Personnel Performance, or Patient Care issue which is either important to quality or has been identified as a high risk or high liability area for Emergency Medical Services.

The items listed in this guideline are of more value when trended (monthly or quarterly) and then divided up among the yearly peer review meetings for review and discussion. How frequently each item is presented and discussed within the Peer Review Committee should be determined by the EMS Systems call volume and resources. The EMS System is encouraged to build a Peer Review and Performance Improvement Program that meets the local needs of the system and therefore may add additional topics as necessary. Every item in this guideline is designed to be reviewed and discussed at a minimum of once each year.

Topics are grouped into the following areas:

- ❖ Operations
- ❖ Personnel
- ❖ Clinical
- ❖ Special Topics



**North Carolina College of Emergency Physicians
Standards for the Selection and Performance of
EMS Performance Improvement**



	Category	Specific	Definition	Loop Closure	Data Source	
Operations	Call Volume	All Calls	Emergent, Non Emergent, Interfacility	To get an overall picture of system activity, trending and tracking of patterns, determination of resource utilization and needs.	Response STATS	
	Resources	Vehicles	Any incident that interrupts patient care delivery or causes patient injury such as mechanical issues, crash	Any issue that impedes the delivery of service or causes patient injury	Internal Data Source	
		Equipment	Any failure that interrupts patient care delivery or causes patient injury such as electronic equipment or other failure of equipment	Any issue that impedes the delivery of service or causes patient injury		
	First Responder Utilization		Use of First Responder Agency	Identify any issues needed to be addressed by targeted education such as response, patient care, skill performance, protocol compliance	Internal Data Source	
	Times	All Time Intervals	Dispatch Center Time, Turn-out (Wheels Rolling), Response to scene, Time at Patient, Scene Time, Transport Time, Back in Service	Examine target times set by NCCEP and system for compliance	Response STATS	
		Scene Times	For all STEMI, Stroke, Trauma, Cardiac Arrest calls	Evaluate target times set by NCCEP and/or local Medical Control for compliance		
		Delays	Dispatch, Response, Scene, Transport, ED Off-load, Back in service	Examine causes that impede the delivery of service		
	EMD		EMD Compliance per EMD Vendor Quality Management and System requirements	Identify deficiencies to be addressed by targeted education	Internal Data Source	
	PCR Documentation		Element Completion of Protocols, Vital Signs (initial and 2nd set), Procedures, Destination, Crew, Incident Location, Response, Delays (Response, Scene, Transport) etc.	To ensure system meets targeted goals set by the system, NCCEP and NCOEMS	Continuum Reports	
	Data Quality		Number of data errors per PCR	Examine and correct deficiencies to meet targeted goal to ensure quality data for review	Continuum Reports	
	Category	Specific	Definition	Loop Closure	Data Source	
Personnel	EMS Personnel Credentialing	Credentials Renewed Locally	Number of EMS personnel in the system that had their credentials renewed locally during the quarter (include EMD personnel)	Discuss any recredentialing issues experienced during the period and implement plans to avoid lapses	Internal and/or Continuum Reports	
		Credentials Due to Expire	Number of EMS personnel in the system due to expire during next quarter (Include EMD personnel)	Evaluate plan to review all expiring credentials for recredentialing eligibility		



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Clinical	Skill Competency	Airway	Agency and provider success rate for ET, BIAD, BVM, NIPPV, Chest Decompression, Surgical/Needle Cricothyrotomy, Drug Assisted Intubation, NPA/OPA	Ensure system is meeting skill competency goals. Identify technicians not meeting system standards for targeted education.	Continuum Reports
		Cardiac	Cardiac Monitoring, 12 lead, CPR Manual/Mechanical, Pacing, Cardioversion, Defib, AED, Impedance Threshold Device		
		Vascular	IV, IO, Central Line, Port Access		
		Trauma	Spinal Motion Restriction (C-Spine, LBB, Vest type), traction, extremity, Pelvic Binder/Sling, Tourniquet		
	Medications Complications	Adverse event	Any medication error or adverse event	Identify events for discussion and address preventable care issues	Internal Reports
	Category	Specific	Definition	Loop Closure	Data Source
Special Topics	Special Patient Population	High Utilization	Any person accessing EMS at least four times in a consecutive 30 day period.	Discuss appropriateness of EMS use from a patient care perspective. If inappropriate identify plan to address	Internal/Continuum Reports
		Repeat Patient	Patients with multiple EMS Transports within 48 hour time period	Evaluate patient care event and discuss any EMS care related issue that may have contributed. Develop and implement plan to address any identified issue	
		AMA/Refusal	High risk and AMA refusals	Define high risk refusals and develop/implement strategies to mitigate risk of undesirable outcomes	
		Cancelled Calls	Review events where EMS was re-dispatched to scene after cancellation by First Responder		
		Multi-patient events	Events as defined by System Response Plan that extend beyond routine operations	Discuss and address any identified issues post event and adjust plan as needed	



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Special Topics	High Risk Procedure	Drug Assisted Intubation (DAI)	Appropriate use and outcome of Drug Assisted Intubation	Conduct 100% review of appropriateness and care associated with procedure. Address any identified issues. Ensure DAI cases are forwarded to NC OEMS for review monthly.	Continuum Reports
		Chest Decompression	Appropriate use and outcome of chest decompression		
		Cardioversion	Appropriate use and outcome of cardioversion		
		Restrained Patients	Any patient restrained physically, chemically, or in custody of Law Enforcement.		
	High Acuity	STEMI	Examine system STEMI Care	To ensure protocol compliance and address any identified issues	STATS
		Stroke	Examine system Stroke Care		
		Trauma	Examine system Trauma Care		
		Pediatrics	Examine system Pediatric Care		
		Sepsis	Examine system Sepsis Care		
	Community Paramedic		All systems with a Community Paramedic Program. (MIHC exempt)	Discuss objectives of the mission as defined by the system	Internal Reports
	Pilot Programs		Any Pilot program approved by NCCEP and NCOEMS	Review to ensure compliance with protocols, procedures and policies set for the program.	Internal and/or Continuum Reports
	Special Operations		Tactical, Wilderness, High Angle, Confined Space, Mass Gathering	Discuss any special operations deployments to identify and address any issues	Internal