

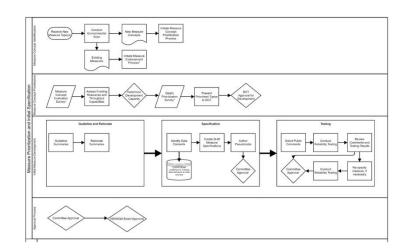
2023 NEW National EMS Quality Alliance Measure Set: Tools for EMS to Operationalize Evidence Based Care

Jeffrey L Jarvis, MD, MS, EMT-P Chair, Measure Development Committee



Outline

- What is NEMSQA?
- Measure Development Process
- What is Measure Endorsement?
- 2021-2023 Measure Endorsement Cycle
- Overview of the New Measures
- Resources
- What's next









What We Do

- Provide measurable ways for EMS systems to pursue improvement, improve patient outcomes and provider safety.
- Collaboratively develop and test evidence-based quality measures.



Why It Matters

- Focus on measuring what matters and provide the tools to make that happen at a local and national level.
 - Operationalize treatment guidelines and best practices.
 - Providing the best care to patients and the best service to their communities.
 - Identify successes and areas for growth.
 - Provide a path that puts data to use in a meaningful way to help EMS providers better serve patients and communities .



NEMSQA History



2017

Established with assistance from NHTSA to continue **EMS Measure** Development initiative



2019

Established as its own 501(c)(6) nonprofit entity

Released National **EMS Measure Set** (Compass 2.0)



2021

Updated Membership Structure

Started EMS Quality Improvement Partnership



2023

Release Endorsed Measure Set

Airway EBG Measure Development

Develop new measures from **PGC EBG Systematic Review**

Board of Trustees Established

EMS-based organizations became steering committee or stakeholder members

2018

COVID...

Rollout of National **EMS Measure Set**

Florida F.A.I.R Project

2020

Lights and Siren Collaborative

Field Triage Guideline Measure Development with American College of Surgeons

Completed F.AI.R. Project

2022



Current NEMSQA Measures

Measure ID	Description	
Hypoglycemia-01	Treatment Administered for Hypoglycemia	
Respiratory-01 previously Pediatrics-01	Respiratory Assessment	
Asthma-01 previously Pediatrics-02	Administration of Beta Agonist for Asthma	
Pediatics-03b	Documentation of Estimated Weight in Kilograms	
Seizure-02	Patients with Status Epilepticus Receiving Intervention	
Stroke-01	Suspected Stroke Receiving Prehospital Stroke Assessment	
Trauma-01	Injured Patients Assessed for Pain	
Trauma-03	Effectiveness of Pain Management for Injured Patients	
Trauma-04	Trauma Patients Transported to a Trauma Center	
Safety-01	No Lights or Sirens During Response to Scene	
Safety-02	No Lights or Sirens During Transport	



Measure Development Work



- Florida DOH F.A.I.R. Measure Development
 - 56 Measure including stratifications



Guidelines for Field Triage of Injured Patients
 Update Measure Development



 NASEMSO Prehospital Airway Management EBG Measure Development (in progress)



NEMSQA's Role with Florida DOH F.A.I.R.

- Serve as Performance Measurement Develop Measures for Rural EMS
 - Call for Measures
 - Initial Classification, Harmonization, Prioritization
 - Guidelines and Evidence Review
 - Develop Technical Specifications
 - Testing Measures

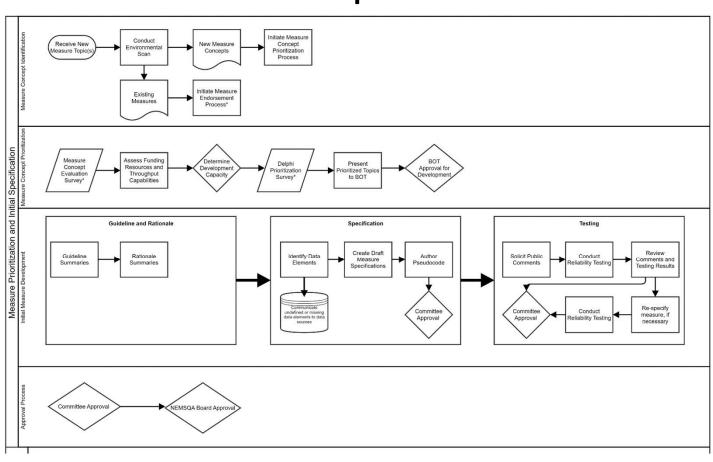


NEMSQA Developed FAIR Measures

Measure ID	Title	Stratifications
Airway-01	Successful First Advanced Airway Placement without Hypotension or Hypoxia	6- procedure type & age
Airway-05	Adequate Oxygen Saturation Achieved Before Intubation Procedure	2- age
Airway-07	Airway-07: ETCO2 Verification of Advanced Airway Placement	6- procedure type & age
Airway-10	Documentation of SPO2 Saturation with Advanced Airway	2- age
Airway-18	Waveform Capnography Airway Device Monitoring	2- age
Airway-19	Airway Composite (Defect-Free Care)	2- age
Cardiac-07-1	Time to First ECG – Initial 911 Call to ECG	
Cardiac-07-2	Time to First ECG – On Scene to ECG	
Cardiac-07-3	Time to First ECG – At Patient to ECG	
Cardiac-12	Aspirin Administration for STEMI	
Cardiac-13	STEMI Under Call Rate	
Hyperthemia-01	Assessment of Mental Status for Patients with Hyperthermia	2- age
Respiratory-01	Oxygen Administration for Hypoxia	2- age
Safety-04	Pediatric Restraint Device Used During Transport	
Safety-05	Use of Backboards	4- injury type & age
Safety-10	Use of PPE	
Sepsis-01	Sepsis Alert	2- age
Sepsis-07	IV Antibiotics for Sepsis Patients	2- age
Sepsis-08	ETCO2 Measurement for Sepsis Patients	2- age
Stroke-03	Prehospital Suspected Stroke with Emergency Department Stroke Diagnosis	
Stroke-06	Suspected Stroke Patients Transported to a Stroke Center	
Structure-01	Pediatric Emergency Care Coordination	
Syncope-01	ECG Performed for Syncope Patients - Pediatric	2- age
TBI-01	Clinical Assessments for Patients with Traumatic Brain Injury	2- age
Throughput-01	Patient Offload Time	
Trauma-08	Documentation of GCS, SBP, and Respiratory Rate	2- age
Trauma-14	Trauma Call Rate - Pediatric	2- age
Trauma-17	Non-Opioid Approaches to Pain Management	2- age
TTR-01-1	Vital Signs Documented	2- age



Measure Development Process





Measure Endorsement

- Evaluate measures developed/published by other organizations
- Consider for 'endorsement' of measure as opposed to internally developed measures.
- Avoids 're-inventing wheel'



Criteria for Measure Evaluation

Clinical Value/Impact

- Does the measure evaluate an outcome or process that is clinically important to EMS patients.
 - Addresses a specific national health goal/priority for EMS
 - Affects large numbers of patients and/or has a very substantial impact for smaller populations
 - Focuses on a leading cause of morbidity or mortality
 - High resource use (current and/or future)
 - Severity of illness
 - Patient/Societal consequences

Evidence

- Internal assessment of evidence
 - Guideline recommendation has strong evidence (Level I or Level III (Harm) or equivalent)
 - Guideline recommendation has moderate evidence (Level 2a or equivalent)
 - Guideline recommendation has low evidence (Level 2b or equivalent)
 - Guideline recommendation has very low evidence or is based on consensus opinion (Level III or equivalent)



Criteria for Measure Evaluation

Feasibility

 Evaluates if the measure is feasible using standard fields available in the National Emergency Medical Services Information System (NEMSIS) or another national, state or local data source.

Face Validity:

- Determines whether a measure has consensus-based face validity.
 - Reviewers agree the measure will provide an accurate reflection of quality and will be able to be used to distinguish good and poor quality.



Criteria for Measure Evaluation

Technical Work and Implementation

• Evaluates the level of effort required to create pseudocode and implement the measure into clinical practice.

Ease of Endorsement*

 Likelihood of agreement with measure steward within 3 months

*unique to this endorsement cycle



2021-2023 NEMSQA Measure Endorsement Cycle



Summer 2021

Scoping review/environmental scan for existing, published EMS measures from federal agencies, national and state organizations

Identified **174** EMS measures.



Winter 2022

Round 2 measure reviewconsensus based rating/grading of measures measures on criteria for measure endorsement.

Identified **26** "A" graded measures



Fall 2022

Review of reliability testing data for Florida FAIR measures

Final recommendations to BOD of 11 measures.



2023

Executed agreement with measure steward

Round 1 measure review to remove duplicates of existing NEMSQA and not feasible for development, merge similar measure concepts.

Identified **38** unique measures for endorsement consideration.

Fall 2021

Round 3 measure reviewprioritization survey of "A" graded measures

Summer 2022

Final Board approval of 10 measures

February 2023

Published Measures

2023



Grading Criteria

Grade	Clinical Value/Impact	Ease of Endorsement	Technical Work
А	High	High	Pseudocode & Testing Completed or minimal work needed
В	High	Moderate/Low	No pseudocode or moderate work needed
С	Moderate/Low	Moderate/Low	No pseudocode and complicated work



New NEMSQA Measures

Airway-01	Successful First Advanced Airway Placement without Hypotension or Hypoxia		
Airway-05	Adequate Oxygen Saturation Achieved Before Intubation Procedure		
Airway-18	Waveform Capnography Airway Device Monitoring		
Respiratory-02	Oxygen Administration for Hypoxia		
Safety-04	Pediatric Restraint Device Used During Transport		
Syncope-01	ECG Performed for Syncope Patients		
TBI-01	TBI: Clinical Assessments for Patients with Traumatic Brain Injury (oxygen level, ETCO2, and SBP)		
Trauma-08	Documentation of GCS, SBP, and Respiratory		
Trauma-14	Trauma Call Rate		
TTR-01	Vital Signs Documented (non-transported)		



Criteria for All Measures

- EMS responses originating from a 911 request for patients
- Measures stratified by age
 - Less than or equal to 18 years of age
 - Greater than 18 years of age

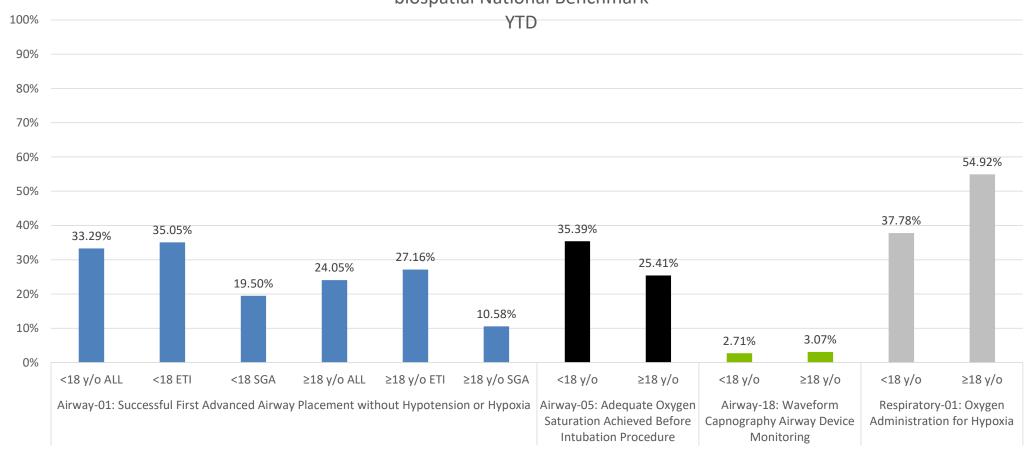


What's Next in Measure Development

- Prioritize evidence-based guidelines for measure development
 - Collaboration with Pre-hospital Guidelines Consortium
- Future measure endorsement cycles will include call for submission of measures for endorsement.

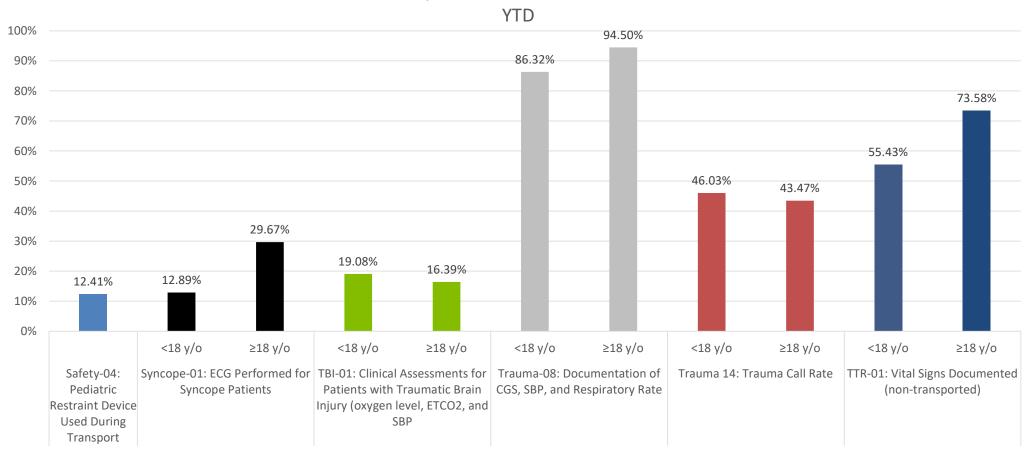


biospatial National Benchmark

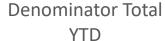


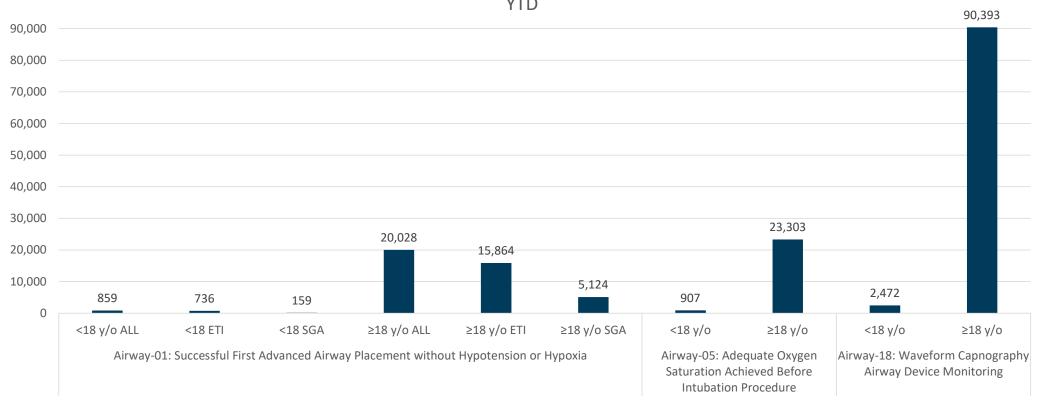




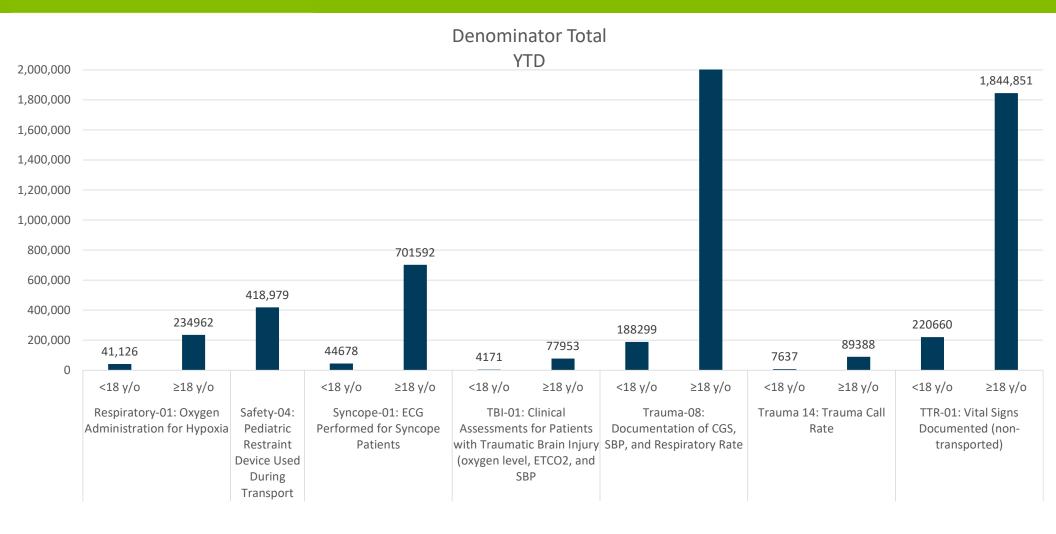














Measure Technical Resources



Home About Measures Events Resources EMS Quality I

Join Now

NEMSQA Measure Technical Documents

NEW 2023	Measure ID	Description	Туре	National Quality Strategy Domain
*	Airway-01	NEMSQA_Airway-01_2023	Outcome	Clinical Process- Effectiveness
*	Airway-05	NEMSQA_Airway-05_2023	Process	Patient Safety
*	Airway-18	NEMSQA_Airway-18_2023	Process	Clinical Process - Effectiveness
	Asthma-01	NEMSQA _Asthma-01_Updated_2021	Process	Clinical Process - Effectiveness
	Hypoglycemia-01	NEMSQA_Hypoglycemia-01_Updated_2021	Process	Clinical Process - Effectiveness
	Respiratory-01	NEMSQA_Respiratory-01_Updated_2021	Process	Clinical Process - Effectiveness
*	Respiratory-02	NEMSQA_Respiratory-02_2023	Process	Clinical Process- Effectiveness

www.nemsqa.org/nemsqa-measure-technical-documents



Get Involved

- Become a member: https://nemsqa.org/nemsqa-membership-application
 - Organization
 - EMS Agency
 - Individual
 - Corporate Partner
- Follow us:





Contact us: Sheree Murphy, Executive Director: smurphy@nemsqa.org