



Regional EMS & Trauma Performance Improvement (PI/TPI) Plan FY2017

Southwest Virginia EMS Council
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I. PURPOSE

The purpose of the regional EMS Performance Improvement /Trauma Performance Improvement Plan is to provide a mechanism by which issues that affect patient care can be properly addressed, thus ensuring the highest standard of patient care throughout Southwest Virginia. This plan will establish a program for region wide PI/TPI review and provide a mechanism for EMS agencies in the region to establish and maintain PI/TPI programs.

II. PRINCIPLE

Performance Improvement (PI) is a process whereby an organization continuously monitors the quality of its work and institutes plans and policies with the goal of maintaining a minimal acceptable level of performance in all core areas at all times. An intended outcome is to improve performance to the highest levels of excellence attainable when opportunities for improvement arise.

PI has three modalities:

Retrospective – monitoring care that has already been provided, such as by Prehospital Patient Care Report (PPCR) review

Concurrent – monitoring and improving care as it is being provided, such as by on-scene medical direction or by OMD monitoring of care on a real-time basis by radio

Prospective – improving care by instituting training policies, and plans and policies for specific situations and procedures

The PI loop is completed by identifying areas of patient care needing improvement and subsequent action taken to undertake that improvement.

III. BACKGROUND AND SCOPE OF PLAN

Section 12 VAC 5-31-600 of the Virginia Emergency Medical Services Regulations requires all EMS agencies to participate in Performance Improvement review programs.

“An EMS agency shall have an ongoing Quality Management (QM) Program designed to objectively, systematically and continuously monitor, assess and improve the quality and appropriateness of EMS patient care provided by the agency. The QM program shall be integrated and include activities related to patient care, communications, and all aspects of transport operations and equipment maintenance pertinent to the agency’s mission. The agency shall maintain a QA report that documents quarterly PPCR reviews, supervised by the operational medical director.”

The Virginia Department of Health, Office of Emergency Medical Services contracts with the Southwest Virginia EMS Council to coordinate and support various aspects of the regional EMS system. Contract #517-07-507 requires, in part, that regional Councils:

“Provide a schedule and topics for quarterly, region wide, PI projects to be conducted by the Contractor [Southwest Virginia EMS Council] and individual EMS agencies.”

This plan may be utilized by any EMS agency operating within the Southwest Region’s service area to establish and maintain their PI program and will provide guidelines for participation in the regional PI program.

IV. EMS AGENCY PI TEMPLATE

In order to assist agencies in fulfilling their regulatory requirements concerning PI programs, the Council has established a generic PI template which can be used by EMS agencies to establish and maintain a PI program. The PI template is available on the Council website for download or can be requested from the Council. The template establishes written guidelines for completion of quarterly PI projects. The template allows agencies to determine quarterly PI

indicators for EMS response, trauma response, and system issues. The Council's regional PI plan establishes quarterly regional PI indicators. Agencies are encouraged to utilize the regional indicators. Quarterly data should be provided to the agency's OMD for review.

V. REGIONAL PI PROGRAM

As described in this plan, the Council is contracted by OEMS to coordinate a regional PI program. The purpose of this program is to examine specific PI indicators, determine any deficiencies that might exist, and make recommendations to improve the regional EMS system based on those determinations. The overall all goal of this program is to improve and strengthen the level of care provided in the region and reduce morbidity and mortality.

A. Performance Improvement Committee

Under the guidance of Council staff, a Performance Improvement (PI) Committee shall be established and will be composed of a minimum of 1 individual from each locality within the region. This committee will be composed of equal representation from OMD's, hospital staff and a diversity of EMS providers. EMS Providers will be composed of equal representation from Air Medical, Fire Based, Volunteer, and Career based agencies. The composition of this committee will adhere to guidelines provided by OEMS through its contract with SVEMS. The members of this committee will sign a confidentiality agreement which will cover their participation on the committee to insure the highest level of privacy. Committee members will be required to attend 75% of all meetings. If a committee member is unable to attend 75% of all meetings the member will be replaced.

The PI Committee will establish quarterly PI indicators. Data and supporting documents supplied by EMS agencies in accordance with this plan will be reviewed by the PI Committee. The PI Committee will make recommendations based on analysis of this data.

B. EMS Agency Review and Reporting

All EMS agencies will review PPCRs quarterly for data related to quarterly call indicators as described in this plan. Tracking sheets will be provided by the Council to EMS agencies to track calls and specific PI indicators being reviewed. Additional copies of the form should be made by the agency as needed. Agencies should total the specific data being collected as indicated on tracking forms provided by the Council), and this information should be submitted to the PI Committee through the Council's website, www.southwest.vaems.org. An electronic submission form will be provided quarterly on that website to allow for electronic submission. If an agency is unable to submit the data electronically, a *Quarterly PI Reporting Form* can be downloaded from the Council's website. The Council will send a copy of the form to any agency upon request. Copies of related PPCRs, with sensitive or confidential data marked out, should be submitted to the PI Committee upon request.

The Council staff and PI Committee will review collected data at the quarterly committee meeting. Council staff will be available to assist each agency with the quarterly review upon request by the agency. Quarterly reports should be received in the Council office no later than thirty days after the end of the quarter. OEMS Program Representatives and regional OMDs will be provided a listing of agencies participating in the regional PI program.

C. REGIONAL QUARTERLY REVIEW

Quarterly agency reports from the preceding quarter will be reviewed by the PI Committee and Council staff at the quarterly committee meeting to insure the highest level of care has been provided. All collected agency data will be compiled in order to evaluate each indicator being reviewed in that quarter. Compiled data will be reviewed during a closed session to insure patient and/or provider privacy, to identify any patient care deficits. If a deficit is

found, the Committee will determine what action is necessary to correct the deficiency. The Committee may recommend distribution of a clarifying memo to an affected EMS agency, provider, or Operational Medical Director (OMD); development of educational brochures or publications; development of remedial training programs; or recommend protocol revisions or additions to the regional Medical Direction Committee to address the deficiency.

The PI Committee's findings and recommendations, if applicable, will be forwarded to regional Medical Direction Committee for support and to the Council's Board of Directors (or Executive Committee) for approval. If remedial education is required, the PI Committee will work with the regional Training Committee to develop a program/schedule to facilitate improvement in that area.

EMS Medical Indicators will be as follows:

- 1ST quarter-ALS/BLS 12-Lead Monitor Usage
- 2nd quarter-Chest Pain Medication Administration
- 3rd quarter-STEMI Pack Orders by Medical Direction
- 4th quarter-STEMI Pack Orders by Medical Direction

Trauma Performance Improvement indicators will be as follows:

- 1st quarter-Intubation in Patients with GCS<9
- 2nd quarter-Advanced Airway Use in Patients with GCS<9
- 3rd quarter -Spinal Immobilization
- 4th quarter-Spinal Immobilization

Agencies will also look at and report the following system indicators:

- 1st quarter- Type of Calls (ALS vs. BLS)
- 2nd quarter-Type of Calls (ALS vs. BLS)

- 3rd quarter – KED usage for MVC Patients
- 4th quarter - KED usage for MVC Patients

If possible, data will be obtained from the OEMS biostatistician for review. In such instances where data can be collected in this manner, EMS agencies will be informed that quarterly review documents and/or PPCR copies are not required.

In addition to these indicators, the regional medical direction committee has asked that EMS agencies submit data on Rapid Sequence Intubation (RSI). A submittal form is included in Appendix C.

A PI/TPI Plan template is provided for EMS agencies who wish to utilize their own PI/TPI indicators. The template is available for download and is included in Appendix A.

E. OTHER PI REVIEW AND REPORTING

In addition to the regional review, each Operational Medical Director (OMD) is responsible for review of EMS calls each quarter for the purpose of performance improvement. Review of the data specified in the quarterly regional PI plan will satisfy this requirement.

Quarterly reports prepared by agencies should be submitted to their respective OMD. The OMD should review that data and/or call reports (PPCR) and determine if any deficiencies exist or corrective action is required. EMS agencies are also required to submit pre-hospital patient care data to OEMS on a quarterly basis.

F. COMPLAINT REFERRAL

If an agency official or OMD feels that a significant deficiency exists or that there is a significant patient care issue, an attempt should be made between the OMD and agency leaders to address those concerns. If the issue cannot be resolved by the agency and OMD, a *Performance Improvement Referral/Comment Form* (Appendix B) may be submitted to the

Council for the PI Committee. Submission of the *Referral Form* is a voluntary request for review and assistance by the regional PI Committee. Submitted forms will be handled according to the guidelines described in this section, and by submitting a *Referral Form*, agencies and OMDs agree to the process described herein.

Council staff and/or PI Committee members will review complaints regarding patient care during EMS response that have been submitted upon receipt. The *Performance Improvement Referral/Comment Form* must be complete and signed by the agency leader or OMD making the complaint. A copy of the PPCR(s) will also be required. If additional information is needed, a request will be made to the agency or OMD. The Council may also wish to speak with individuals involved in the incident to obtain a better understanding of the incident and gather any pertinent facts. The complaint and information gathered will be reviewed at a regular or special called meeting of the PI Committee. The PI Committee will make a recommendation to the agency and OMD concerning the issue. The recommendation may be distribution of a clarifying memo to an affected EMS agency, provider, or Operational Medical Director (OMD); development of educational brochures or publications; development of remedial training programs; or recommend protocol revisions or additions to the regional Medical Direction Committee to address the deficiency. The Committee may also issue a statement that no action is recommended. Any complaints alleging violation of the EMS rules and regulations will be forwarded to the Regional OEMS Program Representative.

In addition, any EMS agency or hospital may report significant events (compliments or criticism of EMS responses) and untoward outcomes of EMS responses using the *Performance Improvement Referral/Comment Form*. Such referrals will be addressed as described above.

G. ONGOING PROGRAM REVIEW

The Council Staff and Committee will also address any issues that pertain to the quality assurance section of the Rules and Regulations from OEMS to integrate and include activities related to communications, all aspects of transport operations, and equipment maintenance. The PI Committee will meet at least quarterly and at any time an issue may deem it necessary. The PI Committee will review the PI Plan at least annually and make any necessary changes to insure the efficiency and effectiveness of the program.

EMS AGENCY PERFORMANCE IMPROVEMENT PLAN

AGENCY

Purpose: To enable this EMS agency to achieve excellence in the provision of emergency medical services by establishing a systematic and integrated performance assessment and improvement plan that:

1. Complies with Virginia EMS regulations as per 12 VAC 5-31-600 (limited to patient care)
2. Establishes mechanisms to evaluate the quality of patient care
3. Identifies opportunities to improve care

Scope: All agency personnel.

Policy: This EMS agency shall have an active, ongoing PI Plan conducted by the Operational Medical Director (OMD) with the assistance of crew members on an ad hoc basis. The agency will also participate in the regional PI program as defined in the *SVEMS Regional Performance Improvement Plan for EMS Response*.

Principle: Performance Improvement (PI) is a process whereby an organization continuously monitors the quality of its work and institutes plans and policies with the goal of maintaining a minimal acceptable level of performance in all core areas at all times. An intended outcome is to improve performance to the highest levels of excellence attainable when opportunities for improvement arise.

PI has three modalities:

1. *Retrospective* – monitoring care that has already been provided, such as by Prehospital Patient Care Report (PPCR) review
2. *Concurrent* – monitoring and improving care as it is being provided, such as by on-scene medical direction or by OMD monitoring of care on a real-time basis by radio
3. *Prospective* – improving care by instituting training policies, and plans and policies for specific situations and procedures

The PI loop is completed by identifying areas of patient care needing improvement and subsequent action taken to undertake that improvement.

At OMD discretion, some possible actions that may be indicated include, but are not limited to:

1. Focused in service education
2. New or revised plans or policies
3. Counsel crew personnel
4. Require member-specific additional education, training, or limitation of practice, etc

Procedure:

- A. **Agency Review**—Retrospective PI will be conducted by the OMD by quarterly review of PPCR run sheets utilizing the EMS Performance Improvement Quarterly Report. Concurrent PI may be performed by the OMD on an ad hoc basis. Prospective PI is accomplished by OMD policies. Agencies may utilize the *EMS Performance Improvement Quarterly Report* (available for download from the Council website).

- B. **Regional PI Projects**—The agency will participate in quarterly regional PI projects according to the guidelines specified in the *SVEMS Regional Performance Improvement Plan for EMS Response* and the *SVEMS Trauma Performance Improvement Plan*. Performance Improvement indicators for EMS Response, Trauma Response, and System Issues will be reviewed as defined in the Council plan. The Council plans are available for download from the Council website.

Quarterly review topics for the regional EMS PI program (EMS Response) are as follows:

- 1st quarter: _____

- 2nd quarter: _____

- 3rd quarter: _____

- 4th quarter: _____

Quarterly review topics for the regional Trauma PI program (Trauma Response) are as follows:

- 1st quarter: _____

- 2nd quarter: _____

- 3rd quarter: _____

- 4th quarter: _____

Quarterly review topics for system issues are as follows:

- 1st quarter: _____

- 2nd quarter: _____

- 3rd quarter: _____

- 4th quarter: _____

Reporting templates will be provided by the Council for regional PI projects.

- C. **Reporting**—EMS agencies are required to submit pre-hospital patient care data to OEMS on a quarterly basis. Data will be submitted to the Council for indicators specified in the current *Performance Improvement (EMS Response) Plan* and *Trauma Performance Improvement (Trauma Response) Plan* using the online submission form or the *Quarterly PI Reporting Form* provided by the Council within 30 days of the end of the quarter. A copy of the submitted data will be filed at the agency, and a copy will be provided to the agency’s OMD for review. The OMD will sign the form upon review and make any recommendations based upon data provided.
- D. **Complaint Referral**—An agency and their OMD will attempt to address any performance issues identified through their PI process. If the issue cannot be resolved, it may be referred to the Council using a *Performance Improvement Referral/ Comment Form*. In addition, any EMS agency or hospital may report significant events (compliments or criticism of EMS responses) and untoward outcomes of EMS responses using the *Performance Improvement Referral/Comment Form*.

- E. **Plan Review**—This plan will be updated yearly to according to new performance indicators defined in the Council PI and TPI plans.

Agency Representative

Date

OMD Signature

Date

Southwest Virginia EMS Council

Performance Improvement Referral/Comment Form

Your name: _____ Your title: _____

Your agency: _____ Today's Date: _____

Agency/facility/individual targeted for quality improvement: _____

EMS Incident number: _____ Patient Record number: _____

Receiving facility: _____

Date of incident: _____ Time of incident: _____

Patient age: _____ Patient date of birth: _____

Illness/Diagnosis: _____

Purpose of Referral/Comment:

_____ Patient care _____ equipment issue _____ destination/diversion

_____ Other (describe) _____

Attendant in charge: _____ Level of certification: _____

Attendant: _____ Level of certification: _____

Attendant: _____ Level of certification: _____

Attendant: _____ Level of certification: _____

Description of events/Comment (use back of paper if necessary): _____

Agency OMD: _____

Signature of person completing this form: _____

For QA Committee use only	Date received:	Action taken:
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RSI Review Form

This form must be completed and returned to the Southwest Virginia EMS Council for review by the regional PI Committee and OMD Committee.

Date:	Time of Call:	PPCR No:
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Agency:	Provider:
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Patients Chief Complaint:

Indication for RSI:	Time RSI Started: _____ Time RSI Completed: _____
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Pre-Medication

Indication: None___ Head Injury___ Bradycardia___ Age___

Pre-Medicated with: _____ Dose: _____ Time: _____

Provider Administering Medication: _____

Medication

Sedative: _____ Dose: _____ Time: _____
 Provider Administering Medication: _____

Sedative: _____ Dose: _____ Time: _____
 Provider Administering Medication: _____

Paralytic: _____ Dose: _____ Time: _____
 Provider Administering Medication: _____

Paralytic: _____ Dose: _____ Time: _____
 Provider Administering Medication: _____

Time of Intubation: _____ Placement at Lip: _____	Placement Confirmed (3): 1. _____ 2. _____ 3. _____
Number of Attempts: _____ ET Tube Size: _____	

Patient Disposition: _____ _____ _____ _____	Complications: _____ _____ _____ _____
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FY2017 Quarterly PI Indicators

Call Type	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Medical	Of the transported Pt. how many were placed on monitor? Note ALS/BLS 12 lead	List the number of Chest pain calls, and Meds given, ASA, NGT,MS,	List the number of Chest pain calls were the STEMI pack was ordered by Medical Direction	List the number of Chest pain calls were the STEMI pack was ordered by Medical Direction
Trauma	Pt. transported with GCS <9 without intubation?	Pt. transported with GCS <9 that received advanced airway King/ET intubation?	List the number of transported pt. that received spinal immob.	List the number of transported pt. that received spinal immob.
All Calls	Total # of ALS & BLS calls?	Total # of ALS & BLS calls?	List the number of Pt. that received KED that were involved in MVC	List the number of Pt. that received KED that were involved in MVC

Other Options				
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