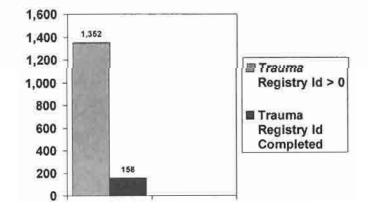
ATCC# Usage Per the Trauma Registry ID Data Point Alabama Electronic Patient Care Reports (ePCRs) August 1, 2009 thru August 31, 2009

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- In the ePCR database for the designated study period, around 1,350 records, where the Trauma Registry Id was greater than zero, were found.
- Of these approximately 1,350 records found in the ePCR database, almost 12% had actual values.
- 40 emergency medical services providers requested the ATCC Numbers which were captured via the Trauma Registry Id datapoint in the ePCR database during the designated study period: #108(5), #110(3), #124(7), #136(3), #154(2), #168(3), #216(6), #228(1), #236(3), #238(1), #252(9), #253(1), #254(41), #270(4), #276(2), #278(1), #291(1), #317(2), #318(2), #339(1), #340(1), #347(1), #374(2), #394(2), #397(1), #410(1), #484(2), #725(4), #794(3), #831(1), #864(2), #887(2), #904(2), #911(14), #924(5), #943(1), #944(2), #946(6), #968(7) and #970(1).
- For those records where actual values were not entered into the Trauma Registry Id datapoint, the following is a listing of the other options entered: "0", "77", "123", "1044", "1046", "55099", "555262", "700200", "800394", "9070013", "4 Stroke Scale", "N.A.", "N/A", "n/a", "NA", "na", "NONE", "Not Applicable", "Not Known" and "TCC Computer prob-".

ATCC# Usage Per the Trauma Registry ID Data Point Alabama Electronic Patient Care Reports (ePCRs) August 1, 2009 thru August 31, 2009



Trauma System Planning Tool & Related Documents

100. Assessment. Regular systematic collection, assembly, and dissemination of information on the health of the community.

Benchmark

101. There is an accurate description of the epidemiology of traumatic injury in the state using population-based data and clinical databases.

Essential service: Monitor Health

Indicator:

101.1 There is an accurate description of the epidemiology of trauma mortality in the state using population based data.

Scoring:

- 0 Not known
- 1 There is no accurate description of the epidemiology of injury mortality in the state.
- 2 Death certificate data have been used to describe statewide incidence of traumatic injury deaths aggregating all etiologies but no E-code reporting is available.
- 3 Death certificate data, by E-code, are reported on a statewide basis but are not reported by sub-state jurisdiction.
- 4 Death certificate data, by E-code, are reported on a statewide and sub-state basis.
- 5 Death certificate data, by E-code, are used as part of the overall assessment of trauma care in a state or sub-state district, including statewide rural and urban preventable mortality studies.

Alabama Trauma System Planning, Development, and Evaluation Document

Benchmark Indicator Scoring Current Status/Goal/Priority

Benchmark Indicator #	Current Score	Goal score	Priority level	Comments
101.1	2	4	1	No comments; planning tool complete
101,2	1	3	2	
101.3	1	2	2	
102.1	2	3	2	
102.2	1	4	3	
102.3	3	5	2	
102.4	2	3	3	
103.1	4.	5	3	
103.2	1	5	3	
103.3	1	5	3	
104.1	1	3	3	
104.2	1	5	3	
105.1	1	5	3	
105.2	1	5	3	
105,3	1	4	3	
105.4	1	5	3	

¹ Companion Document to the 2006 HRSA Model Trauma System Planning and Evaluation Document, June 2006. National Association of State Emergency Medical Services Officials (NAESEMSO).

Trauma System Planning Tool

Core Function 100. ASSESSMENT. Regular systematic collection, assembly, and dissemination of information on the health of the community.

Benchmark 101. There is an accurate description of the epidemiology of traumatic injury in the state using population-based and clinical databases.

Indicator 101.1 There is an accurate description of the epidemiology of trauma mortality within the state using population based data.

- MTSPE Scoring Descriptor best defining current status: = 2
 (Death certificate data have been used to describe statewide incidence of traumatic injury deaths aggregating all etiologies but no E-code reporting is available.)
- MTSPE Scoring Descriptor best describing goal status = 4
 (Death certificate data, by e-code, are reported on a statewide and substate basis.)

Tasks to achieve goal status:

- Who: ATS epidemiologist upon consultation with staff of Alabama Center for Health Statistics Statistical Analysis Division.
- What: Trauma-specific death certificate mortality data compiled and reported with focus on traumatic injury deaths by E-code categories.
- When: Beginning upon completion of functional installation of ATR software as per contract with Digital Innovations Corporation.
- 4. Where: Statewide data housed in the ADPH's Vital Statistics
- 5. How: Using data collected and compiled by the Alabama Center for Health Statistics the results of directed annual analyses of mortality data will accurately describe the epidemiology of death due to traumatic injury statewide.
- 6. Barriers: To accomplish the goal, the ATS epidemiologist must work with designated staff in the Alabama Center for Health Statistics. Mortality data is based on International Statistical Classification of Diseases and Health Problems Tenth Revision (ICD-10) Mortality coding, a system with which the Traumatic Injury Epidemiologist should be familiar. Currently, traumatic injury mortality data is reported using classifications of external injury differing from those classifications most often used in Statewide Trauma Systems. Reporting periods may also differ. Data from Vital Statistics

death certificate data is subject to misclassification due to coding and completion error that may further confound the results of E-code analysis. Nonetheless, when these barriers are overcome, death certificate data is available in a form which provides a widely used source of population-based traumatic injury mortality.

- 7. Potential Strategy for Overcoming Barriers: The epidemiologist must develop a working relationship with designated staff in the Alabama Center for Health Statistics. Additional background research in the use of mortality data in describing the Epidemiology of Traumatic Injury will facilitate the process. ATS staff with experience using data collected by the Center for Health Statistics may be available, as well.
- Resources Required: There is no indication, at this point, that additional software or staffing will be required.

Trauma System Planning Tool & Related Documents

Benchmark

301. The trauma management information system (MIS) is used to facilitate ongoing assessment ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including a cost-benefit analysis.

Essential Service: Evaluation

Indicator:

301.2 Prehospital care providers collect patient care and administrative data for each episode of care and provide these data not only to the hospitals but have a mechanism to evaluate the data within their own agency including monitoring trends and identifying outliers. Scoring:

- 0 Not known.
- 1 There is no jurisdiction-wide prehospital data collection.
- 2 Prehospital care providers have a patient care record (PCR) for each episode of care but it is not yet automated or integrated with the trauma MIS.
- 3 The prehospital PCR electronically captures patient care provided by field personnel and can be transferred or entered into the trauma registry system within individual trauma centers.
- 4 The prehospital patient data system is integrated into the trauma MIS and is used by prehospital and hospital personnel to review and evaluate prehospital and ATS performance.
- 5 Individual prehospital provider data are electronically submitted to the ATR, are aggregated with other prehospital agency data, and are used to evaluate overall ATS performance.

Alabama Trauma System Planning, Development, and Evaluation Document¹

Benchmark IndicatorScoring Current Status/Goal/Priority

Benchmark Indicator #	Current score for indicator #	Goal score for indicator #	Priority (1-4) for Indicator #	Comments
301.1	2	5	Ĩ	Immediate goal is 3
301.2	2	5	1	Currently somewhere between 2 & 3
3.01.3	1	5	3:	Currently somewhere between 1 & 2
302.1	4	5	1	
302.2	3.	5	1	Other input needed
302.3	5	5	1	
302.4	5	5	1	"Feedback loop" to educate disputchers?
302.5	4	5	1	
302.6	4	5	1	"Statewide" or "regional standards"?
302.7	4	5	2	All hazards response under development
302.8	. 5	5	1	All hazards response under development
302.9	3	5	2	
302.10	1	5	3	All hazards response under development
303.1	4	5	2	Burns and pediatric care addressed
303.2	1.	5	2	Suitable period for data collection needed
304.1	3	5	3	All hazards response under development
304.2	3	5	3	ME data access needed to complete
305.1	5	5	I	
305.2	4	5	2	Paramedics only
305.3	2	4	1	Trauma centers set training requirements
305.4	1	3	2	
305.5	1	5	3	Board certification + ATLS minimum
305.6	3	4	3	
305.7	5	5	1	
306.1	5	5	1.	
306.2	3	5	1	
306.3	4	-5	1	
306.4	3	5	1	No regular period specified
306.5	3	5	1	
306.6	2	3	3	1

¹ Companion Document to the 2006 HRSA Model Trauma System Planning and Evaluation Document, June 2006. National Association of State Emergency Medical Services Officials (NAESEMSO).

Trauma System Planning Tool

Core Function 300. ASSURANCE. Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

Benchmark 301. The trauma management information system (MIS) is used to facilitate ongoing assessment and assurance of system performance and outcomes and provides a basis for continuously improving the trauma system including cost-benefit analysis.

Indicator 301.2 Prehospital care providers collect patient care and administrative for each episode of care and provide these data not only to the hospitals but have a mechanism to evaluate the data within their own agency including monitoring trends and identifying outliers.

- MTSPE Scoring Descriptor best defining current status: = 2
 (Prehospital care providers have a patient care record (PCR) for each episode of care but it is not yet automated or integrated with the ATR.)
- MTSPE Scoring Descriptor best describing goal descriptor = 5
 (Individual prehospital provider data are electronically submitted to the ATR, are used to evaluate overall ATS performance.)

Tasks to achieve objective:

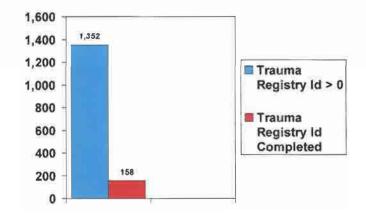
- 1. Who: The ATS has contracted with Digital Innovations (DI) for a database to house Alabama Trauma Registry data. Representatives of the Trauma Registry along with ADPH Computer Technical Assistance staff are working with DI staff to complete the database and begin operations using the DI product as the primary database. EMS and staff work with the Trauma Data Analyst to complete and deploy the prehospital database statewide.
- What: The measurable task to be accomplished is complete deployment of both databases with a long-term goal of merging electronic data from the EMS database with the Trauma Registry database.
- When: The Trauma Registry data management system should be available for 2010
 hospital admissions data entry in early 2010. Electronic Patient Care (ePCR) data are
 available on 100% of traumatic injury cases at present.
- 4. Where: The PCR database is being deployed statewide as is the Trauma Registry database. However, only head and spinal cord injury data are reported by acute care hospitals that are not participating in the ATS. Hospital data will be available from all six EMS regions in Alabama but not from all hospitals in each region. Geographically, these

- data are available statewide but the ATR cannot be described as a population-based registry due to lack of complete data from hospitals that do not participate in ATS.
- How: The task will be accomplished by directly merging electronic data from the prehospital electronic Patient Care Record into existing records in the Trauma Registry.
- 6. Barriers: There have been, and continue to be, delays in the development of the new Trauma Registry data management system that the accomplishment of this goal represents. Moreover, once this Trauma Registry data management information system is completely deployed, it will be incompatible with much of the ePCR data. As a consequence, the goal indicator is viewed as a long-term project by ATS staff. Willingness on the part of the software providers to devote the necessary staff and resources to facilitate the merging process is essential.
- 7. Potential Strategy for Overcoming Barriers: The actions required to make these two data sets compatible should become clearer as the EMS and Trauma staff builds experience with the two data management systems. Over time, more research may overcome the substantial barriers to electronically incorporating prehospital data into the Trauma Registry.
- 8. Resources Required: Functional, versatile software is essential in accomplishing this objective. The goal can only be achieved by either appointing staff form all four parties represented, i.e. ePCR MIS developers, Trauma Registry MIS developers, and ADPH staff from both Computer Services and the Office of EMS and Trauma. Work toward this goal is not presently ongoing in any of the parties represented but all parties are aware that the ultimate goal is to overcome the software incompatibility issues which we currently face.

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- 40 emergency medical services providers requested the ATCC Numbers which were captured via the Trauma Registry Id datapoint in the ePCR database during the designated study period: #108(5), #110(3), #124(7), #136(3), #154(2), #168(3), #216(6), #228(1), #236(3), #238(1), #252(9), #253(1), #254(41), #270(4), #276(2), #278(1), #291(1), #317(2), #318(2), #339(1), #340(1), #347(1), #374(2), #394(2), #397(1), #410(1), #484(2), #725(4), #794(3), #831(1), #864(2), #887(2), #904(2), #911(14), #924(5), #943(1), #944(2), #946(6), #968(7) and #970(1).
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ATCC# Usage Per the Trauma Registry ID Data Point Alabama Electronic Patient Care Reports (ePCRs) August 1, 2009 thru August 31, 2009



Alabama EMS & Trauma System Quality Assurance/ Quality Improvement Plan

Quality Assurance Plan

The mission of the quality assurance/quality improvement (QA/QI) plan is to assure optimal care of injured patients in the state of Alabama.

To accomplish this mission the QA/QI committee will continuously monitor the Statewide EMS & Trauma System utilizing system operation standards, system performance criteria, and data. The QA/QI process also includes development of system operation protocols, system performance standards, and system benchmarks. The process also includes the coordination of educational initiatives, system changes and enforcement as necessary.

QA/QI is made up of three component areas:

- Standard Setting the establishment of system operation protocols, system performance standards, and system benchmarks.
- Quality Control the "real time" operations of intervention by on-line medical direction, ADPH/OEMS&T, or the Alabama Trauma Communications Center (ATCC) to prevent sub-standard performance in any component of the ATS.
- Quality Improvement the use of system standards, quality control incidents, and data to determine the need for system change, provider education, or contract/regulatory action by the ADPH/OEMS&T.

The process is designed to allow all participants to recognize optimal as well as substandard performance. The process may use direct intervention, educational initiatives, system changes, and enforcement as necessary.

Alabama Trauma System QA/QI consists of the following:

- 1) Hospital
 - A. Quarterly internal audits
 - B. Alabama Trauma System Registry reports
 - C. Participation in quarterly regional QA/QI committee meetings
- 2) Pre Hospital
 - A. Air
- 1. Internal Audits
- 2. Participation in quarterly regional QA/QI committee meetings
- 3. Participation in quarterly Aero-Medical QA/QI committee
- B. Ground
 - 1. Internal Audits
 - 2. Participation in quarterly regional QA/QI committee meetings
 - 3. Participation in quarterly Aero-Medical QA/QI committee

3) ATCC

- Assist all appropriate parties with their responsibilities as detailed in this
 plan.
- Provide Quality Control to assure ATS system operation protocols and ATS system performance standards are met with intervention as appropriate and incident reports made as necessary.

4) On-Line Medical Direction

- Provides on-line medical direction as necessary to assure compliance with ATS system operation protocols and ATS system performance standards.
- 2. Provides incident reports as necessary to the appropriate RTAC(s).

5) System

The Alabama Department of Public Health's Office of EMS and Trauma is responsible for direct oversight and operation of the OA/OI plan:

- Assumes responsibility and accountability for the implementation and ongoing activities of the QA/QI process.
- B. Establishes, maintains and provides guidance to STAC, RTAC, EMS Regional Staff and ATS QA/QI Committees.
- Integrates the QA/QI process into activities for all levels of participation within the ATS.
- Utilizes the QA/QI data to identify the need to make any changes to the ATS to ensure its success.
- E. Communicates and cooperates with appointed RTAC QA/QI committee members to operate their QA/QI plan.
- Reports all QA/QI plan activities to STAC and the State Committee of Public Health.
- G. Establishes and maintains a systematic QA/QI assessment process.
- Establishes a culture of excellence through leadership, education, communication and teamwork.
- I. Forwards complaints received at the State level to the Regional staff for follow-up according to steps I, II, III and IV of the Trauma System noncompliance process listed under Regional Trauma Advisory Council: Number 8.

Regional Trauma Advisory Council (Staffed by Regional EMS Agency)

- Utilizes regional level quality assurance/improvement, data process to identify the need to maintain/change trauma system processes by reporting findings to OEMS&T.
- Communicates and cooperates with the direct services providers, ADPH/OEMS & T staff and all appropriate trauma system personnel to ensure Trauma System information is shared including the return of outcome data to the prehospital agencies involved in each patients care.
- 3. Promotes, coordinates and conducts ongoing prehospital and hospital ATS education.
- 4. Follows up with direct services providers to ensure trauma processes are performed.
- 5. Participates in all levels of the OAOI process.
- Meets quarterly with the ATS QA/QI committee to discuss ways to improve the ATS processes.
- Receives all ATS QA/QI issues and then forwards to the ADPH/OEMS&T as well as State & Regional QI committees.

Non-Compliance Assurance

Reports **noncompliance** issues to the Regional Trauma Advisory Council as listed below for the ATS prehospital component:

I. First Issue

- A. Minor issues (misunderstanding, not yet trained, etc.): Explanation of issue and remedial education, documentation by regional staff. Copy to State OEMS & T Compliance Officer (for information only).
- B. Issues where service or provider does not respond or is uncooperative: to be forwarded to the OEMS & T Compliance Officer. (For appropriate actions by Compliance Officer).
- II. Second Issue-Verbal warning by regional staff. Issue will be forwarded to State OEMS & T Compliance Officer. State OEMS & T Compliance Officer will notify service provider and individual involved to schedule a counseling meeting.
- III. Third Issue-Verbal/written report will be forwarded to State OEMS & T Compliance Officer for investigation with possible licensure action taken.
- IV. State OEMS & T Compliance Officer will report all outcomes from findings to RTAC. A summary will be provided to the STAC.

EMS & Trauma Regions Noncompliance:

All regional EMS Agency noncompliance issues related to trauma system issues will be handled by the Director of the Office of EMS & Trauma.

Hospital Noncompliance:

All hospital noncompliance trauma system issues will be processed according to the contractual agreement with the hospital (See Trauma System Contract for respective hospital).

ATCC Noncompliance:

All ATCC noncompliance issues will be processed by the Director of the Office of EMS & Trauma and the ATCC Director.

RTAC QA/QI Committee Make Up

I. Representation-

Each RTAC QA/QI committee will have the following minimum trauma system components represented:

E911

ATCC

BLS First Responder

ALS First Responder

ALS Transport Provider

BLS Transport Provider (Only if BLS responds to 911 calls)

Trauma Hospital of each level in the Region

Community Hospital

Emergency Medicine

Emergency Nursing

Trauma Surgeon

General Surgeon

Orthopedic Surgeon (if level 1 or 2 in Region)

Neurosurgeon (if level 1 in Region)

Trauma Coordinator from each level hospital in the ATS Region

II. Membership

Each RTAC will determine and select the RTAC QA/QI membership to assure the above are represented. The Vice-Chair of the RTAC is to be the Chair of the RTAC QA/QI Committee.

III. Meetings

The RTAC QA/QI committee must meet at least once quarterly. All meetings will be advertised to ATS staff.

Alabama Department of Public Health Trauma System QA/QI Issue Tracking Log

Service Provider:		Emplo	yee:		
Date of Occurrence:	S	ervice Notification Date:			
EMSP Involved Name	License#_				
EMSP Involved NameName		License#		Unit#	
Noncompliance Issues:l	AIB	II	III	Region	
Issue:					
Service Findings:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_
Resolution:					
Resolution Date:					
Regional Staff Signature	1	D	ate	2	
				ATCC ID#	

Alabama Department of Public Health

Office of Emergency Medical Services and Trauma QA/QI Issues Feedback Report

QA/QI Issue:			
Region:	Hospital:	Prehospital:	
Service Provider	:	Employee:	
ATCC ID #:			
Investigation Tin	ne Period:		_
State Office Reco	ommendation:		
1			
,			
Submission to Region I	Date		
State Compliance Offic	er Signature		
OEMS &T Medical Dir		1	
OEMS & T Assistant M	fedical Director Signatur	е	

ALABAMA DEPARTMENT OF PUBLIC HEALTH OFFICE OF EMERGENCY MEDICAL SERVICES AND TRAUMA

IN THE MATTER OF:		
ALABAMA LICENSE NO.)	ALABAMA TRAUMA SYSTEM NONCOMPLIAN	CE
The undersigned holder of licensure in the State of Alabama is hereby notific system noncompliance issue which has	e to practice as an Emergency Medical Service Technician ied of the third trauma resulted in this written notification.	
	to practice as an Emergency Medical Service Technician correct the noncompliance issue as listed below.	
The Emergency Medical Technicia future investigation and/or possible lice	an will be reported to the State Compliance Officer for ense suspension.	
Noncompliance Explanation:		
EXECUTED this the		
APPROVED AND ACCEPTED BY	THE ALABAMA DEPARTMENT OF PUBLIC CY MEDICAL SERVICES AND TRAUMA on this	
day of	, 2008.	
	Respectfully,	
	John Campbell, M.D. Medical Director Office of Emergency Medical Services and Traus	ma
For Office use only ATCC# ATCC#	ATCC#	
	9 CF Edited 04282009 CL Revised 04292009 CF Revised 07/31/2009 CI	¥

ATCC/Trauma System Issues QA/QI Date: ATCC#: Occurrence Date: Time: Region: **Organizations Involved:** ISSUES(S): Patient not entered into system. ☐ Patient entered into system late. Physician did not come to telephone/radio for patient report and orders. Patient not transported to appropriate trauma center ☐ Patient transport designation issues Patient transport issue Statement added to document □Air ☐ Ground No PCR left at Hospital. Other: Explain the occurrence fully below; do not just check box.

