

Performance Measures for Rural EMS

John A. Gale, MS
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A Performance Monitoring Resource for
Critical Access Hospitals, States, and Communities

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Contact Information

John A. Gale, M.S., Research Associate

Maine Rural Health Research Center –U. of Southern Maine

207-228-8246

jgale@usm.maine.edu



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Overview

- Review of EMS performance measures project
- The role of Flex in supporting EMS
- Process to develop performance measures
- Criteria to assess activities and measures
- Organizing Framework and Proposed Measures
- Assessment and capacity improvement

Role of Flex in Supporting EMS

- Allowable Flex EMS activities:
 - **Community-level Rural EMS System Assessment** - Use a standard assessment tool to assess EMS capacity and performance.
 - 1) engage local stakeholders; 2) conduct assessments; 3) identify capacity and performance issues; 4) engage stakeholders in setting priorities; 5) identify common priorities by/across communities.
 - **Improve Time Critical Diagnoses EMS System Capacity** - strategies to improve local/regional system capacity for time critical diagnoses (TCD) (i.e., STEMI, stroke, and trauma).
 - Strategies: 1) engage EMS agencies and systems of care to develop integrated service systems; 2) improve the capacity of EMS agencies to diagnose and treat TCD episodes of care; 3) expand EMS use of nationally recognized protocols related to TCD and emergency dispatch.



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Role of Flex in Supporting EMS

- Allowable Flex EMS activities:
 - **Improve EMS Capacity and Operational Projects**
 - Improve local EMS system capacity issues in CAH communities using data from the EMS assessments and other sources.
 - Target and address issues specific to identified capacity gaps.
 - 1) develop collaborative linkages between CAHs, community providers, and EMS agencies to improve local pre-hospital and emergency care capacity; 2) improve capacity of EMS agencies to collect/report quality data and use data for performance improvement; 3) enhance billing, collection, and financial systems of EMS agencies and their ability to use financial data for performance



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Study Process

- Advisory panel of 16 rural EMS, performance measurement, and program expert, federal and state stakeholders
- Multiple conference calls
- Literature and background review
- Reviews of state Flex activities
- Review of pros and cons of available measures
- Develop a framework for EMS performance measurement appropriate to rural communities
- Identify and agree on potential measures



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Criteria to Assess Alternate EMS Activities

- Evidence-based
- Targets – EMS and system capacity improvement in CAH communities
- Specifically engages local EMS units in system improvement
- Targets identified needs
- System outcomes can be identified and measured in the short, medium, and long term
- Data can be collected to monitor short, medium, and long-term performance improvement



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Preparatory Work

- Assess rural EMS needs and capacity
 - Flex activity or broader responsibility?
 - Encourage SORHs to partner with state-level EMS partners to assess rural EMS needs
 - Understand/improve EMS engagement with local health systems
- Improve rural EMS agency data and reporting capacity
 - Effective billing and management information systems
 - Formal QI/CQI processes in place
 - Billing, financial, and quality data used for performance improvement
 - Participants meet regularly to review data on system performance



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Organizing Framework

- Concentrate Flex activity on improving EMS engagement and performance with CAHs
- System of care orientation
- Assess local EMS capacity and system issues
- Concentrate on time critical diagnoses – STEMI, stroke, trauma
- Focused on following three domains:
 - Capability, capacity, and access
 - Recognition and diagnosis
 - Integration and coordination of care
- Goal – document system performance improvement



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Assessment and Planning (Year 1)

- Assessment of EMS capacity and performance using standardized tools/protocols
- Develop interventions addressing priority needs
- Implementation of interventions
- Leadership programs focused on EMS capacity building



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Assessment and Planning Measures

- Short term outputs/outcomes (Year 1)
 - % of EMS systems assessed
 - % of EMS systems with formal capacity/PI plan
 - % implementing initiatives to improve capacity and performance
 - # of EMS staff completing training/leadership programs
 - % of above training participants actively engaged in rural health systems collaboratives addressing local EMS capacity and performance issues
 - % addressing financial/ billing/quality data issues



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Assessment and Planning Measures

- Medium outcomes (Year 2)
 - % of EMS agencies billing 3rd party payers/patients
 - % using patient billing and agency financial data for PI
 - % with QI protocols/(CQI) process
 - % using quality data for PI
 - % of local/regional EMS systems of care in which participants meet regularly to review data on quality and system performance
- Long Term Outcomes (Year 3 +)
 - % with active PI plans and activities



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PI and System Building (Year 2)

- Implement initiatives to improve EMS capacity and performance. Improve integration of EMS in systems of care.
- Capability, capacity, access
 - Agencies use nationally recognized protocols for time critical diagnoses and emergency dispatch for patients of all ages
- Recognition and diagnosis
 - Are training staff to use evidence-based protocols for time critical diagnoses to identify specific episodes of care
 - Using nationally recognized protocols related to time critical diagnoses and emergency dispatch for patients of all ages



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PI and System Building (Years 2 & 3) (cont'd)

- Coordination of care
 - Agencies are working with other participants in local systems of care to plan for and develop integrated services systems
 - Are training staff to use evidence-based protocols for time critical diagnoses to identify specific episodes of care



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PI System Building – Medium Term Outcomes (Year 2)

- **Coordination of Care:**
 - % of EMS agencies with TCD system planning committees
 - % implementing strategies to address system resource, work force, and training needs
- **Recognition and Diagnosis of TCD episodes of care**
 - % of EMS staff trained on: STEMI recognition, stroke recognition, and trauma/field triage-all ages
- **EMS protocol use**
 - % using AHA Mission: Lifeline Guidelines (STEM)
 - % using protocols meeting ASA/AHA stroke care guidelines
 - % using CDC guidelines for field triage of injured patients



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PI System Building – Long Term Outcomes (Year 3+)

- % of systems functioning as integrated systems of emergency care
- % of EMS agencies with improved performance on key TCD measures (e.g., D2B of ≤ 90 minutes)
- % of EMS agencies with improved financial and quality performance