TASK FORCE FOR TRAUMA AND EMS FUNDING NEEDS REPORT TO THE STATE BOARD OF HEALTH

October 12, 2016

Purpose

At its July 2016 meeting, the State Board of Health formed the Task Force for Trauma and EMS Funding Needs and charged the ad hoc committee with advising the Board on funding options and legislative efforts pursuant to the goal of preserving funding for trauma and emergency medical services (EMS) at or above the originally intended levels. The Task Force members are listed as follows:

Bill Oliver, Chair	Retired Hospital Chief Executive Officer	Hattiesburg
Dr. Luke Lampton	Chairman, MS State Board of Health	Magnolia
Dr. Thad Waites	Member, MS State Board of Health	Hattiesburg
Dr. Mary Currier	State Health Officer, MS State Department of Health	Jackson
Dr. Larry Martin	MS State Medical Association, Trauma Surgeon, University of MS Medical Center Trauma Center (Level I) Medical Director	Jackson
Dr. Kristine Carter	MS State Medical Association, Trauma Surgeon, Gulfport Memorial Trauma Center (Level II) Medical Director and Chair of State Performance Improvement Committee	Gulfport
Dr. Alan Jones	Chairman, Emergency Medicine, University of MS Medical Center	Jackson
Dr. Bob Galli	State EMS Medical Director, MS State Department of Health	Jackson
Shane Spees	MS Hospital Association, North MS Medical Center Trauma Center (Level II) Chief Executive Officer	Tupelo
Doug Higginbotham	MS Hospital Association, South Central Regional Medical Center Trauma Center (Level III) Chief Executive Officer	Laurel
Wade Spruill	Chief Executive Officer, Trauma Care Region VI and AAA Ambulance Services	Hattiesburg

Staff of the Mississippi State Department of Health, as well as members of the Mississippi Trauma Advisory Council (MTAC) and Mississippi Association of Trauma Administrators (MATA), provided information and technical assistance to the Task Force. The Task Force requested the assistance of the Center for Mississippi Health Policy in synthesizing the information reviewed and preparing its report. This report provides background information and summarizes the findings and recommendations of the Task Force.

Historical Funding Sources

In 2008, Mississippi enacted HB 1405, that provided a steady funding stream to support the state's trauma care system. The law was reenacted in 2011 (SB 2734). The law included increases on

assessments and fees targeting risky behaviors associated with trauma care. Figure 1 lists the assessments designated from Fiscal Years (FY) 2008 to 2016 to fund the trauma and EMS systems.

Figure 1: State Funding Assessments for Trauma and Emergency Medical Services Systems, FY 2008-2016

Fund	Assessment	Amount
Trauma Care Systems Fund	Speeding, Reckless, & Careless Driving Violations	$80.00
Trauma Care Systems Fund	Point-of-sale Fee ATVs/Motorcycles	$50.00
Trauma Care Systems Fund	Distinct License Tag Plate Fees	$44.00
Trauma Care Systems Fund	Implied Consent Law Violations	$30.00
Trauma Care Systems Fund	Special License Tag Fees (EMS Technicians)	$25.00
Trauma Care Systems Fund	Special License Tag Fees (Trauma Care)	$24.00
Trauma Care Systems Fund	Special License Tag Fees (EMS Supporter)	$24.00
EMS Operating System	Implied Consent Law Violations	$15.00
Trauma Care Systems Fund	Traffic Violations	$15.00
EMS Operating System	Traffic Violations	$5.00
Trauma Care Systems Fund	License Plate Tags/Decals	$4.00
Trauma Care Systems Fund	Uninsured Motorist Liability Insurance Penalties	Varies

Source: Mississippi Code of 1972. (2015).

Mississippi: A Model System

In 2012, a study published by researchers in the *Journal of Trauma Care and Acute Care Surgery* lauded the policy provisions enacted by Mississippi policymakers as a successful model in terms of funding for the trauma care system and for creating a truly regional system blind to state lines. The researchers also documented a statistically significant increase in hospital participation following enactment of the law.[1] Figure 2 compares hospitals' participation in the system in 2007 to participation in 2016.

Figure 2: Hospital Participation in the Mississippi Trauma Care System, 2007 vs. 2016

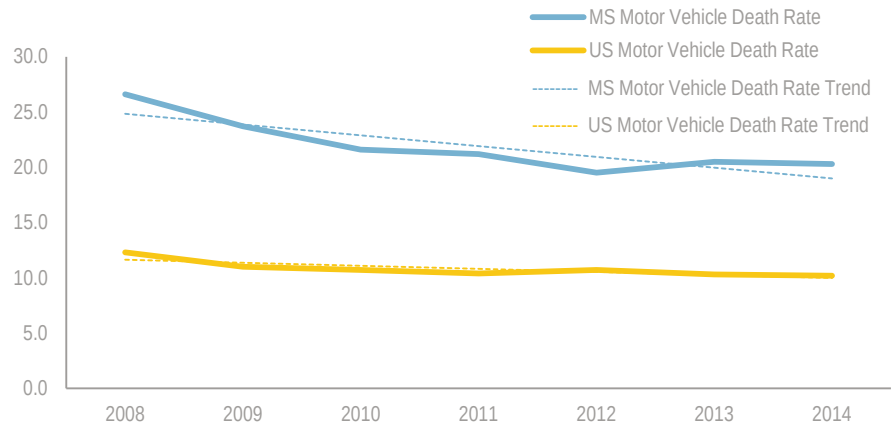
Trauma System Level of Care Designation	2007	2016
Level I (highest level)	2	4
Level II	4	3
Level III	6	15
Level IV (lowest level)	59	62
Burn Center	0	1
Total	71	85

Source: Mississippi State Department of Health. (2016).

Researchers have documented decreases in injury death rates after implementation of formal trauma care systems.[2] Unintentional (accidental) injuries comprise the majority of injury deaths at 67 percent in Mississippi. Motor vehicle crash deaths are the leading cause of unintentional injury deaths statewide.[3] Figure 3 shows the motor vehicle crash death rates have declined significantly ($p<.01$) faster in Mississippi when compared to the United States from 2008 to 2014.

[1] Zarzaur, B.L., Croce, M.A., Fabian, T.C. (2012). Play or pay: a financial model for trauma care in a regional trauma system. Journal of Trauma Care and Acute Care Surgery. Vol. 72(1): 78-85.
[2] Eastman, A.B., Mackenzie, E.J., & Nathans, A.B. (2013). Sustaining a coordinated, regional approach to trauma and emergency care is critical to patient health care needs. Health Affairs, Vol. 32(2): 2091-2098.
[3] Mississippi State Department of Health. (2014). Office of Vital Records. http://mstahrs.msdh.ms.gov/forms/morttable.html.

Figure 3: Motor Vehicle Crash Death Rates per 100,000 in Mississippi and the United States, 2008-2014

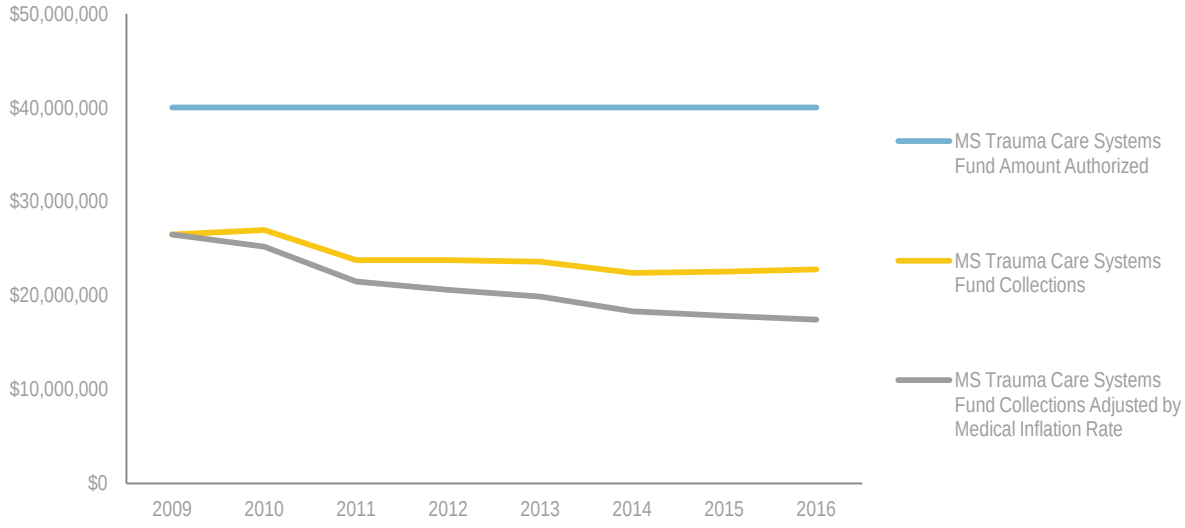


Source: National Highway & Traffic Safety Administration (NHTSA). (2016).

Funding Levels

All of the above improvements, which produced a stronger trauma system of care for Mississippi, were made possible from the additional funding generated by the 2008 legislation. At the time of enactment of the law, it was projected to generate over $30 million in additional revenue, which could be added to the $8 million already deposited annually in the Trauma Care Systems Fund. Collections, however, were less than estimated. As shown in Figure 4, the funding levels for the trauma care system have never reached the amount authorized for trauma care in the Mississippi State Department of Health's appropriations bills, averaging about 60 percent of the authorized amount from 2009 to 2016. When the amounts are adjusted to account for medical inflation over the time period, the funding levels were even lower.

Figure 4: Trauma Care Systems Fund Authorization, Collections, and Collections Adjusted for Medical Inflation Rate, 2009-2016



Source: Mississippi Department of Health. (2016).

2016 Funding Changes

During the 2016 regular legislative session, the Mississippi Legislature amended some of the state funding mechanisms that affected the trauma and EMS systems (Mississippi Code § 99-19-73) by redirecting certain fees and assessments related to moving traffic violations, the Implied Consent Law, and speeding/reckless/careless driving violations into the State General Fund rather than to continue to deposit the assessments into the trauma and EMS funds.

Specifically, moving traffic violation penalties that designated $15.00 of every $20.00 assessed to go to the Trauma Care Systems Fund and the remaining $5.00 to the EMS Operating Fund now go into the State General Fund. Implied Consent Law violation penalties that designated $30.00 of every $45.00 assessed to go to the Trauma Care Trust Fund and the remaining $15.00 to the EMS Operating Fund now go into the State General Fund. All the assessments that were collected for speeding ($60.00), reckless driving ($10.00), and careless driving ($10.00) violations that had been designated for deposit into the Mississippi Trauma Care Systems Fund now also go into the State General Fund.

Impact of Funding Changes

The results of these changes are that the EMS Operating Fund no longer has a designated state funding mechanism and the revenue designated to be deposited into the Trauma Care Systems Fund is reduced. In Fiscal Year 2016, the EMS Operating Fund reported it had collected $1,790,736. Collections for the trauma system from moving traffic violations were $7,205,971 out of the total $22,763,620 collected, about one-third (32%) of the trauma fund collections. Unless the Legislature appropriates the money from the State General Fund, there is projected to be approximately $9 million less revenue supporting the state's trauma and EMS systems.

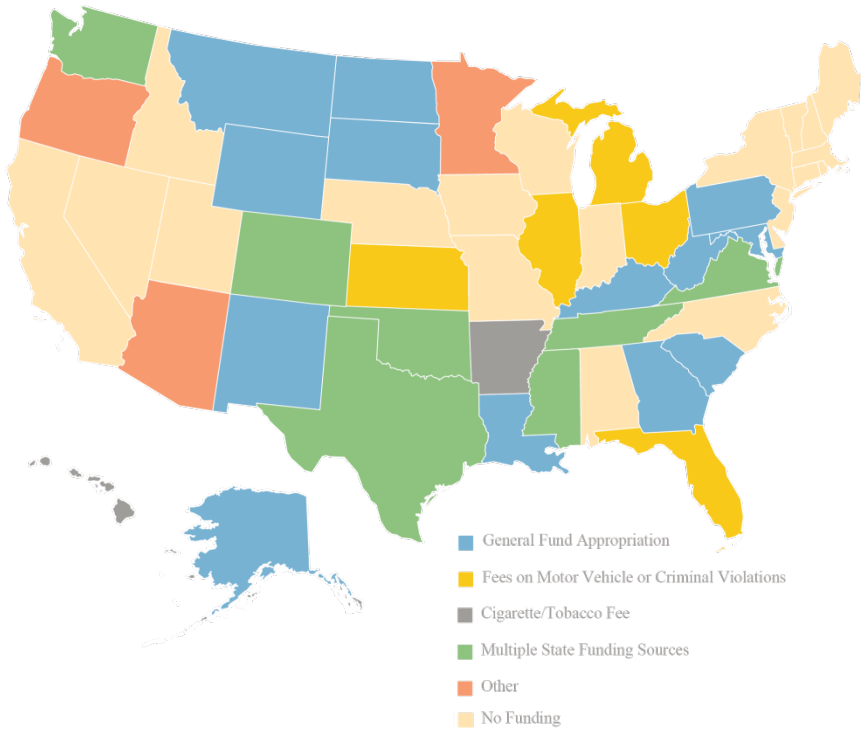
Alternative Funding Sources

There is no designated federal funding for trauma or emergency medical systems outside of occasional grants for specific purposes, and states vary in their funding sources for these systems. Most states employ a combination of funding sources to support trauma and EMS services on the state level. A majority of states (30) fund the trauma and EMS systems separately, while a few states (10) provide joint funding for these services.[4]

Sources of state funding for trauma and emergency medical systems include general fund revenue appropriations by state legislatures; fees assessed on motor vehicle or other violations, vehicle registrations, driver's licenses, and ambulance or emergency medical technician (EMT) operations; and tobacco taxes. Figures 5 and 6 illustrate the variety of sources of state trauma and EMS system funding.[5]

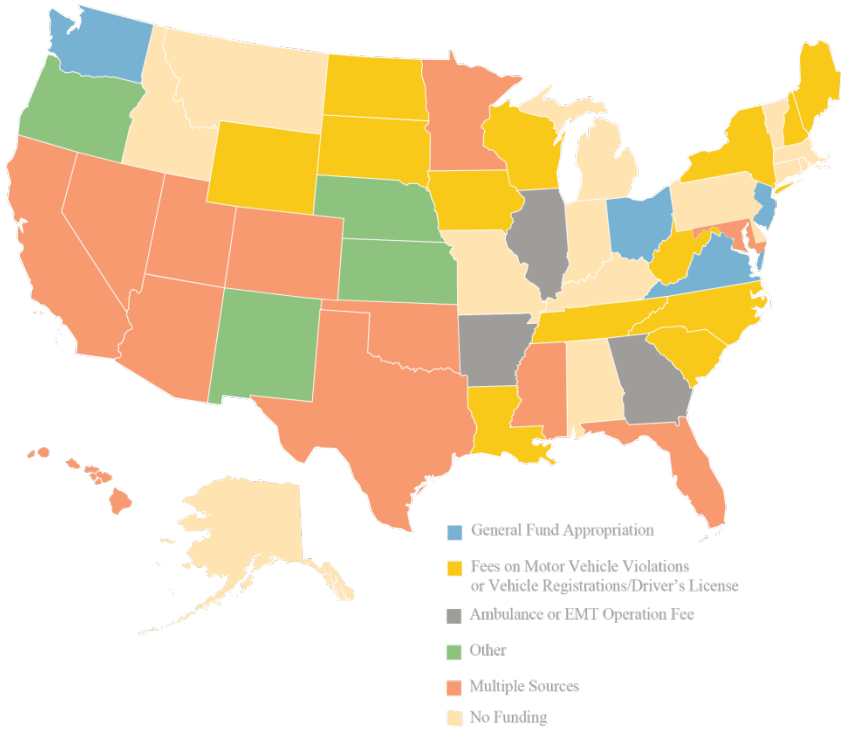
[4] National Conference of State Legislatures. (2012). The right patient, the right place, the right time: A look at trauma and emergency medical services policy in the states. http://www.ncsl.org/documents/health/ncsltraumareport812.pdf.
[5] Ibid.

Figure 5: State Funding Sources for Trauma Care Systems by State



Source: National Conference of State Legislatures. (2012).

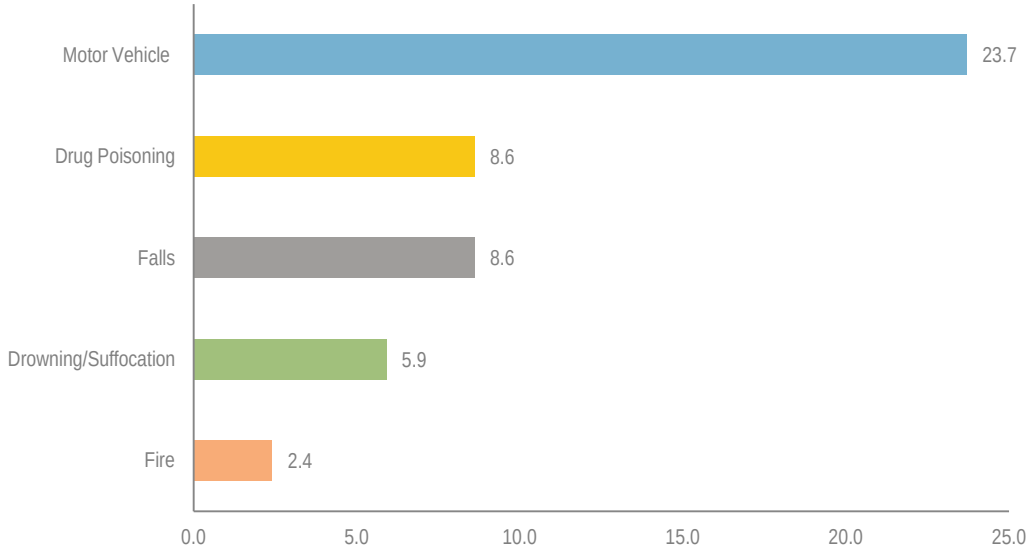
Figure 6: State Funding Sources for Emergency Medical Systems by State



Source: National Conference of State Legislatures. (2012).

Collecting assessments and fees on sources related to the risky behaviors associated with the leading causes of unintentional injuries is a common method to fund trauma and EMS system operations. Motor vehicle crashes, drug poisonings, falls, drowning/suffocation, and fires were the top reasons for unintentional injury deaths in Mississippi from 2008 to 2014 (Figure 7).

Figure 7: Top Causes of Unintentional Injury Death Rates per 100,000 in Mississippi, 2008 - 2014



Source: Mississippi Vital Statistics. (2014).

The State of Louisiana received approval from the Centers for Medicaid and Medicare (CMS) to implement a Medicaid Upper Payment Limit (UPL) program for EMS services. Under this program, Medicaid provides a supplemental payment for emergency medical transportation services rendered by land and air ambulance providers. Governmental entities located in large urban areas are reimbursed at 100% of the provider's average commercial rate and all other providers are reimbursed at the 80% level.[6] Because the state match is paid by the ambulance providers, the program does not use state general funds. The Mississippi Legislature has authorized the use of trauma funds in Mississippi through collaborative efforts between the Division of Medicaid and the State Department of Health to obtain federal Medicaid matching dollars,[7] but the program has not been implemented.

Many states also tap into a variety of federal grant funds to support state trauma systems. Most federal funding sources require state agencies to apply or reapply for grant funds on a frequent basis. The National Association of State Emergency Medical Services Officials (NASEMSO) surveyed state trauma program managers to determine the use of federal grant funding sources for the trauma care system. The most common federal grants used by states to support trauma systems, as reported by the National Conference of State Legislatures (NCSL) from the NASEMSO collected data, are listed in Figure 8.[8]

[6] Brooks, B. (2012). Letter to Mr. Don Gregory, State Medicaid Director, Louisiana Department of Health and Hospitals. http://www.louisianaambulancealliance.org/Resources/Documents/Approval%20letter%2011-23.pdf.
[7] House Bill 1651. (2016). Mississippi Regular Legislative Session.
[8] National Conference of State Legislatures. (2012). The right patient, the right place, the right time: A look at trauma and emergency medical services policy in the states. http://www.ncsl.org/documents/health/ncsltraumareport812.pdf.

Figure 8: Federal Funding used for Trauma Systems by the States

Federal Grants	Administering Agency	Purpose	States
State Offices of Rural Health Policy Grants	U.S. Health Resources and Services Administration	Improve access to rural health care	Delaware, Florida, Indiana, Kansas, Kentucky, Maine, Minnesota, Montana, New Hampshire, New York, North Dakota, Oregon, Pennsylvania, South Dakota, Texas, Utah, Washington, West Virginia, and Wyoming
Emergency Medical Services for Children Grants	U.S. Health Resources and Services Administration	Ensure children receive appropriate emergency medical care	Alabama, Florida, Kentucky, Maryland, Massachusetts, Missouri, Montana, North Carolina, Pennsylvania, Texas, Utah, Washington, and West Virginia
Map 21 Traffic Safety Information System Improvement Grants	National Highway Traffic Safety Administration	Improve traffic safety information and data collection systems	California, Florida, Idaho, Indiana, Kentucky, Maryland, North Dakota, Tennessee, Utah, Washington, and Wyoming
Office of the Assistant Secretary for Preparedness and Response Grants	U.S. Department of Health and Human Services	Prevent, prepare, and respond to public health emergencies and disasters	Alabama, Florida, Illinois, Massachusetts, Michigan, Minnesota, Montana, North Carolina, and Pennsylvania
Preventive Health and Human Services Block Grants	Centers for Disease Control and Prevention	Respond to emerging local public health issues and address the leading causes of death and disability	Iowa, Montana, New Mexico, Texas, Washington, and West Virginia
Department of Homeland Security Grants	U.S. Department for Homeland Security	Protect vital infrastructure and support disaster preparedness	Alabama, Maine, Massachusetts, North Carolina, and Texas
MAP-21 Highway Traffic Safety Grants	National Highway Traffic Safety Administration and the Federal Highway Administration	Support public safety initiatives, including emergency medical services	Alabama, Maryland, Nevada, Utah, and Washington

Source: National Conference of State Legislatures. (2012).

Task Force Findings and Recommendations

The Task Force met twice and examined historical data regarding funding for trauma and EMS, surveyed fourteen trauma center directors and other key system leaders, and considered an array of potential funding mechanisms. The review also revealed data and operational issues that have been incorporated into the findings and recommendations outlined below:

KEY FINDINGS

- The loss of the fee revenue that was redirected to the State General Fund will have significant negative impact on the sustainability of the state's trauma care system if it is not appropriated by the Legislature to the Trauma Program. Trauma and EMS funding needs to be restored to recent levels at a minimum.

- The State Legislature has authorized for several years in the State Department of Health's appropriation bill the use of Trauma Care System funds in a collaborative program with Medicaid to draw down federal matching funds, but the program has not been developed.

- Evaluation of the effectiveness of trauma and EMS services in Mississippi needs to be strengthened through the timely review of data by key stakeholders with an effort to help the Board and elected officials receive clearer clinical effectiveness indicators.

- The trauma care system needs more regular input and involvement from physicians, particularly trauma surgeons.

RECOMMENDATIONS

- Set specific annual funding level goals for the next three years for trauma care and EMS after obtaining input from key stakeholders, including the Mississippi Trauma Advisory Council (MTAC) and the Emergency Medical Services Advisory Council (EMSAC).

- Request the Legislature to restore in statute in 2017 the designation of the assessments on moving traffic violations, the Implied Consent Law, and speeding/reckless/careless driving violations to the Trauma Care System Fund and the EMS Operating Fund.

- Work with the Division of Medicaid to implement in 2017 an EMS Supplemental Payment Program, which would maximize federal funding dollars and increase funds available for all trauma providers (EMS, physicians, and hospitals) through a revised fund distribution model.

- Request the Legislature to establish a task force to study and propose new long-term funding sources. The potential sources should include fees on activities that have been proven to potentially affect causes of trauma injuries, such as alcohol, moving vehicles, and cell phone usage in moving vehicles. In addition, explore the potential of fees on insurance premiums that relate to the significant cost of preparedness required for good trauma care, replacing the insurance activation fees originally included in the funding sources in the 2008 trauma legislation.

- Create a part-time State Trauma Care Medical Director position and appoint a practicing trauma surgeon to serve in a function similar to the position held by the state EMS Medical Director. This position should coordinate efforts with the other trauma medical directors throughout the State and assist the State Health Officer to achieve clear clinical success indicators for the State.

- Authorize the State Health Officer to appoint a Clinical Effectiveness Committee of trauma medical directors, which would meet one or two times a year to adopt and review key clinical indicators submitted through the regions and existing trauma and EMS committees in an effort to help the State Department of Health improve health outcomes. This Committee should assist the MTAC to obtain more surgeon participation and give physician input to the State Health Officer.

- Require the MTAC and the Clinical Effectiveness Committee to present a report annually to the State Board of Health on the performance of the trauma system using the uniform benchmark measures that are selected by the Committee.

- Require each of the trauma regions and the State Department of Health to prepare an annual report to the State Board of Health that includes the clinical effectiveness indicators developed by the Clinical Effectiveness Committee to help the Board and elected officials assess the success of the Trauma System of Care. These reports should be consistently prepared for all regions and approved by the respective trauma medical directors.

- Require State Department of Health staff to work with the trauma regions to coordinate administrative support to achieve the best value to the Trauma System of Care, sharing resources and expertise to minimize administrative costs.