

Measure Concepts Prioritized By Steering Committee to Move Forward for Development and Specification

Measure ID	Measure Title	F.A.I.R. Steering Committee Comments	NEMSQA Prioritization	NEMSQA Comments
Airway-01	Successful First Endotracheal Intubation without Hypotension or Hypoxia	This measure is important to improving patient care. This measure aligns with current clinical standards of EMS care. The correct providers and patient population that could be included in the measure may be adult vs. peds. The clinical process and outcome needs improvement in EMS. This measure would be well received by EMS. The measure will meet the needs of the FAIR project. Actions for this measure would be adoption of existing measure. Other comments include; recommendation to delete 'without hypotension or hypoxia' from draft measure name and description fields.	Proceed with Development	Combine with PEDS-08, with denominator stratified by age. Include in airway bundle and use in composite measure.
Airway-05	Adequate Oxygen Saturation Achieved During Intubation Procedure	Recommendation to use but request more research and need measure development	Proceed with Development	Include in airway bundle and use in composite measure
Airway-07	ETCO2 Verification of Endotracheal Intubation Placement	-Very important to measure. -This may be to be combined with Airway-18 waveform capnography -May be other measures that work better in this set -Do not need 2 or 3 different measures for the same thing	Proceed with Development	Include in airway bundle and use in composite measure
Airway-10	Documentation of Continuous SP02 Saturation with Advanced Airway	-Related to others with revisions -Should have both continuous SPO2 and ETCO2 -Good measure with revisions -Important measure	Proceed with development	Measure is reasonably feasible. May not be able to capture continuous SPO2, but a documented SPO2. Include in airway bundle and use in composite measure
Airway-18	Waveform Capnography Airway Device Monitoring	-This measure is very important and should be a priority for development -Any advanced airway need waveform capnography -Overlap with Airway-07	Proceed with Development	Include in airway bundle and use in composite measure
Cardiac-04	Direct Transport to a PCI Capable Facility	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations are included in this measure. This clinical process or outcome needs improvement in the EMS community. Actions for this measure concept would include adoption of existing measure. Additional measure in this topic area that should be considered may include; percentile, median and average times.	Proceed with Development	

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Cardiac-07	Time (in minutes) from on Scene to first ECG	This measure is important to improving patient care. This measure aligns with current clinical standards in EMS. The correct providers and patient populations are included in this measure. This clinical process or outcome needs improvement in EMS. Data required for this measure is routinely documented and easily collected. This measure will be well received by EMS. This measure should be considered for further development or inclusive in a bundle or composite measure but action items for this topic area would be to harmonize with Cardiac 04. No additional measures in this topic area are noted.	Proceed with Development	
Cardiac-13	STEMI Under call Rate	-Data may be problematic to obtain as you would have to rely on hospital data. -Question about how timely this would be. -Patients may develop STEMI after admission to hospital skewing the data -May not be a quality issue, certainly goal would be less than 100% -Felt this was an important concept as this represents missed STEMI patients.	Proceed with Development	
Respiratory-01	Oxygen Administration for Respiratory Distress	This measure is important to improving patient care. This measure aligns with current clinical standards of EMS care. The correct providers and patient populations are included in this measure. The clinical process or outcome needs improvement by EMS. The existing measure will meet needs of FAIR project. The measure would be well received by EMS. Actions for this measure include adoption of existing measure. Other comments include recommendations to change word 'distress' to 'complaint'.	Proceed with Development	
Safety-04	Pediatric Restraint	-Important safety measure -Data may be problematic -Data is being collected in NEMSIS -Often time parents refused to use restraint devices	Proceed with Development	New NHTSA Crash research on pediatric restraint.
Safety-05	Use of Backboards	-Should not be using at all -Maybe expanded to include patients with penetrating trauma -Could see potential improvement as result of this measure	Proceed with Development	
Safety-10	Use of PPE	-This is already measured in NEMSIS. -Certainly COVID has had an impact on this behavior. -May be a valid measure going forward as EMS historically has poor compliance until COVID -Good measure something we need to get use to -Appropriate difficult to determine -Reinforces PPE behavior with some modifications	Proceed with Development	Have initial feasibility concerns, but will likely be able to capture.
SEPS-01	Timely Sepsis Alert	This measure is important to improving patient care. This measure aligns with current clinical standards in EMS. The correct providers and patient populations are included in this measure. This clinical process or outcomes needs improvement in EMS. Data required for this measure is not routinely documented or easily collected (there is problems in documentation currently). This measure will be well received by EMS. This measure should be considered for further development. This measure should be considered for inclusion in a bundle or composite measure. No additional measures in this topic area were discussion. Other comments included: Percent of sepsis patients that had a sepsis alert called and possibly change wording in description to pre-notification.	Proceed with Development	

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Stroke-03	Accuracy of Prehospital Stroke Diagnosis	This measure is important to improving patient care. This measure aligns with current clinical standards in EMS. The correct providers and patient populations are included in this measure. It is unknown whether the process or outcome needs improvement in EMS. Data required for this measure is not routinely documented or easily collected - need outcome data. This measure will be well received by EMS. This measure should be considered for further development. This measure should be considered for inclusions in a bundle or composite measure. No additional measure in this topic area were listed. No other comments	Proceed with Development	
Stroke-06	EMS Use of Regional Destination Protocol for Stroke	This measure is important to improving patient care. This patient aligns with current clinical standards of care in EMS. The correct providers and patient populations are included in this measure. Unknown whether process or outcome needs improvement. Data required for this measure is routinely documented and easily collected - this would be appropriate	Proceed with Development	
Structure-01	Pediatric Emergency Care Coordination	<ul style="list-style-type: none"> -National standard to have this in place -Terminology champion vs coordinator -Has been shown to improve behavior -Discussion that this may be handled at the regulatory level for agencies -Currently measured by annual survey in Florida 	Proceed with Development	
Structure-04	Bed Delays	<ul style="list-style-type: none"> -Important to measure -Good measure of system efficiency -Hospital drop off waiting has a clinical impact in delaying definitive care. -This may be a system efficiency measures. -State healthcare resource measure. -Data already exists to measures. -Some discussion this is a local issue and should be discussed with local hospitals on a case by case basis 	Proceed with Development	
Syncope-01	EKG for Syncope Patients	<ul style="list-style-type: none"> -Discussion that this was an important measure concept. -Should include a time specification of 10 minutes. -The creation of a measure concept bundle for EKG 	Proceed with Development	
TBI-01	Hypoxia in Patients with Traumatic Brain Injury	<ul style="list-style-type: none"> -Maybe rolled into a composite measure O2, BP, hypoxia. Have 3 indicators rolled into one measure as composite. -EMS must avoid hypoxia in TBI -Should account for patients that are already hypoxic, should be for those who become hypoxic after EMS -Do not want to exclude those already hypoxic -This is an impactful measure EMS tends to get this wrong a lot 	Proceed with Development	

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Trauma-08	Documentation of Airway, Breathing, Circulation and, Disability	<ul style="list-style-type: none"> -Possible bundle with GCS -Changes should be documented and repeated assesses after specified period of -These are key elements of assessment for making a transport decision -Need to careful what we accept as meeting this measure, but does need to be broad -If call is over 10 minutes 2 sets of vitals should be recorded -Add time element -Changes are very important and address things that have changed that may result in indicated -Important but does need significant revisions 	Proceed with Development	
Trauma-14	Trauma Under call Rate for Pediatric Patients	<ul style="list-style-type: none"> -Concern that this may difficult to measure due to hospital data access -Florida will soon as access to hospital data that could facilitate this measure -Should be applied to overall rate -Should not measure overcall rate as this could have cause negative behavior change. -This approach could be used for STEMI, Stroke and others -Florida may need to update trauma triage criteria -This should be for both adults and peds 	Proceed with Development	Trauma under call rate for all patients
Trauma-17	Alternative Approaches to Pain Management	<ul style="list-style-type: none"> -Adopt the NEMSQA Measure Trauma-03 -Adopt the NEMSQA Measure Trauma-03 where added opioid was not used -Concern we may discourage opioid use when is indicated -POTENTIAL NEW MEASURE -No opioid uses measure - NEMSEOA is working on evidence based protocol currently 	Proceed with Development	Combine Trauma 15 & Trauma 16 to create this measure
TTR-01	Appropriate Treatment and Release	<p>This measure is important to improving patient care. This measure can align with current clinical standards of care in EMS. The correct providers and patient populations are included in the measure - it is generalized and can be broken down or stratified further with ages. This clinical process or outcome needs improvement in EMS. Data required for this measure is not always documented or easily collected. This measure will not be received well by EMS. This measure could be considered for further development if it is shifted to what is more applicable - focus on the release issues and look at 72 hours 911 transports after initial release</p>	Proceed with Development	Will depend on patient identifiers in data set Systems will be able to implement. Need to determine Florida's ability to identify in database.
Cardiac-12	Aspirin Administration for STEMI	<ul style="list-style-type: none"> -Contraindications are an issue. -Suggestion was made that should also have a time frame included. -Allergy or administered prior to arrival may skew data 	Low Priority	Aspirin use isn't time sensitive as long as given in first 24 hours. There is also concern about diagnosis bias.
Care Coordination-01	Referral to Fall Prevention Services	<ul style="list-style-type: none"> -Concern over extra work for crews to document the follow-up. -This data is not in NEMSIS, this could be included in the future revisions -This referral is achieved long after the call is completed makes it difficult to gather data -Does this apply to lift assists or acute falls that need to be transported -Do we have the data to capture this measure. -Impactful high fall volume just not sure how to measure 	Low Priority	

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Hyperthermia-01	Assessment of Body Temperature in Hyperthermic Patients	<ul style="list-style-type: none"> -Was mental status assessed 3 separate process measures -No accurate thermometer is available, could be terrible misleading -Real measure should be based on mental status rather than a number, erroneous reading could delay treatment -Very small set of patients -Most accurate measure is rectal, reluctant from providers to assess -NEMSQA comment: They have different discussion more of a general assessment measure 	Low Priority	
SEPS-07	IV Antibiotics for Sepsis Patients	<ul style="list-style-type: none"> -Discussion that this modality for sepsis patients is currently evolving with a small number of EMS agencies offering this treatment. -Discussion also on resistance from some hospitals for pediatric patients. -Caution was noted use in patients that are truly septic -Antibiotic administration was very time sensitive -Sepsis numbers are not improving under current modalities -This concept may not specific enough -Maybe consider antibiotics for open fractures as an alternative -Alternative may be sepsis patients received fluids with BP<X Administration of antibiotics can be life saving 	Low Priority	Primary focus should be on getting patient to hospital.
SEPS-08	ECTO2 Measurement for Sepsis Patients	<ul style="list-style-type: none"> -Do not see priority in this measure -May be an indicator of shock from lactic acid -May be an important measure 	Low Priority	
CareCoord-02	Communication of Color Treatment Zone	<ul style="list-style-type: none"> -Currently much national debate on the efficacy of these types of systems -Consensus that some system to establish weights of pediatric patients to aid in dosing calculations -Must establish some standardized system to relay pediatric weights to hospital emergency departments. -Consider NEMSQA Peds-03 -Frequent medication errors in pediatric treatment -Data may be problematic as written 	Adopt NEMSQA Pediatrics-03	Recommend adoption of NEMSQA Pediatrics-03, which includes documentation of weight in KG or documentation of Color Zone.
PEDS-06	Benzodiazepine Administration to Pediatric Seizure Patients	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations are included in this measure. This clinical process or outcomes needs improvement in EMS. This measure will meet needs of FAIR project. The existing measure would no be well received with EMS - maybe due to peds specific. Actions for this would be to harmonize with another measure. Other comments included would be changing to transported.	Adopt NEMSQA Seizure-02	The denominator for NEMSQA Seizure-02 includes all patients, but can be stratified to capture only pediatric patients
Safety-09	Correct weight-based medication dosage	<ul style="list-style-type: none"> -Data may be problematic -May be more important to document patient weight -Correct is difficult to determine -More important to capture patient weight 	Adopt NEMSQA Pediatrics-03	Concept is not feasible. Recommend adoption of NEMSQA Pediatrics-03, which includes documentation of weight in KG or documentation of Color Zone.

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Cardiac-11	Time on Scene for STEMI	<ul style="list-style-type: none"> -Harmonize with AHA -Debate whether should be 5 or 10 minutes concerns that 5 minute may not a reasonable expectation. -This measure exists within other systems. -Trying to set higher bar may not represent what is reasonable in the state -Should follow national standard 	Adopt AHA Mission Lifeline Measure: First Medical Contact to Destination within 30 Minutes for STEMI	The intent of this concept is best served by the AHA Mission Lifeline Measure
Stroke-04	Stroke Severity Score Performed and Reported	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations are not included in this measure- stratify one for transports vs. responses/exclusions. The clinical process or outcome needs improvement in EMS. The existing measure will not meet the needs of FAIR project. The existing measure would be well received in EMS. Actions for this measure concept would be harmonization. No additional measures in this topic area are listed. Other comments included - need clarification on which field is required for assessment (exclude unresponsive patients from denominator).	Adopt NEMSQA Stroke-01	
Stroke-05	Advanced Notification of Stroke with Triage Findings	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations included in this measure. This clinical process or outcome needs improvement in EMS. Unknown about routine or easy data collection (zoll/intermedix). This measure will be well received by EMS. This measure should be considered for further development. This measure should be considered for inclusion in a bundle or composite measure - possibly bundle with Alert -01. No additional measures in this topic area are listed. Other comments include changing the word triage to assessment.	Adopt NEMSQA Stroke-01	
Airway-09	Hypoxic episodes Occurring During Advanced Airway Placement	<ul style="list-style-type: none"> -Data may be problematic -May be related to Airway-05 from MSC -GAMUT-01 component -Are they already hypoxic when you begin treatment -Needs work to make measurable 	Do not proceed	More of a research question than a measure. Can derive this information from the Airway-01 measure.
Airway-11	Intubation Attempts Ratio	<ul style="list-style-type: none"> -MSC recommended that this move forward as Airway-06 -Florida document procedures or events different than NEMSIS FL documents each attempt differently and timestamps all attempts are defaulted to one -Important to documents success rates for training needs evaluation -May compare to ratio to age or others -First pass success may be more important than attempts 	Do not proceed	Less meaningful than Airway-01. Airway-01 is better supported by literature.

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Airway-14	Time On Scene Attempting Advanced Airway with Trauma Alert Patient	-Data may be problematic -May be difficult to define accurately -How could you separate extrication time from this measure-we have fields that indicate delays on scene for extrication -Advanced airway interventions may take time	Do not proceed	Feasibility concerns Concerns with being too specific
Asthma-01	Steroid Administration For Asthma Exacerbations	-Significant concern on the how the severity of the exacerbations would be evaluated -The data acquisition would be problematic and very complicated -Consensus among the group that measures must be carefully evaluated as not to create any unintended consequences that could alter behavior that would negatively impact patient outcomes.	Do not proceed	Low direction of evidence for prehospital care.
Asthma-02	Ipratropium Use for Asthma	-Minimal impact on the care of the patient -Modality would have small impact. -Consensus among the group that measures must be carefully evaluated as not to create any unintended consequences that could alter behavior that would negatively impact patient outcomes. -Literature supports beta antagonist use instead -Low impact -Consider NEMSQA Peds-02	Do not proceed	Low direction of evidence for prehospital care.
Cardiac-05	Time from On Scene to Receiving Facility	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations are unknown to be included in this measure. This clinical process or outcome needs improvement in EMS. Data required for this measure is routinely documented and easily collected. This measure will be well received by EMS. This measure should be considered for further development. This measure should be harmonized and potentially inclusive in bundle or composite measure. Action items for this topic area include harmonization with Cardiac 04.	Do not proceed	Want to be careful not to develop measures encouraging use of lights and sirens
Cardiac-09	Correct Assessment of ECG	-Hard to determine as you need hospital data. -Appropriate is difficult to define -Suggestion was made to apply to STEMI patients.	Do not proceed	Feasibility concerns and concerns about variances in ECG interpretation.
Cardiac-15	First Medical Contact to Destination within 30 Minutes for STEMI	-Not rural relevant -Should get to STEMI center as soon as possible -Very difficult as geography would prohibit ever meeting this measure -Should focus on scene time -Should not encourage ambulances to drive faster	Do not proceed	Recommend adoption similar AHA Mission Lifeline measures if interesting in pursuing this concept: Similar to AHA ML: Percentage of patients treated and transported directly to a STEMI Receiving Center, with EMS First Medical Contact to device time ≤ 90 Minutes and/or EMS First Medical Contact to PCI ≤ 120 Minutes when transport time ≥ 45 minutes and Door to Balloon ≤ 30 Minutes. (When destination facility = STEMI Receiving Center)

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Documentation-01	Chief Complaint Properly Obtained and Documented	-More of a data quality measure -Proper is a challenge to determine -Whether or not is entered would be fine -This may not be very impactful <u>-This may related to EMD rather than crew documentation</u>	Do not proceed	Measure likely to be topped out.
PEDS-08	Pediatric Airway Success	This measure is important to improving patient care. This measure aligns with clinical standards of EMS care. The correct providers and patient populations are included. The clinical process or outcome need improvement by EMS. The existing measure will meet the needs of FAIR project. This measure will be well received by EMS. Actions for this match Airway -01 and will be recommended for adoption of existing measure. No other comments	Do not proceed	Airway-01 is a more robust measure. Will combine with Airway-01, with denominator stratified by age.
PEDS-09	Pediatric Airway Attempts Ratio	This measure is important to improving patient care. This measure aligns with clinical standards of EMS care. The correct providers and patient populations are included. The clinical process or outcome needs improvement by EMS. The existing measure will meet the needs of the FAIR project. This measure will be well received by EMS. Actions for this match Airway -06 and will be recommended for adoption of existing measure. No other comments	Do not proceed	Combined with Airway-11, with denominator stratified by age.
Seizure-04	Fingerstick for Seizure Patients	-The discussion was that this measure should be more broadly applied to included altered mental status. -Potentially part of a seizure bundle. <u>-May want to look at other measures as well</u>	Do not proceed	Not supported by current evidence. Competing measure concept was retired by NEMSQA in 2019 due to direction of evidence.
SEPS-02	Time from EMS Arrival on Scene to Sepsis Alert	This measure is not important to improving patient care. This measure does not align with current clinical standards in EMS. The correct providers and patient populations are not included in this measure. This measure will be well received by EMS. Data required for this measure is routinely documented but not easily collected, there is problems with current documentation. This measure with some changes in focus should be considered for further development. This measure could be considered for inclusion in a bundle or composite measure. Comments include the need to focus on finding alert and giving a fluid bolus	Do not proceed	Duplicative to SEPS-01
SEPS-03	Timely Fluid Bolus	This measure is important to improving patient care. This measure, with some changes align with current clinical standards of care. The current providers and patient populations are not included in this measure. Data required for this measure is routinely documented but not easily collected - problem is that times can be documented hours after the fact, so not real-time. The measure will be well received by the EMS community. The measure, with changes can be considered for further development. No additional measures in this topic area were listed. other comments included may be changing verbiage to percent or patients that received a bolus if septic or SBP > 90 or MAP < 65. Also change verbiage to 'time of alert' to	Do not proceed	Evidence concerns. Disadvantage to short transport time.

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SEPS-04	Time from EMS Arrival to Fluid Bolus	This measure is important to improving patient care. This measure with some changes, align with current clinical standards of care in EMS. The current providers and populations are not included in this measure. Data required for this measure is not routinely documented or easily collected - problem is that times can be documented after the fact, so not real-time. The measures will be well received by EMS. This measure, with changes to verbiage can be considered for further development. Other comments included changing verbiage to 'time of alert' to in description.	Do not proceed	Evidence concerns. Disadvantage to short transport time.
SEPS-05	Sepsis Alert to Fluid Bolus	This measure is important to improving patient care. This measure with some changes, align with current clinical standards of care in EMS. The current providers and populations are not included in this measure. Data required for his measure is not routinely documented and easily collected - problem is that times can be documented after the fact,	Do not proceed	Evidence concerns. Disadvantage to short transport time.
SEPS-06	Time from Sepsis Alert to Fluid Bolus	This measure is important to improving patient care. This measure aligns with current clinical standards of care in EMS. The correct providers and patient populations are included in this measure. This clinical process or outcomes needs improvement in EMS. Data required for this measure is not routinely documented or easily collected - problem is	Do not proceed	Evidence concerns. Disadvantage to short transport time.
Stroke-12	Vital Signs Completed within 5 Minutes for Stroke	-Discussion that this measure concept is important -Reasonable should have for all patients -Should consider a general assessment vitals assessment	Do not proceed	Vital signs should be standard of care for all patients.
Stroke-13	ECG Obtained for Stroke	-Discussion that this concept should include a time specification as well such as 10 minutes. -Discussion including the value of ECG is the treatment of the stroke patient. -Another concern this procedure may create added delay in transporting the patient to definitive care -Identification important of A-Fib in a stroke patient	Do not proceed	Not supported by current evidence.
Trauma-01	Vital Signs Completed within 5 Minutes for Trauma	-What are vitals -Remove 5 minutes not important, maybe at any time -no BP or Resp. -Life threats should be identified prior before taking time to measures -Vital signs should be assessed in general -We do not want to create a measure that would encourage more time spent on scene that could be detrimental to the patient	Do not proceed	Vital signs should be standard of care for all patients.
Trauma-05	Proper Placement of Tourniquet	-Remove from trauma as may used for other indications. Most common placement is for patients with fistula, maybe uncontrolled extremity bleeding -Just tourniquet placed -Proper would be difficult to determine	Do not proceed	Unlikely to be a measurement for quality improvement. Uncontrolled bleeding often leads to application of tourniquet.
Trauma-07	Documentation of GCS	-Simple straight forward -Starting to think about neurological assessment	Do not proceed	Develop Trauma-08, which includes disability component, instead.

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Trauma-15	Application of Ice	<ul style="list-style-type: none">-Ice is not practical in prehospital setting-Important but impractical-Note in the intervention-Could be part of alternative pain management techniques-Where you have ice available	Do not proceed	Combine concepts into Trauma-17
Trauma-16	Splinting of Soft Tissue Injuries	<ul style="list-style-type: none">-Soft tissue does not need to be splinted-Rollup into a bundle.-Could be part of alternative pain management-This data is available for measure-This could be the process measure for Trauma-03	Do not proceed	Combine concepts into Trauma-17