Trauma Report

SB0493/Chapter0342, HB0675/Chapter 341 - Commission to Study Trauma Center Funding in Maryland

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Executive Summary

Maryland trauma centers provide the foundation for optimal care of seriously injured people at any time of day or night. In a constant state of readiness, they ensure that Marylanders have prompt access to treatment that can be lifesaving and provides the best hope for return to health. Trauma centers necessarily make considerable ongoing investments in developing and maintaining sufficient resources and readiness of clinical expertise. Revenue to offset these expenses comes primarily in two forms.

The first is revenue associated with providing patient care. In Maryland, the cost of providing hospital care is determined by a rate-setting process conducted by the Health Services Cost Review Commission (HSCRC). The process facilitates reimbursement to hospitals for patient care based on associated costs. Some operational costs associated with being a trauma center are deliberated by the HSCRC. For example, the cost of having a regulation-mandated trauma program director is considered during the rate-setting process.

Second, trauma centers are eligible for limited supplemental funding through the Trauma Physician Services Fund (Trauma Fund) administered by the Maryland Health Care Commission (MHCC). When the law was passed in 2003, payments from the Trauma Fund were intended to cover uncompensated trauma care, Medicaid underpayments, and to augment on-call payments to specialists for being ready to provide trauma care. Uncompensated care payments, major drivers in the early years, have diminished due to the expansion of insurance coverage through the Affordable Care Act. Having evolved since its inception 20 years ago, the Trauma Fund predominantly supplements costs associated with maintaining physician on-call in recent years.

The Trauma Fund is capitalized by a $2.50 per year ($5 bi-annual) surcharge assessed by the Maryland Motor Vehicles Administration (MVA) on motor vehicle and motorcycle registrations and renewals. The distribution of funds is dictated by statute and has not adapted to the evolution of health care finance. Thus, trauma centers are in greater need of support for on-call and standby expenses than the Trauma Fund can currently provide.

In recognition of the gaps in trauma funding, the General Assembly established the Commission to Study Trauma Center Funding (Trauma Funding Commission).[1] Over the

[1] The legislation establishing the Trauma Funding Commission is available from this link. Summaries for the five meetings of the Trauma Funding Commission are included in Appendix 1.

course of the five Trauma Funding Commission meetings, data analyses, and interval discussions, the following became clearer:

- Incremental costs accrued by trauma centers vary considerably and are complex. To the extent that these expenses are specifically part of routine healthcare delivery costs, expenses should be offset by mechanisms designed to fund health care delivery. When expenses that are unique to Maryland's trauma care delivery model are experienced, the fiscal efficiency measures inherent to Maryland's Total Cost of Care Model (TCOC) discourage including such expenses in hospital global budgets. The Trauma Funding Commission concluded that it is in the public's best interests to fund a trauma system that is in a perpetual state of readiness for the next injured person;
- Some expenses of being a trauma center are considered in the HSCRC rate-setting processes, which should be more explicit and transparent to trauma centers' leadership:
- The Trauma Fund should be revised to provide more flexibility to compensate hospitals for additional on-call and standby expenses that are not recoverable through patient care-generated revenue;
- The foundation of every trauma center includes the readiness of specialists in trauma/general surgery, orthopedic surgery, neurosurgery, and anesthesiology. The expense of maintaining the readiness of these four specialties should be fully funded through hospital rates, or if necessary, from funding external to hospital rate-setting; and
- To meet the objective of ensuring trauma readiness, additional funding of approximately $18.4 million is needed to fund on-call and standby costs. Approximately $10.8 million of the deficit could be generated through adjustments in hospital rates and an additional $7.6 million for on-call payments would be needed from other revenue sources including increases in the MVA motor vehicle registration surcharge. The $18.4 million estimate does not include significant clinical and physician costs at R Adam Cowley Shock Trauma Center (RACSTC), the only trauma hospital in the State.

The Trauma Funding Commission recognizes that including the costs of additional standby and higher incremental trauma expenses in HSCRC's hospital rate structures will challenge several policies mandated by Maryland's TCOC Model contract with the Centers for Medicare and Medicaid Innovation (CMMI). Those challenges dictate that other revenue sources also need consideration if Maryland intends to reduce the funding gap for the hospital-based trauma centers and RACSTC.

Addressing Special Concerns of RACSTC

RACSTC is the only hospital in the country devoted to trauma care and is the anchor for the Maryland trauma system. Representatives from RACSTC emphasized throughout the Trauma Funding Commission meetings that losses at the RACSTC attributable to physician salaries and the clinical costs associated with being the trauma hospital could not be fully offset by incorporating standby and incremental trauma costs in their hospital rates. Many of the losses at RACSTC are a magnitude higher than other more conventional Maryland trauma centers and can be traced to RACSTC's role as a hospital dedicated to trauma care. For example, physicians at RACSTC cannot offset their trauma service obligations by also delivering lucrative non-trauma services and procedures, nor can the RACSTC offset significant facility costs associated with trauma care by performing more lucrative cardiac or joint procedures. Trying to align standby and incremental trauma costs adjustments with RACSTC needs would nearly double the funding needs and potentially compromise needs at the nine trauma centers that operated as part of acute care hospitals. Additional sources of reimbursement must be identified to offset the significant needs at RACSTC.

Addressing Special Concerns of Level II Trauma Centers

The four Level II trauma centers treated 9,868 (41%) of the 24,112 adult trauma patients in Maryland. These four Level II centers treat a greater share of trauma patients than the combined market share (26%) at RACSTC and the Johns Hopkins Level I Adult Trauma Center. A big concern of Level II centers is physician readiness expense. Level II trauma centers are required to have a trauma surgeon and an anesthesiologist in the hospital and immediately available to treat trauma patients. Orthopedics and neurosurgeons must be on-call and able to arrive at the trauma center within 30 minutes. Some of the Level II trauma centers argued for greater flexibility in how a trauma center configures its physician trauma readiness requirements. One Level II center felt a Postgraduate Year Four (PGY-4) resident in-house with a trauma surgeon or anesthesiologist on-call, instead of at the trauma center could potentially offer some cost-savings to the hospital without compromising clinical care. Allowing trauma surgeons and anesthesiologists to provide some on-call hours would increase the direct payments from the Trauma Fund and reduce the costs of standby, which are accounted for in HSCRC-approved hospital rates. Multiple Level II trauma centers expressed a preference for direct payments from the Trauma Fund as opposed to having those costs reflected in hospital rates.

Addressing Special Concerns of Level III Trauma Centers

The trauma centers in more rural parts of Maryland expressed continuing concern about the costs of operating a trauma center. The Trauma Funding Commission recognizes the critical role they play. Staff also observed that some of the concerns about trauma service reflect broader concerns about the adequacy of payment for rural hospitals more broadly. The HSCRC has been responsive to those concerns.

In the summer of 2023, the HSCRC agreed to include $35.7 million in Meritus hospital rates and $28.9 million in TidalHealth hospital rates if the respective hospitals agreed not to file a full rate application prior to January 1, 2025, given that the adjustments awarded in the summer of 2023 were permanent. Both hospitals agreed to the restriction. TidalHealth and UPMC Western Maryland have continued to raise concerns about trauma funding during the Trauma Funding Commission meetings. Their communications to the Trauma Funding Commission are included in Appendix 3. The Trauma Funding Commission as well as the Maryland Institute for Emergency Medical Services Systems (MIEMSS), MHCC, and HSCRC, are committed to working with these hospitals to address the challenges of delivering high-quality health care in these communities.

Introduction and Charge

The challenge for maintaining effective trauma centers hinges on the financial stability and sustainability of the entire system. Due to the unpredictable nature of the arrival of the next injured patient, trauma readiness represents a key requirement for a trauma center. This readiness also incurs a defined, fixed cost for the trauma center that is independent of the number of injured patients who arrive at the facility. The concept of readiness poses challenges to traditional billings and reimbursements and to hospital global budgets that are a key feature of the Maryland TCOC Model. The contention concern that the Maryland TCOC Model and the several predecessor hospital payment models may have not fully accounted for trauma center costs has raised concerns about the adequacy of support for Maryland's trauma centers, essential components of the emergency health care infrastructure.

The General Assembly enacted SB0493/Chapter0342, HB0675/Chapter 341, *Commission to Study Trauma Center Funding in Maryland*, which established the Trauma Funding Commission to examine the adequacy of trauma center funding across the State for operating, capital, and workforce costs. MIEMSS and MHCC were directed to jointly

staff the Trauma Funding Commission.[2] The creation of the Trauma Funding Commission reflects Maryland policymakers' recognition that trauma center hospitals face unique challenges as well as their importance to the public. The Trauma Funding Commission is comprised of a representative from the Maryland Senate and the Maryland House of Delegates; Secretary of Health; Executive Director of MIEMSS; Executive Director of the MHCC, a representative from the HSCRC; and six representatives from trauma centers, one of which is a representative of TraumaNet. The Trauma Funding Commission Co-chairs appointed Dr. Ray Fang as the physician adviser to the Trauma Funding Commission. The Trauma Funding Commission was charged to make recommendations regarding:

- Changes in staffing, recruitment, compensation, or other factors that would impact the funding needed to operate a trauma center in the State;
- Changes to approved uses of the Trauma Fund over time;
- The amount of funding needed to adequately fund trauma centers in the State;
- The funding mechanisms available to adequately fund trauma centers; and
- Funding criteria that would impact the receipt of funds by existing or new trauma centers.

Funding of trauma systems in today's health care environment remains a work in progress. It requires introspective assessments of local, regional, and statewide needs. Persistent interaction with legislative teams and trauma leadership is needed to initiate and maintain system level funding. Continued documentation of efficiency and outcomes allows involved groups to verify the return on investment and to continue to justify funding.

Maryland Trauma System Overview

Serious injury is a problem that can affect every person at nearly any time. Marylanders experience serious injuries every hour of every day. Ensuring that injured people experience the best chances for optimal health outcomes, recovering to be productive community members, requires a systematic approach to their care. The foundation of timely, expert care is the Maryland trauma system. At its core are nine adult and one pediatric in-state trauma centers, with the expertise and resources available 24/7 to treat severely injured people.

[2] Trauma Funding Commission staff refers to the MIEMSS and MHCC staff that supported the Commission to Study Trauma Center Funding in Maryland's work.

Maryland's trauma centers are designated by MIEMSS, an independent State agency governed by an 11-member State Emergency Medical Services (EMS) Board appointed by the Governor. MIEMSS designates trauma centers and specialty referral centers based on designation standards promulgated by regulation, which first began in 1997.[3] (ref COMAR 30.08 et seq.) Prior to the development of formal state trauma designation standards, Maryland's trauma centers were informally organized based upon their capabilities and location.

Maryland's trauma center designation standards closely reflect standards identified by the American College of Surgeons (ACS) in their "Optimal Resources of the Care of the Injured Patient" guidelines that set national standards for all levels of trauma centers.[4] These guidelines include standards for trauma center personnel, resources, policies, and practices. Research has shown that trauma centers that meet these standards are able to deliver better clinical care and trauma patient outcomes.

Although Maryland's trauma center standards closely reflect national ACS standards, Maryland's trauma center standards have been tailored to meet the needs and capabilities of the Maryland trauma system. For example, while the ACS standards peg the highest-level trauma designation at the Level I trauma center, the unique capabilities of the RACSTC exceed the ACS Level I standards and, as a result, the RACSTC is designated by statute as Maryland's "Primary Adult Clinical Resource Center" and the Maryland standards applicable to RACSTC exceed the ACS national standards (ref 13-514).

Unlike the ACS standards, however, Maryland's trauma center designation standards are developed via a consensus process involving all the designated trauma centers, MIEMSS, and the State EMS Board. Typically, as advancements in trauma treatment evolve and the ACS standards are modified in response, MIEMSS convenes a workgroup comprised of physician and trauma nurse coordinator representatives from Maryland trauma centers to review the modified ACS standards and determine which would be appropriate to adopt for Maryland. Proposed changes must be subsequently reviewed and approved by the State EMS Board and then promulgated as regulations. In the next 18 months, MIEMSS anticipates repeating the consensus and regulatory process in response to changes in the national trauma designation standards released by the ACS in 2022. The most recent updates to COMAR 30.08.05 were published in 2023.

[3] Under COMAR regulations, MIEMSS also designates Perinatal Referral Centers, Primary and Comprehensive Stroke Centers, Cardiac Interventional Centers, and Base Station Hospitals.
[4] American College of Surgeons, "Resources for Optimal Care of the Injured Patients", accessible at https://www.facs.org/quality-programs/trauma/quality/verification-review-and-consultation-program/standards/

Maryland has four levels of adult trauma centers.

The Maryland Level III Trauma Centers

Level III trauma centers are advanced community hospitals with a broad spectrum of clinical services that enable them to provide optimal care for uncomplicated trauma patients, or initiate life-saving stabilizing care for complex patients who require transfer to more comprehensive trauma centers. They are invaluable as gateways to timely critical care and often obviate the need for injured people to be transferred hours away from their homes to receive the care they need. They include:

- Meritus Medical Center, Hagerstown;
- TidalHealth Peninsula Regional, Salisbury; and
- UPMC Western Maryland, Cumberland.

Collectively, in FY 2023 they cared for 5,950 trauma patients according to the Maryland Trauma Registry maintained by MIEMSS.

The Maryland Level II Trauma Centers

Level II trauma centers provide care to all but the most complex trauma patients. They represent the next echelon in trauma care sophistication and include:

- Lifebridge Sinai Hospital of Baltimore, Baltimore;
- Suburban Hospital – Johns Hopkins Medicine, Bethesda;
- Johns Hopkins Bayview Medical Center, Baltimore; and
- University of Maryland Capital Regional Medical Center, Largo.

Collectively, in FY 2023 they cared for 9,868 trauma patients according to the Maryland Trauma Registry.

The Maryland Level I Trauma Center

The Level I trauma center cares for trauma patients with complicated problems and serves as a referral center. As a large teaching hospital, it educates the next generation of trauma practitioners and conducts research to advance the treatment of injuries and their consequences and includes:

- Johns Hopkins Hospital, Baltimore.

In FY 2023 the Level I trauma center treated 2,647 patients.

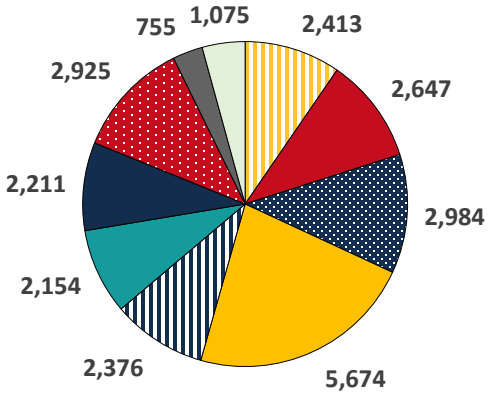
The Primary Adult Resource Center (PARC)

The Primary Adult Resource Center (PARC) is defined in Maryland statute and designated as the R Adams Cowley Shock Trauma Center (RACSTC) at the University of Maryland Medical Center (UMMC). The RACSTC treats all types of injured patients, particularly the most complicated. Dedicated exclusively to the treatment of physiologic shock and trauma, it possesses unique expertise and resources to optimally care for complex cases. As Maryland's PARC, approximately 32% of RACSTC patients are transferred from community hospitals, Level II, and Level III trauma centers. Clinicians come to RACSTC from throughout the United States, and the world, to learn about treating the most severely injured people. Research conducted at RACSTC adds to the science of trauma care. In FY 2023, the RACSTC cared for 5,674 patients, according to the Maryland Trauma Registry. There is no other state in the nation with a similarly designated facility that serves as the clinical, academic and research resource for trauma care in the state.

Pediatric Trauma Center

Maryland has one in-state pediatric trauma center at the Johns Hopkins Children's Center, Baltimore. It is a Level I trauma center with special expertise and resources to care for injured children. In FY 2023, the Johns Hopkins Children's Center cared for 1,075 trauma patients, according to the Maryland Trauma Registry.

Figure 1: Trauma Patient Distribution FY 2023



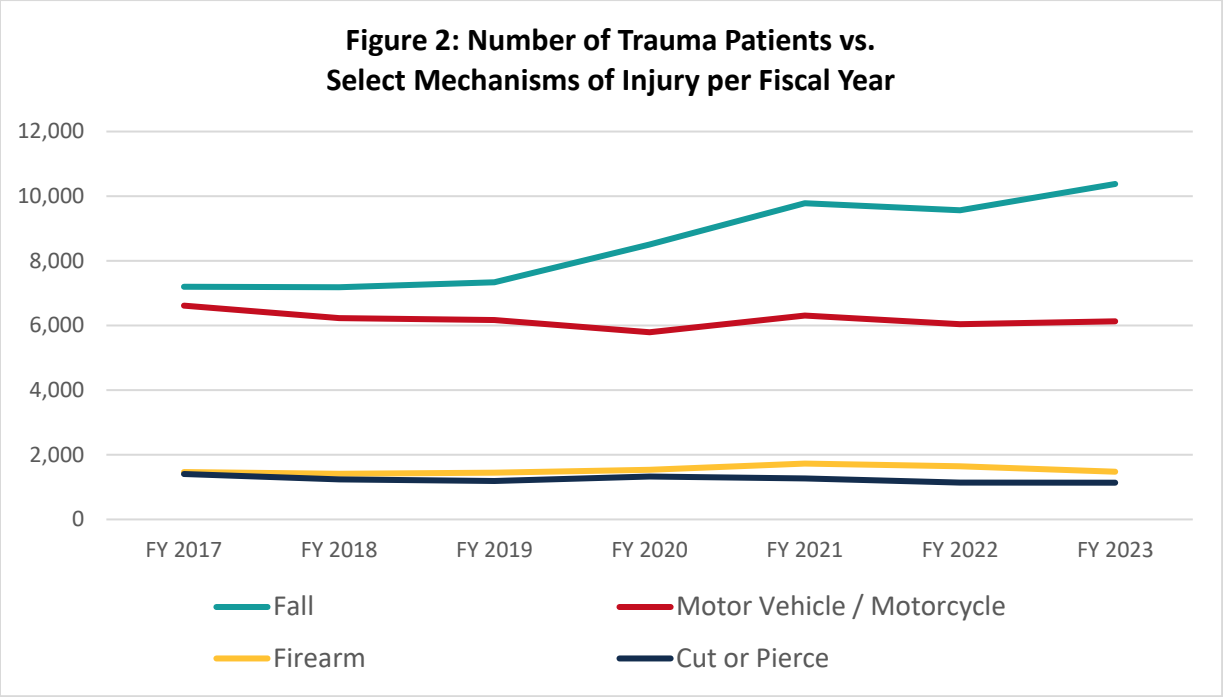
JH Bayview Medical Center
Johns Hopkins
Meritus Medical Center
R Adams Cowley Shock Trauma Center
Sinai Hospital of Baltimore
Suburban Hospital
Tidal Health Peninsula Regional
UM Capital Region Medical Center
UPMC Western Maryland
Johns Hopkins Children's Center

An overview of Maryland's trauma system would be incomplete without acknowledging the expertise and resources of the Curtis National Hand Center at MedStar Union Memorial Hospital, Baltimore. It is available to patients with isolated injuries to hands and upper extremities. Similarly, the Wilmer Eye Institute at The Johns Hopkins Hospital provides expert care to patients with eye injuries and the Burn Center at Johns Hopkins Bayview provides comprehensive treatment for patients with catastrophic burn injuries.

It is noteworthy that while the focus of this report is in-state trauma centers, Maryland's system to care for injured people includes collaborations with nearby centers in adjacent jurisdictions. Perhaps the most notable is Children's National Hospital, which last year cared for 851 injured Maryland children.

Each echelon of trauma centers has specific requirements related to the readiness of clinical specialties. Examples include a trauma resuscitation team, which is expected to be present upon patient arrival at the PARC, within 15 minutes of request at Level I and II centers, and within 30 minutes of request at Level III centers. The same criteria exist for general/trauma surgery. In addition to general surgery, essential services at all trauma centers include anesthesiology (in-house), neurosurgery, orthopedic surgery, obstetrics/gynecology, thoracic surgery, and urologic surgery. The spectrum of additional surgical and non-surgical specialties that are to be available is commensurate with the sophistication of the respective hospitals. In other words, they are services such hospitals would be reasonably expected to provide.

Injuries related to falls, often among an older population, represent approximately 47% of trauma patients. Approximately 25% of trauma cases involve injuries from a motor vehicle or motorcycle crash. Another 7% of serious injuries, statewide, are the result of firearms.



The Impact of Firearms Injuries on Trauma Center Operations

The Centers for Disease Control and Prevention (CDC), the American Medical Association, the American Hospital Association, the American Public Health Association, and the American Association of Medical Colleges have made strong statements that gun violence constitutes a public health crisis[5][6][7][8][9] Those calls have been echoed here in Maryland by local health departments, and through research on the issue by schools of public health at Johns Hopkins and the University of Maryland. Admissions where the mechanism of injury is a firearm include assaults, accident injuries, and suicide attempts. Firearms are the most lethal method of suicide attempts, and about half of suicide attempts take place within 10 minutes of the current suicide

[5] Factsheet by CDC at https://www.cdc.gov/violenceprevention/firearms/index.html, see also statement of CDC Director Walensky CDC on gun violence on August 28, 2021 https://www.cnn.com/2021/08/27/health/cdc-gun-research-walensky/index.html

[6] Statement of the AMA on June 14, 2016, https://www.ama-assn.org/press-center/press-releases/ama-calls-gun-violence-public-health-crisis

[7] Fact Sheet on Gun Violence from APHA, https://www.apha.org/-/media/files/pdf/factsheets/200221_gun_violence_fact_sheet.ashx

[8] State of AAMC on June 2, 2022, https://www.aamc.org/news/crossroads-addressing-gun-violence-public-health-crisis

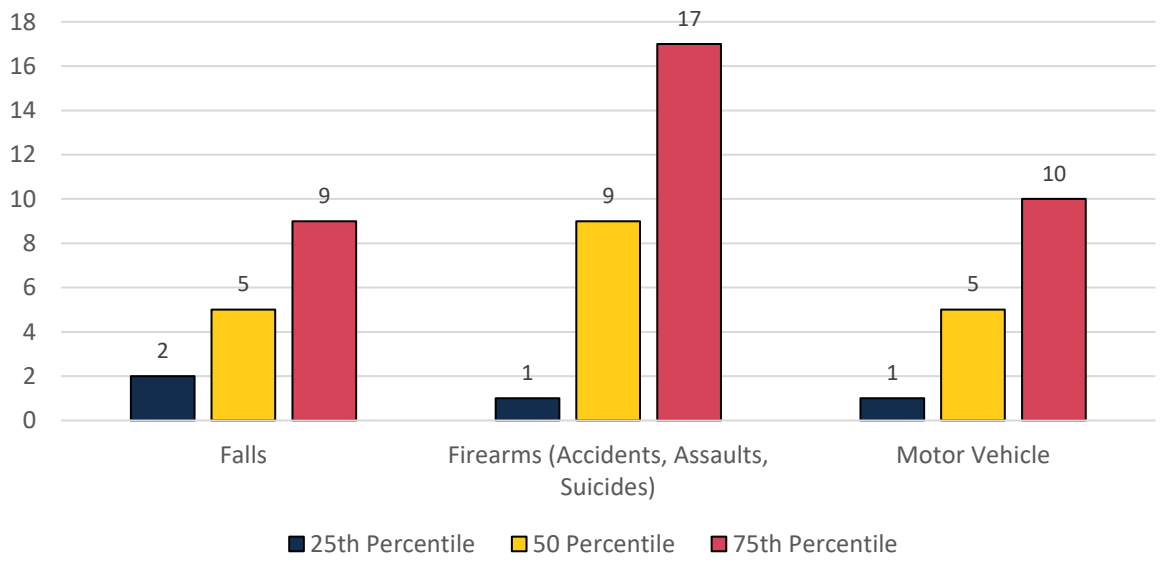
[9] Statement of the AHA on June 24, 2020 https://www.aha.org/public-health-approach-addressing-gun-violence#:~:text=Gun%20violence%20has%20a%20significant,communities%20and%20workplaces%20are%20safe.

thought.[10] Having access to firearms is a suicide risk factor. The availability of firearms has been linked to suicides in several peer-reviewed studies.

The direct and immediate outcome of gun violence has a dramatic impact on Maryland's trauma system. Firearm-related injuries present special challenges to the trauma system and to the trauma centers who receive victims disproportionately. Injuries are often of a nature that demand immediate life-saving interventions. Thus, the trauma centers must maintain a state of maximum readiness.

One tool to document the extent of injury is the Injury Severity Score (ISS), which is determined only after all potential injuries have been identified and evaluated. Because of the components of its calculation, summing injuries from body anatomic regions, it often under-values injuries such as gunshot wounds that affect only a single anatomic region. Nevertheless, firearm-related injuries result in greater ISS scores than fall and motor vehicle-related injuries. More than 25% of firearm-related injuries result in an ISS score greater than 17 (scores greater than 15 indicate major trauma).

Figure 2: FY 2023 Injury Severity Scores vs. Selected Mechanism of Injury



An additional indicator of injury severity is the final patient disposition from the trauma center. During FY 2023, 16.4% of people with firearm-related injuries died after arriving

[10] Kaiser Family Foundation, "Do States with Easier Access to Guns have More Suicide Deaths by Firearm?, Jul 18, 2022, accessed at https://www.kff.org/mental-health/issue-brief/do-states-with-easier-access-to-guns-have-more-suicide-deaths-by-firearm/

at a trauma center, compared to 2.5% of patients who fell and 1.8% of motor vehicle occupants as shown in Table 1.

Table 1: Discharge Location for Patients with Selected Mechanisms of Injury for FY 2023

Discharge Location	Fall	Firearm	Motor Vehicle Occupant
Died/Morgue	2.5%	16.4%	1.8%
Inpatient Rehab Facility	8.3%	4.6%	4.5%
Skilled Nursing Facility	17.5%	1.4%	3.3%
Specialty Referral Center	2.4%	2.7%	2.7%
Home with Services	8.1%	6.3%	4.7%
Home	54.2%	61.5%	78.9%
Hospice	1.4%	0.0%	0.1%
Jail	0.1%	2.9%	0.4%
Other	5.5%	4.2%	3.6%

Source: MIEMSS analysis of Trauma Registry 2022-23 data.

The costs of firearm injuries are disproportionately higher than the number of firearm injuries, which are themselves too high. Table 2 lists trends in inpatient stays for patients injured by firearms from 2018-2022. Although inpatient care is the major contributor to the high costs of treatment for firearms injuries, outpatient charges are also significant. In the period from 2019 through 2022 average costs for the initial stay increased from $54,737 to $72,513 in 2022. The additional trauma admission is far from the total cost to the system or the likely lifetime health care and disability costs to the victims. Note that injuries due to firearms are sometimes treated at community hospitals that are not trauma centers. In some instances, these cases are transferred to a trauma center after the medical staff has stabilized the patients. In other cases, the community hospital provides the entire course of treatment and sadly in other cases the patient dies before transfer. Treatment at a community hospital is more likely if the patient is transported to a hospital by the public, not EMS. In 2021 for example, 218 patients were treated at community hospitals for a part or all their care.

Due to data limitations among the principal data sources, it was not possible to link the total costs of trauma episodes which would include inpatient, outpatient, rehabilitation care, physician, and pharmacy. The Trauma Funding Commission will recommend changes to these data systems to support the construction of trauma episodes.

Table 2: Patients Admitted for Inpatient Treatment Due to A Firearm Injury

Hospital Name	2019		2020		2021		2022	
	Cases	Average Charges	Cases	Average Charges	Cases	Average Charges	Cases	Average Charges
Johns Hopkins Hospital	176	57,655	174	64,378	156	65,974	209	62,657
Johns Hopkins Bayview	56	33,394	55	40,326	55	63,327	54	50,040
LifeBridge Sinai	82	43,231	84	51,862	94	49,864	71	48,760
John Hopkins Suburban Hospital	18	13,962	20	43,140	30	23,481	18	74,457
UM Capital Region	134	43,171	134	55,477	167	55,305	140	77,386
Meritus Medical Center	14	14,975	5	17,104	5	20,804	12	24,626
TidalHealth Peninsula Regional	13	22,763	18	33,580	5	23,374	16	27,962
UPMC Western Maryland	5	22,657	5	23,556	5	29,872	*	12,518
RACSTC	263	73,908	274	77,031	288	102,779	295	104,619
Total Trauma Centers	**761**	**54,737**	**769**	**62,402**	**805**	**72,513**	**815**	**82,186**
Total Non-Trauma Hospitals	**191**		**186**		**218**		**367**	**40,074**

Source: MHCC and HSCRC analyses of the HSCRC Hospital Discharge Dataset

The Financial Performance of Trauma Center Hospitals

The commitment to provide state-of-the-art trauma care, which by its nature is unscheduled, demands a perpetual state of trauma center readiness to respond optimally to the needs of seriously injured people. It is the constant need for preparedness that drives costs and imposes financial stress on the health systems. These issues were the impetus for the work of the Trauma Funding Commission and this report.

The topline financial performance of trauma centers generally tracks with overall hospital performance to date across Maryland, with some notable exceptions. As shown in Table 3, trauma center hospitals overall rate-regulated operating margins are slightly higher than all Maryland hospitals on average. The services captured in the rate-regulated services account for most of the revenue at Maryland hospitals. On the other hand, the operating margins on the non-rate regulated services, which includes physician services, are worse. All trauma center hospitals, except the University of Maryland Medical System (UMMS) and Johns Hopkins academic centers, reported unfavorable performance on non-rate regulated services. When RACSTC is examined separately from the UMMS Academic Center, a key driver of its overall performance is the substantial losses for the faculty physician practice that staff RACSTC.

Non-rate regulated services also include outpatient services and surgeries delivered off the hospital campus. Rates for these services are determined through negotiation with commercial payers and through public payers' payment models. Certain incentives in the Maryland TCOC Model incentivize health systems to expand these services. There is

no guarantee that these unregulated services will be profitable, unlike rate-regulated services where HSCRC is required to establish sufficient revenue to allow reasonably efficient hospitals to generate positive net revenue.

Losses on physician services are especially noteworthy because the cost of physician services is cited by hospitals as a driver behind financial losses in the trauma service. Losses occur because the revenue on physician services is less than the compensation that the health system pays the physicians in the health system-owned practices. Losses on physician services must be offset from other revenue sources. Notably, non-regulated operating margins overall are strongly negative.

The analysis of overall hospital performance can be an important anchor to understanding the challenges of operating a trauma center. Except for RACSTC, audited standalone profit and loss statements for trauma centers are not collected by HSCRC or other federal or state regulatory agencies. The audited financial data from RACSTC provides a signal that most trauma centers cannot recover sufficient revenue to cover physician compensation for system owned physician practices.

Health systems are not accountable for the compensation of independent practices, but they typically compensate these physicians through on-call and standby stipends. As discussed below, subsidies on standby and on-call payments are key funding streams in the Maryland Trauma Physician Services Fund ("Trauma Fund"). On-call and standby are useful concepts for understanding the physician readiness challenges faced by trauma center hospitals.[11]

[11] Physician standby and on-call obligations are often requirements of credentialing arrangements between physicians in private practice and hospitals. In the late 1990s and 2000s, compensation for meeting these obligations became routine. As health systems acquired physician practices, specific payments for standby and on-call were incorporated in the employed physicians' compensation packages and employment contracts. CMS and other payers allow standby payments made by hospitals to be added to hospital costs. Payers do not allow on-call costs to be included in hospital costs. Thus, allowed standby costs are included in hospital rates and allowed on-call costs are paid directly from the Trauma Physician Services Fund.

Table 3: Financial Performance at Maryland Trauma Center Hospitals in FY 2023

Hospital Name	Rate-Regulated Operating Margin	Non-Rate Regulated Operating Margin	Total Regulated and Unregulated Operating Margin	Total Margin
Johns Hopkins Hospital	1.6%	9.0%	3.2%	3.8%
Johns Hopkins Bayview	1.4%	-6.0%	0.4%	-0.4%
Johns Hopkins Suburban	4.1%	-180.5%	-3.9%	4.1%
LifeBridge Sinai	10.7%	-57.8%	0.4%	4.4%
Meritus Health System	14.9%	-48.0%	10.1%	18.3%
TidalHealth Peninsula Reg.	11.9%	-153.6%	3.0%	9.4%
UM Capital Region	7.4%	-2,447.2%	-5.1%	-4.7%
UMMS & RACSTC	3.1%	7.9%	3.7%	5.1%
UPMS Western Maryland	17.9%	-60.5%	4.9%	5.5%
Trauma Center Hospitals (hospital-weighted)	8.1%	-326.3%	1.9%	5.1%
Statewide	**6.6%**	**-48.4%**	**0.0%**	**2.4%**

Note: If RACSTC performance is examined separately from UMMS main campus, its rate regulated profit margin is 17.5% and its unregulated operating margin is -193.8% with an overall operating margin of 1.9%.

Note: HSCRC senior leadership notes that margins are turning upwards in FY2024. Many analyses suppressed 2022 and 2023 financial results due to hospitals overreliance on expensive contract nursing and heightened length of stay, both of which appear to be abating as the industry recovers from the effects of the COVID-19 pandemic.

Source: FY 2023 Annual Filing Data (UPMC Western MD is from the FY 2022 Annual Filing Data because the FY 2023 filing is not yet available).

A trauma center can have a disproportionate impact on the cost of operations because of high readiness costs and significant clinical costs of treating trauma patients. However, inpatient trauma discharges and revenue represent a small share of patient volume and operating revenue. Table 4 presents financial and utilization information for trauma center hospitals. Trauma inpatient discharges constitute about 8.1% of total inpatient discharges and 13.4% of total inpatient revenue for trauma center hospitals. These small shares somewhat overstate the share of discharges and revenue attributed to inpatient trauma patients because RACSTC, the busiest and most sophisticated trauma center in Maryland, is a dedicated trauma hospital. Among other trauma center hospitals, LifeBridge Sinai has the highest share of inpatient discharges (18.1%) and inpatient revenue charges (22.1%) attributable to their trauma service revenue. Comparatively, approximately 2.6% of inpatient discharges and 2.7% of inpatient revenue charges at Johns Hopkins Hospital are attributable to their Level I trauma center and pediatric trauma centers.

Table 4: Total Trauma Inpatient Discharges and Inpatient Revenue for Maryland Trauma Center Hospitals

Hospital Name	Discharges			Charges		
	Total Inpatient Discharges	Trauma Inpatient Discharges	Trauma Share of Inpatient Discharges	Total Inpatient Charges	Trauma Inpatient Charges	Trauma Share of Inpatient Revenue
Meritus Health System	15,846	860	5.4%	$231,911,303	$19,508,739	8.4%
UM Capital Region	12,609	1,129	9.0%	$306,048,155	$58,984,989	19.3%
Johns Hopkins Hospital	41,451	1,073	2.6%	$1,782,500,189	$48,480,072	2.7%
Lifebridge Sinai	16,448	2,974	18.1%	$522,653,037	$115,406,982	22.1%
TidalHealth Peninsula	17,922	705	3.9%	$323,837,815	$15,835,352	4.9%
Johns Hopkins Suburban	11,308	626	5.5%	$239,948,924	$12,693,705	5.3%
UPMC Western Maryland	9,798	55	0.6%	$179,964,524	$1,218,867	0.7%
Johns Hopkins Bayview	16,827	858	5.1%	$463,834,473	$36,912,751	8.0%
RACSTC	3,525	3,525	100.0%	$268,933,400	$268,933,400	100.0%
Total	**145,734**	**11,805**	**8.1%**	**$4,319,631,818**	**$577,974,856**	**13.4%**

Source: MHCC analysis of the FY 2022 HSCRC Inpatient and Outpatient Discharge Datasets.

Note: Trauma discharges are defined as discharge records with a R_FLAG='R' or R_FLAG='S'. This flag is not audited by HSCRC and undercounts or overcounts of volume and charges may occur.

Background/History on the Maryland Trauma Physician Services Fund

Providing additional funding sources for the Maryland Trauma Centers has been a two-decade long effort. The Trauma Fund covers the costs of medical care provided by trauma physicians at Maryland's designated trauma centers for uncompensated care, Medicaid-enrolled patients, trauma related on-call and standby expenses, and trauma equipment grants. The Fund is financed through a $5 surcharge on biennial motor vehicle registrations and renewals ($2.50 per year).

The concept of linking funding for emergency medical care to motor vehicle registration began with legislation in 1992 that created the Maryland Emergency Medical System Operations Fund (MEMSOF). The MEMSOF is currently funded by a $29 surcharge on biennial motor vehicle registrations ($14.50 per year). Additionally, a modest portion of funding originates as some of the fines levied for motor vehicle moving violations. To maintain MEMSOF solvency, the surcharge has been adjusted via statute approximately every 10 years. Parenthetically, MEMSOF is now in need of augmentation to avoid insolvency during FY 2026. The MEMSOF funds the infrastructure of Maryland's EMS system, including the operating budgets of MIEMSS, the Maryland Fire and Rescue Institute and 80% of the Maryland State Police Aviation Command (the remaining 20% is supported by general funds). Additionally, MEMSOF currently provides $3.7M annually to RACSTC to offset expenses related to operating room preparedness, and the

Go-Team, a critical care team that deploys to extraordinary injury scenes, typically involving complex or prolonged victim extrication. Finally, $15M is distributed to counties in the form of "Amoss funds," in honor of the late Senator William Amoss. Amoss funds are administered by the Maryland Department of Emergency Management and distributed based on the proportions of property tax receipts for counties to purchase fire and rescue equipment and make capital improvements.

When the General Assembly created the Trauma Physician Services Fund, the motor vehicle surcharge was added to what was already being collected for MEMSOF. A specific amount of the surcharge, what was already being collected, was directed to MEMSOF, and a specific amount was directed to the Trauma Physician Services Fund. The amounts are defined in statute.

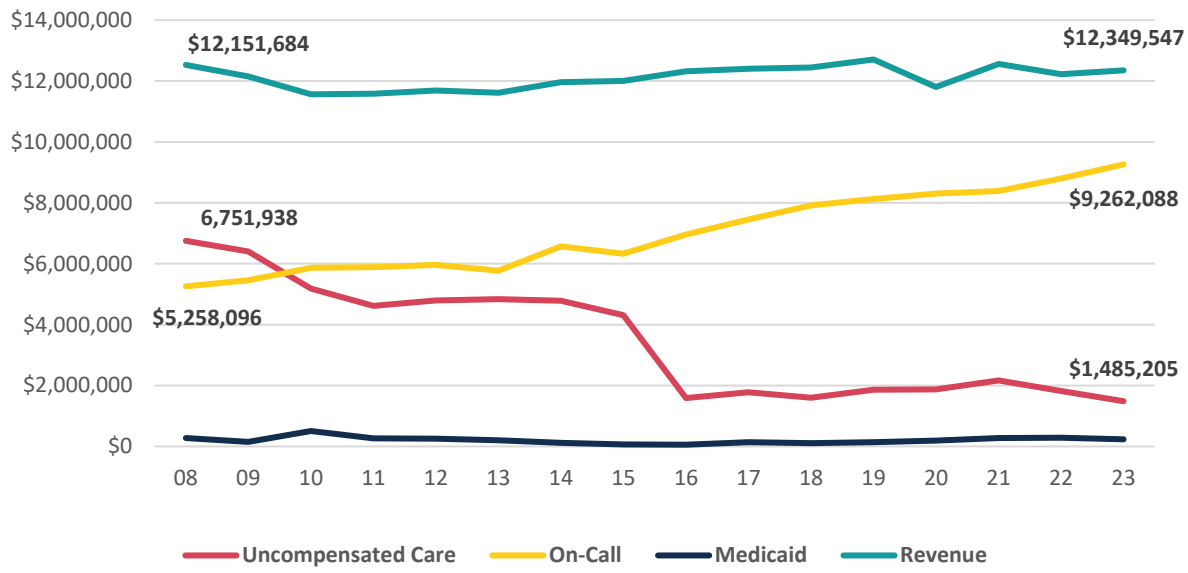
During the 2003 legislative session, the Maryland General Assembly enacted legislation that created the Trauma Fund, which focused primarily on funding trauma-related physician expenses that could not be included in hospital rates. Hospital expenses that are included in hospital rates are typically referred to as "Part A" costs. Physician-related costs, which cannot be accounted for in hospital rates are typically referred to as "Part B" costs. The 2003 legislation requires that the Trauma Fund reimburse trauma physicians for uncompensated care at 100% of Medicare fee levels and raises Medicaid payments for trauma service to 100% of the Medicare rate. The legislation established a formula for reimbursing trauma centers for trauma-related on-call expenses for trauma surgeons, orthopedists, neurosurgeons, and anesthesiologists because on-call costs are not allowable hospital expenses (Part A).[12] The legislation directed the HSCRC to allow trauma center hospitals to include trauma-related standby expenses, which are recognized as allowable Part A costs, in HSCRC-approved hospital rates.

The 2003 legislation was a balancing act among the competing needs of Maryland Trauma Centers. Level III and some Level II Trauma Centers benefited from on-call payments. Some Level II, Level I, and PARC primarily benefited from uncompensated care and Medicaid underpayment provisions. Because the legislation aimed to benefit different needs, the payment formulas in the statute are very specific and gives MHCC virtually no flexibility in adjusting the payment formula. Some recognized trauma costs were not included in the 2003 legislation because of concerns about the adequacy of the revenue source.

[12] On-call requirements under MIEMSS standards for Maryland trauma centers require that physicians be available to respond within 30 minutes. Standby requirements state that the physician must be at the facility, ready to respond. Level III trauma centers may operate with all trauma physicians on-call, though a center is permitted to have physicians on standby. Level II centers must have trauma surgeons on standby status, but other physicians are permitted to be on-call. Level I centers must always have physicians in all MIEMSS-designated specialties on-site.

To date, the MVA revenue source has been adequate to meet allowed needs. The specificity of the payment formulas set in the statute gives MHCC little flexibility to increase or decrease payments. This limitation has proven to be problematic when Trauma Fund surpluses develop because the MHCC can only adjust the funding formula for uncompensated care. Thus, there are unmet needs that the Trauma Fund is currently not allowed to meet. The MHCC is not able to modify funding specifications when broader national or state health policy changes are adopted that affect the Trauma Fund. Figure 3 presents the trend in revenue collected by the MVA from 2008-2023 and payments for the three primary payment streams.

Figure 3: Trends in Trauma Fund Revenue and Payments 2008-23



Source: 2008-2023 Maryland Trauma Physician Service Fund Annual Report

The Affordable Care Act adopted in 2014 expanded access to private insurance and Medicaid. Since 2014 uncompensated care payments have declined from $5.2 million in FY 2013 to approximately $1.8 million in FY 2023. Increasing on-call payments have absorbed some, but not all the surpluses. Consequently, a significant Trauma Fund reserve developed. The Trauma Fund reserve stood at $7.3 million at FY 2023 closing and is projected to fall slightly in 2024 to $6.8 million (see Table 6).

Trauma providers have been attentive to the Trauma Fund reserve and have sought to expand eligibility when new needs arise. The statute has been modified multiple times since passage in 2003; the most significant changes expanded eligibility for Trauma Fund payments to other classes of trauma physicians and increased payment levels for classes of providers. The most recent change occurred in the 2019 session when the General

Assembly enacted legislation that made RACSTC eligible for standby payments. This legislation directed MHCC to subsidize costs incurred for standby and on-call for trauma surgeons, orthopedic surgeons, neurosurgeons, and anesthesiologists at PARC beginning in FY 2020. Table 5 presents the trend in Trauma Fund revenue and payments from 2004 to 2023.

Table 5: Revenue and Payments Since Inception of the Trauma Fund (2004-2023)

Fiscal Year	Total Revenue	Total Payment	Uncompensated	On-Call	Medicaid Payment	Children	Admin	Trauma Grants
2004	$10,441,648	$2,561,402	$461,402	$2,100,000				
2005	$22,097,012	$4,530,527	$1,682,973	$2,300,338	$230,966	$206,250	$110,000	
2006	$12,553,359	$7,268,205	$2,646,319	$3,748,065	$536,115	$275,000	$62,706	
2007	$12,963,424	$10,238,099	$4,724,998	$4,697,218	$323,277	$275,000	$217,606	
2008	$12,530,847	$13,116,122	$6,751,938	$5,258,096	$153,920	$490,000	$462,168	
2009	$12,151,684	$13,011,235	$6,403,698	$5,456,251	$153,920	$490,000	$507,366	
2010	$11,564,059	$12,639,481	$5,135,510	$5,865,210	$506,408	$542,800	$389,556	$199,997
2011	$11,584,887	$12,068,730	$4,600,000	$6,400,000	$ 267,289	$542,800	$258,641	
2012	$11,683,370	$12,157,420	$4,794,732	$5,961,370	$ 255,372	$542,800	$304,575	$298,571
2013	$11,609,441	$11,643,380	$4,834,368	$5,774,302	$ 197,481	$542,800	$294,429	
2014	$11,957,131	$12,817,406	$4,786,633	$6,568,473	$ 118,961	$542,800	$402,308	$398,231
2015	$11,999,199	$11,969,144	$4,313,377	$6,323,849	$66,301	$542,800	$722,817	
2016	$12,316,030	$9,647,948	$1,590,273	$6,956,389	$56,715	$590,000	$160,571	$294,000
2017	$12,399,990	$10,119,432	$1,778,943	$7,454,865	$141,650	$590,000	$153,974	
2018	$12,445,331	$10,920,753	$1,599,446	$7,914,887	$109,282	$590,000	$107,140	$599,998
2019	$12,707,734	$10,845,077	$1,864,933	$8,180,153	$143,642	$590,000	$66,349	
2020	$11,798,484	$11,336,579	$1,877,081	$8,300,327	$194,095	$590,000	$75,077	$299,999
2021	$12,562,282	$11,501,863	$2,162,934	$8,392,623	$ 275,160	$590,000	$81,146	
2022	$12,227,047	$11,768,157	$1,818,042	$8,796,840	$280,424	$590,000	$88,771	$194,080
2023	$12,349,547	$11,653,259	$1,485,205	$9,262,088	$238,423	$590,000	$76,543	

Note: The MHCC corrected the MCOs' physician underpayments in the amount of $1,000,448 in 2018 and $1,158,383 in 2019. RACSTC's standby expenses were incorporated in hospital rates in FY 2021. Standby funds to RACSTC in the amount of$2,444,700 in 2020 and $1,026,976 in 2021 were paid from the Trauma Fund.
Source: 2004-2023 Maryland Trauma Physician Service Fund Annual Reports

Table 6, Actual and Projected Trauma Fund Spending for FYs 2022-2024 presents revenue (collections from the $5 motor vehicle registration surcharge) and projected disbursements for FY 2024. The MHCC estimates that revenue from the MVA will remain stable with modest increases and small decreases year-to-year. The COVID-19 pandemic directly impacted collections due to extensions given for registration renewals for Maryland residents. However, Governor Hogan lifted the State of Emergency in July 2021; all delayed vehicle registration renewals would have been completed by August 2021.

Growing reimbursement for on-call services continues as the single most important driver of higher payments in the program. Most Maryland trauma centers are collecting the full amount of on-call payment for which they are eligible. On-call payments will continue to increase due to annual update factors derived from increases in the Medicare Fee Schedule, the schedule used to reimburse physicians for delivering care to Medicare beneficiaries.

It should be noted that consensus has been a key success factor in the trauma coalition to establish financial support for the Maryland trauma care system. The MHCC believes the stability of the Trauma Fund can be maintained over the next couple of years through its current authority. While the funding stream from the MVA registration fees for the Trauma Fund appears stable, there is pressure on the Trauma Fund related to increasing on-call costs.

Table 6: Actual and Projected Trauma Fund Revenue and Spending, FYs 2022-2024

Category	Actual FY 2022	Actual FY 2023	Projected FY 2024
Carryover Balance from Previous Fiscal Year	$2,171,071	$6,700,833	$7,317,221
Collections from the $5 surcharge on motor vehicle registrations and renewals	$12,227,047	$12,349,547	$12,600.000
Addition from the 2022 Budget and Reconciliation Financing Act Legislation	$4,000,000	$0	$0
TOTAL BALANCE & COLLECTIONS	**$18,398,118**	**$19,050,380**	**$19,317,221**
Total Funds Appropriated	$12,300,000	$12,000,000	$12,600,000
Credits	$70,872	$85,893	$70,000
Uncompensated Care Payments	($1,818,042)	($1,485,205)	($1,190,000)
On- Call Expenses	($8,796,840)	($9,263,088)	($9,700,000)
Standby Costs for Shock Trauma PARC	($1,026,976)	($0)	($0)
Medicaid	($280,424)	($238,423)	(265,000)
Medicaid/Medicare Differential Payment for FYs 2017 and 2018 (Paid in following FY)	($0)	($0)	($0)
National Medical Center	($590,000)	($590,000)	($590,000)
MHCC Administrative Expenses (TPA & Audit)	($88,771)	($76,543)	($82,150)
Trauma Equipment Grants (funding drawn from Trauma Fund Balance)	($194,080)	($0)	($670,000)
Transfers to the General Fund	($0)	($0)	($0)
PROJECTED FISCAL YEAR-END BALANCE	**$6,700,833**	**$7,317,221**	**$6,886,061**

Source: 2022 and 2023 Maryland Trauma Physician Services Fund Annual Reports

Costs of Operating a Trauma Program

Trauma center costs necessarily include clinical staff, highly trained critical care nursing staff, operating rooms (ORs), Intensive Care Unit (ICU) beds, and advanced medical equipment. Trauma center hospitals must also plan and fund periodic trauma certification and maintain community education programs on trauma prevention. Trauma patients arrive randomly at all hours of the day and night, often with complex and life-threatening injuries. To be prepared, hospitals must arrange for the readiness of specialist physicians, and they must invest in additional infrastructures and other human resources. Most of these resources and the related investments cannot be tied to individual trauma patients. Many of the physical resources such as ORs and ICU beds cannot be fully dedicated to the trauma program.

Working with the Trauma Funding Commission and the HSCRC, the MHCC and MIEMSS explored several approaches to gathering information on trauma program costs and sources of revenue. The approach taken was to rely on a survey instrument used by HSCRC to assess incremental trauma costs and augment those results with a general cost survey and a more specific survey tool focused on costs of maintaining the primary trauma physician specialties of trauma surgery, orthopedics, neurosurgery, and anesthesiology. The costs associated with operating a trauma program can be categorized as hospital costs, sometimes referred to as Part A costs, and physician and health care practitioner costs, referred to as Part B costs, which typically are not hospital costs. This distinction is significant in Maryland because HSCRC regulates hospital payments, but not physician and health care practitioner charges. Table 7 presents the broad categories of incremental costs that trauma center hospitals and their affiliated health systems must absorb.

Trauma center hospitals, for example, must maintain spare capacity hospital-wide to accommodate occasional but inevitable spikes in demand for key assets including operating room time, sophisticated medical equipment, and ICU beds. In both theory and practice, the costs are substantial, and for various reasons, some of these costs escalate more rapidly than overall hospital costs.

Table 7: Hospital Costs Associated with a Trauma Program in FY 2022 that are Incorporated in Hospital Rates

Costs that can be incorporated into the Trauma Hospital Rates (Part A)			
Cost category	**Description**	**Costs in Rates**	**Estimated Total Actual Costs**
Trauma Department	Costs on Trauma Program administrative operations	$6,653,719	
Trauma Director		$822,094	
Trauma Protocol	Incremental cost of staff who respond to trauma patients beyond the normal ED response	$6,474,636	
Specialized Trauma Staff	Costs incurred for additional non-physician staffing in departments treating trauma	$35,127,186	
Education and Training	The incremental costs of orientation, education, and training specifically required for trauma clinical personnel	$1,422,647	
Specialized Equipment	The annual depreciation of equipment and cost of technology needed to support the trauma center.	$1,754,517	
Total Incremental Part A Trauma Costs	**Included as Incremental Trauma Costs at Community Hospitals**	**$52,254,799**	**$81,783,893**
Total Part A Allowed Costs at RACSTC	Shock Trauma Part A costs are incorporated in HSCRC rates.	**$250,841,799**	**$269,292,095**
Part A Hospital Trauma Costs Reflected in Rates and Actuals		**$303,096,598**	**$351,075,988**
Difference in Costs Between Costs Included in Rates and Actuals			**($47,979,390)**

Note: These categorizations of incremental costs should be interpreted cautiously because some trauma hospitals may label costs of staffing the ED as incremental trauma expenses.
Source: HSCRC MIEMSS Incremental Trauma Cost worksheet for 2022 and hospital reports requested by the Trauma Funding Commission

Hospitals do not consistently complete the MIEMSS Incremental Trauma Costs (MTC) worksheet that is collected as part of the HSCRC annual rate update process. To obtain a more consistent picture of costs, the Trauma Funding Commission staff asked trauma center hospitals to complete a supplemental survey of physician and hospital costs. Most trauma centers provided some information on physician costs, but the reports on hospital costs aligned with the cost categories on the MTC worksheet were more mixed. Table 8 shows the detailed cost data reported by hospitals from the supplemental survey and the MTC worksheet. The difference between the supplemental cost survey and the MTC worksheet showed that the costs reported on the MTC worksheet were underreported by $47.9 million, or by about 13.6% using the $350.9 million reported cost as the base.

Table 8: Trauma Center Costs: Actual and Potentially Included in Hospital Rates

Trauma Center	Total Trauma Costs Reported on the Survey or Estimated by MHCC	Total Costs Reported in the MTC Worksheets	Difference
Meritus Medical Center*	$5,693,841	$3,180,917	$2,512,924
UM Capital Region*	$2,827,457	$1,579,585	$1,247,872
Johns Hopkins Hospital	$30,560,607	$27,650,229	$2,910,378
Johns Hopkins Pediatric Trauma	$7,348,434	0	$7,348,434
Johns Hopkins Bayview	$12,957,801	$9,444,136	$3,513,665
Johns Hopkins Suburban	$9,971,036	$3,336,205	$6,634,831
LifeBridge Sinai*	$4,820,762	$2,693,163	$2,127,599
TidalHealth Peninsula*	$4,114,968	$2,298,865	$1,816,103
UPMC Western Maryland*	$3,488,987	$2,071,698	$1,417,289
UMMS RACSTC	$269,202,095	$250,841,799	$18,360,296
TOTAL COSTS REPORTED	**$350,985,988**	**$303,096,597**	**$47,889,392**

Note: * indicates the hospital did not complete these fields on the supplemental survey

Readiness and Availability: A Key Driver of Trauma Center Financial Stress

The Trauma Funding Commission requested that trauma centers complete several surveys in the fall and winter of 2022. Many of the trauma centers reported readiness costs, composed of on-call and standby payments much higher than appears in the estimates below. The estimates presented below align costs with the readiness requirements in MIEMSS regulations. Those regulations require that each trauma center provide trauma readiness for one specialist in each of the four principal trauma specialties of trauma surgery, orthopedics, neurosurgery, and anesthesiology. Requirements differ depending on the level of the trauma center as to whether the specialist must be on call and ready to respond or on standby at the hospital. Several of the trauma centers reported trauma readiness hours and costs well above the MIEMSS requirements. For consistency across centers and to align with MIEMSS requirements, the Trauma Funding Commission staff capped readiness hours at 8,740 hours per specialty at each trauma center. This report notes that financial needs at RACSTC are significantly greater across all categories of costs. The tables below do not reflect readiness hours above MIEMSS requirements. It also does not include physician costs at RACSTC that cannot be categorized as standby expenses. RACSTC estimated these costs at between $24-$29 million in 2023.

A Closer Look at Trauma Fund On-Call Payments FY 2021 - FY 2023

On-call payments are the primary driver of increased Trauma Fund payments as shown in Table 9. On-call payments increased by $466,248 from FY 2022 to FY 2023. On-call accounts for 80% of total spending in FY 2023 compared to 76% in FY 2022 and 67% in FY 2021. Most Level II and III trauma centers now collect the maximum amount because they claim the maximum allowable on-call hours. When the Trauma Fund was established, on-call payments were assumed to cover about 50% of the on-call stipends that hospitals pay to trauma physicians.

Table 9: On-Call Payments to Trauma Centers, FYs 2021-2023

Trauma Center	On-Call Payments		
	FY 2021	FY 2022	FY 2023
Johns Hopkins Adult Level One	$182,558	$186,764	$190,880
Johns Hopkins Bayview	$1,003,822	$994,319	$1,067,710
John Hopkins Suburban Hospital	$807,802	$936,781	$1,074,243
Johns Hopkins Adult Burn Center	$91,280	$93,382	$95,440
Johns Hopkins Wilmer Eye Center	$91,280	$93,382	$95,440
Johns Hopkins Pediatric Trauma	$137,221	$129,266	$174,243
LifeBridge Sinai	$788,420	$799,950	$793,150
Meritus Medical Center	$1,436,683	$1,635,888	$1,740,874
TidalHealth Peninsula Regional	$1,459,877	$1,476,636	$1,414,225
Union Memorial, Curtis National Hand Center	$91,280	$93,382	$95,540
UM Capital Region	$1,021,160	$1,044,680	$1,067,710
UPMC Western Maryland	$1,281,240	$1,312,410	$1,506,253
TOTAL	**$8,796,840**	**$9,263,088**	**$9,315,708**

Source: 2022 and 2023 Maryland Trauma Physician Services Fund Annual Reports

On-call expenses are reimbursed for the number of on-call hours provided up to a maximum of 35,040 hours for Level III trauma centers and 24,500 hours for Level II trauma centers per year.[13] FY 2010 was the first year that expanded on-call stipends were reimbursed to the specialty trauma centers because of the statutory changes enacted in 2008. Most trauma centers receive the maximum reimbursement due to on-call submission requests exceeding the allowable threshold under the current statute. Some

[13] Note: The 35,040 hours is based on the four specialties providing 8,760 hours each per year. The 24,500 hours available to Level II centers is roughly 8,760 hours for the three specialties allowed to be on on-call at a Level II trauma center.

physician contracts allow for on-call payments only when the physician is on-call and not providing care. Thus, there is an unmet documented need.

A Closer Look at the HSCRC Standby Expense Allocation

The HSCRC used the Reasonable Compensation Equivalent (RCE)[14] developed by Medicare to set reasonable allowable standby cost ceilings. The actual costs per hour of standby were compared to these cost ceilings to include standby costs in the applicable hospital's rate base in FY 2005.

Approximately $4.1 million was included in FY 2005 rates for standby costs. Overall rates are updated each year (including these standby amounts) by applying the current year update factor to aggregate charges from the previous year. Table 10 presents the amount of applicable standby costs in each trauma center's approved rates after the hospital's update factors have been applied.

The HSCRC continues to collect standby cost data from hospitals with trauma centers on an annual basis. If a hospital desires to increase standby expenses in rates and qualifies under HSCRC rules and procedures, a full rate review would be required and the entire regulated rate structure at the hospital would be reviewed, in keeping with the HSCRC's statutory mandate to assure purchasers that aggregate costs are reasonable and charges are reasonably related to aggregate costs.[15] The HSCRC would utilize the annual standby cost data collected from all trauma centers in its full rate review analysis.

[14] A Reasonable Compensation Equivalent (RCE) is the limitation on the cost which a hospital can claim for compensation of services furnished by physicians to the hospital. At present, the RCEs apply only to on-call and standby services. The RCE limitation is expressed as a dollar amount for a full work year of work-year hours and is published in the Federal Register. It is differentiated by physician specialty with variations for rural areas, metropolitan areas of less than 1,000,000 population, and metropolitan areas of greater than 1,000,000 population. Details on the RCE limitation are provided in §2182.6, Conditions of Payment for Costs of Physicians' Services to Providers.

[15] HSCRC's current regulations state that the only payment and cost data allowed to be considered in HSCRC rates is standby. On-call costs are not within HSCRC's regulatory authority and are not permitted by CMS to be included in hospital costs because they include costs for physicians not on the hospital campus. HSCRC Accounting & Budget Manual – SBC I & II Reporting Instructions Page 59.

Table 10: Maryland Trauma Standby Payments in HSCRC Approved Rates, FY 2021-2023

Trauma Center	Maryland Trauma Standby Payments through Hospital Rates		
	FY 2021	FY 2022	FY 2023
Johns Hopkins Hospital	$1,430,393	$1,464,447	$1,523,903
Johns Hopkins Bayview	$718,495	$714,326	$743,328
Johns Hopkins Suburban	$893,107	$914,370	$951,493
LifeBridge Sinai	$1,764,790	$1,806,804	$1,880,160
TidalHealth Peninsula Regional	-	-	-
Meritus Medical Center	$1,165,574	$1,193,323	$1,241,772
UPMC Western Maryland	$572,482	$586,111	$609,908
UM Capital Region	$2,406,909	$2,471,377	$2,571,715
RACSTC	$1,026,976	$2,620,823	$2,737,228
TOTAL	**$9,978,726**	**$11,771,581**	**$12,259,507**

Source: 2022 and 2023 Maryland Trauma Physician Services Fund Annual Reports

Combining on-call and standby payments cost is useful to assess the complete cost of trauma center readiness. Funding mechanisms differ because of reimbursement rules established by public and private payers. The aim of both is to ensure the appropriate clinicians are available to respond. It is also important to understand that on-call and standby are artifacts of the old fee-for-service reimbursement system that is slowly disappearing. Today most clinicians delivering trauma care are employed by the health system that operates the trauma center. Readiness to respond for trauma care may be a condition of employment. However, since payers recognize on-call and standby as components of recognized costs, policymakers should be careful about abandoning these cost frameworks until a more current payment mechanism is developed. Table 11 presents the combined payments made to Maryland trauma centers.

Table 11: Total Readiness Payments (Standby and On-Call)

Trauma Center	Trauma Level	Total Readiness Payments (Standby+On-Call)		
		FY 2021	FY 2022	FY 2023
Johns Hopkins Hospital	I	$1,612,951	$1,651,211	$1,714,783
Johns Hopkins Bayview	II	$1,722,317	$1,708,645	$1,811,038
Johns Hopkins Suburban Hospital	II	$1,700,909	$1,851,151	$2,025,736
Johns Hopkins Adult Burn Center	Specialty	$91,280	$93,382	$95,440
Johns Hopkins Wilmer Eye Center	Specialty	$91,280	$93,382	$95,440
Johns Hopkins Pediatric Trauma	Ped.	$137,221	$129,266	$174,243
LifeBridge Sinai Hospital	II	$2,553,210	$2,606,754	$2,673,310
Meritus Medical Center	III	$2,602,257	$2,829,211	$2,982,646
TidalHealth Peninsula Regional	III	$1,459,877	$1,476,636	$1,414,225
Union Memorial, Curtis National Hand Center	Specialty	$91,280	$93,382	$95,540
UM Capital Region	II	$3,428,069	$3,516,057	$3,639,425
RACSTC	PARC	$1,026,976	$2,620,823	$2,737,228
UPMC Western Maryland	III	$1,853,722	$1,898,521	$2,116,161
TOTAL		**$18,371,349**	**$20,568,421**	**$21,575,215**

Source: 2022 and 2023 Maryland Trauma Physician Services Fund Annual Reports

Table 12 presents Trauma Funding Commission staff estimates of the overall funding gap between costs and payments. As shown in final columns trauma centers experience a shortfall of approximately $18.4 million in provisioning trauma readiness for the four principal trauma specialties.

Table 12: Combined Funding Needs for Trauma Readiness

	Submitted Costs	Payment	Difference
Total Additional Funding for On-call for the Four Primary Trauma Specialties			
FY 2022	$16,036,602	$8,796,840	($7,239,762)
FY 2023	$16,950,000	$9,315,708	($7,634,292)
Total Additional Funding for Standby for the Four Primary Trauma Specialties			
FY 2022	$22,366,004	$11,771,581	($10,594,423)
FY 2023	$23,059,000	$12,259,507	($10,799,493)
Total Additional Funding for Readiness for the Four Primary Trauma Specialties			
FY 2022	$38,402,606	$20,568,421	($17,834,185)
FY 2023	$40,009,000	$21,575,215	($18,433,785)

Note: Anesthesiology, Neurosurgery, Orthopedics, Trauma Surgery are the four critical trauma specialties. Depending on the level of the trauma center, these specialties will be eligible for on-call or standby.

Unraveling the incremental hospital and physician costs of supporting a trauma center is complex. As described in this report trauma centers costs span numerous costs centers in a hospital and a large physician practice. Despite the complex task of estimating trauma center costs, potential legislative changes in trauma funding requires the Trauma Funding Commission to produce an overall cost estimate even though separate funding streams including increases to the Trauma Fund, potential changes to how hospital trauma costs are included in hospital rate, and possibly transfers from general funds. Table 13 summarizes the gaps in spending.

Table 13: Combined Estimate for More Fully Funding Trauma Costs

	Type of Costs	Source of Payment	Current	Current Gap
Part A	Incremental Trauma Costs in Rates	Hospital Rates	$303,096,598	($47,979,390)
Part A	Standby in Rates	Hospital Rates	$12,259,507	($10,799,493)
	In or Potentially In Hospital Rates	**Hospital Rates**	**$315,356,105**	**($58,778,883)**
Part B	On-call	Trauma Fund	$9,315,708	($7,634,292)
Part B	Uncomp. Payments to Other Trauma Practitioners	Trauma Fund	0	$500,000
N/A	Stipend to Children's National	Trauma Fund	$590,000	$310,000
N/A	New Audits, Data Enhancements	Trauma Fund	0	$300,000
	Total From Trauma Fund	**Trauma Fund**	**$9,905,708**	**($8,444,292)**
Total			**$325,261,813**	**($67,223,175)**

Note: Anesthesiology, Neurosurgery, Orthopedics, and Trauma Surgery are the four critical trauma specialties. Depending on the level of the trauma center, these specialties will be eligible for on-call or standby. Note this estimate does not include costs above 8,740 of readiness hours for each principal specialty. Nor does the estimate include physician costs at RACSTC that are not categorized as standby.

Recommendations

Key Design Principles for Reforms to Trauma Center Funding

The Trauma Funding Commission considered proposals for expanding Trauma Funding at their fourth and fifth meetings. Based on input from Trauma Funding Commission members during the five meetings, Trauma Funding Commission staff developed reform principles that could guide the ranking of options for additional funding.

Throughout the Trauma Funding Commission's work, trauma center representatives, MIEMSS, and MHCC emphasized these important design principles:

- Preserve the ability of trauma teams to function effectively. Planning and readiness for key clinical staff and support staff to respond are key success factors.
- Ensure equitable access to the Trauma Fund for all health care practitioners that treat trauma patients (uncompensated and Medicaid underpayment) is essential. Nurse practitioners, physician assistants, physical, occupational, and speech therapists, among others, are currently ineligible for uncompensated care and Medicaid underpayments.
- All recognized trauma center costs eligible for inclusion should be incorporated in hospital rates consistent with HSCRC requirements regarding the recognition of added costs.
- Consider funding sources in addition to current surcharge from MVA registration and registration renewals.

Table 14 briefly summarizes each recommendation and presents cost estimates for the recommendations when possible. Following the recommendations are discussions of several issues that were considered by the Trauma Funding Commission but were not included in the final recommendations.

Table 14: Summary of the Reform Recommendations.

Recommendation	Legislation Required	Hospital Costs?	Funding Needed	Source of Revenue
A.1-2. Increase On-Call Payments	Y	N	$7,600, 000	Currently MVA Surcharges
B.1-2. Add additional flexibility For Trauma Fund Administration to modify program parameters.	Y	N	No Budget Impact	No Funding Impact
C. Enable non-physician providers to receive payment from the Trauma Fund	Y	N	$500,000	Currently MVA Surcharges
D.1 Allow all standby costs for the four primary specialties to be fully included in hospital rates	N	Y	$11,000,000	HSCRC rate-setting authority
D.2 HSCRC should audit the incremental hospital costs associated with the trauma service	N	Y	$200,000	HSCRC Operating Budget
D.3 HSCRC should consider full accounting for incremental trauma costs as opposed to considering these costs as part of its hospital efficiency methodology.	N	Y	Increase costs to payers and residents due to higher hospital costs.	Community hospitals reported $82 million and RACSTC $269 million in trauma costs in 2022-23.
E. Conduct biennial audits to confirm that managed care organizations (MCOs) are reimbursing all trauma providers at the Medicare rate	N	N	$250,000	Medicaid Operating Budget may absorb
F.1 Award National Children's Hospital an increase in their stipend consistent with the increase in on-call pays	Y	N	$310,000	Currently, Children's receives a stipend of up to $590,000 based on documented costs.
F.2 Increase on-call payments to the Specialty Pediatric, Hand, Eye, and Burn trauma centers consistent with the increases for Level II and III trauma centers	Y	N	n/a	Cost already reflected in Recommendation A.1
G.1 Align the Trauma Data Systems with MHCC and HSCRC Data Systems to enable more complete analysis of trauma care and costs	N	N	$100,000	Annual cost, but possibly smaller once established
G.2 MHCC shall convene a workgroup to examine defining quality measures for trauma care.	N	N	$100,000	One-time Expense

A. Recommendations to Modify the Existing Scope of the Maryland Trauma Physician Services Fund

The Trauma Funding Commission recommends an increase to on-call payments paid through the Trauma Fund:

1. The Trauma Funding Commission recommends that on-call payments from the Trauma Fund be increased to fund on-call expenses more fully.

Rationale: Hospitals reported $16.9 million in on-call costs in 2023 and the Trauma Fund made $9.3 million in payments.

2. The Trauma Funding Commission recommends that the percentage of RCE payment used to set the on-call ceiling should be raised for all eligible trauma centers to 60% of the RCE, which would increase the maximum allowed on-call payments for Level III trauma centers and Level II trauma centers.

Rationale: Currently Level IIIs are paid up to 35% of the RCE rate and Level IIs are paid 30% of the relevant RCE rate. Moving the funding ceiling for on-call to 60% of RCE rates would establish greater parity in on-call payments as well as raising the overall levels for Level II and III trauma centers. Note this increase would also apply to the Johns Hopkins Pediatric Trauma Center and the Specialty trauma referral centers.

Cost Impact: Additional Trauma Funds of approximately $7.6 million would be needed to fund on-call more completely.

B. Add Additional Flexibility for Trauma Fund Administration (MHCC and HSCRC) to Modify Program Parameters

1. The Trauma Funding Commission recommends removing the 10% cap on trauma reserves that can be spent on trauma equipment grants.

Rationale: To avoid depleting the Trauma Fund entirely in one fiscal year, MHCC would maintain a fund reserve of no more than 10% of the total Trauma Fund revenue each fiscal year, consistent with Department of Budget Management (DBM) requirements.

2. The Trauma Funding Commission recommends that MHCC be given the flexibility to award grants subject to Trauma Fund reserve requirements set by DBM, thereby allowing MHCC to award grants to trauma centers for other purposes besides equipment.

Rationale: Currently the RCE thresholds are specified in the statute. By giving MHCC the flexibility to raise or lower the RCE threshold by a certain percentage, it allows the MHCC to better address changing trauma center and trauma physician needs.

Cost Impact: There is no impact as these changes are aimed at providing MHCC with more flexibility to effectively manage the Trauma Fund reserve.

C. Enable Non-Physician Providers to Receive Payment from the Trauma Fund

Non-physician health care practitioners should be allowed to bill the Trauma Fund for uncompensated care provided to a trauma patient and to receive payments pegged at 100% of Medicare when treating Medicaid trauma patients. Currently, physicians that treat trauma patients can bill the Trauma Fund.

Rationale: A tenet of trauma care is that for trauma care to be most effective, an entire team of practitioners needs to be mobilized and work together. Providing access to the Trauma Fund furthers that objective.

Cost Impact: Trauma Fund <$500,000: The Trauma Fund paid about $1.4 million in uncompensated care in FY 2023 and less than $300,000 in Medicaid underpayment in FY 2023. The Trauma Funding Commission staff believe that physician assistants, nurse practitioners including certified registered nurse anesthetists at the trauma center and physical, occupational, and speech therapists would be the primary beneficiaries of this reform.

D. Recommendations Pertaining to HSCRC's Authority to Establish Hospital Rates

1. The Trauma Funding Commission recommends that all standby costs for the four primary specialties be fully included in hospital rates and that the HSCRC include the full value of incremental trauma costs in rates as reported in the MIEMSS Incremental Trauma Cost Worksheet.

Rationale: Physician standby costs are an allowable cost in establishing hospital rates. The Trauma Funding Commission staff estimates that approximately $11 million would be added to hospital rates to reflect the change. Since standby is an allowable cost, it makes sense to include the full costs of the four primary specialties required by regulation in the rate calculation. While the Trauma Funding Commission recommends adding the full standby costs into the rates, the HSCRC is encouraged to carefully examine the feasibility of this recommendation as it may set a precedent for hospitals to argue they deserve special increases outside the formal HSCRC rate review process, which looks at all costs. Maryland law dictates that HSCRC ensure aggregate costs are reasonable and charges are reasonably related to those costs. HSCRC states that if HSCRC exempts trauma standby and MIEMSS incremental trauma costs from this requirement, other hospitals can argue for special cost-based reimbursement for

funding malpractice, maintaining minimum staffing ratios, or other financial needs specific to a hospital or a group of hospitals.[16]

Cost Impact: Adding $11 million to hospitals' rates could impact various financial tests under the Maryland TCOC Model. Consequently, this would have to be reviewed carefully.

2. The Trauma Funding Commission recommends that the HSCRC audit the incremental hospital costs associated with the trauma service.

Rationale: Currently approximately $52 million is incorporated in hospital rates to account for the incremental hospital costs associated with a trauma program. Given the significant variability in the costs reported by hospitals, audits of these costs should be conducted.

Cost Impact: The cost of contracting with an auditing firm could be as much as $200,000 per year. These costs would be included in the HSCRC operating budget. The HSCRC budget is derived from a user fee assessment of hospitals. A modest impact on the State Budget or on Maryland residents' health care premiums due to higher hospital rates.

3. The Trauma Funding Commission recommends that the HSCRC conduct a study accounting for the incremental trauma costs that trauma centers report as part of the annual rate update.

Rationale: In 2022, the last year that data is available from trauma hospitals, excluding RACSTC, trauma centers reported $52 million in incremental costs. These costs are recognized in a review of a hospital's rate (trauma standby, labor market, Graduate Medical Education, etc.). These costs do not necessarily change the hospital's rate structure. If an inefficient hospital under the HSCRC efficiency policy (a hospital with high cost per case or very large profits or both) gets additional trauma costs recognized through the annual filing (as the Trauma Funding Commission is recommending), that does not mean that the hospital will necessarily get additional revenue. The reason is that HSCRC provides hospitals with additional revenue when all their costs are reasonable, and their charges are reasonably related to those costs. If a hospital has costs equivalent to the statewide average cost per case, which is what HSCRC historically considers reasonable, and no profits, which ensure charges are reasonably related to costs, then any new social good costs such as trauma costs will increase the hospital's rate structure dollar for dollar. If the hospital has higher than average cost

[16] HSCRC created a special class of costs for trauma standby costs, whereby these costs pass through the HSCRC efficiency evaluation without qualification, but these costs do not necessarily produce additional funding for those costs because HSCRC needs to ensure the hospital's aggregate costs are reasonable.

per case and/or a regulated margin, then the hospital will likely not get additional revenue.[17]

Cost Impact: In 2022 incremental trauma costs totaled $52 million, so the impact on various financial tests under the Maryland TCOC Model would be nontrivial.[18] Like recommendation D.1, this issue deserves careful balancing of the needs of trauma hospitals against the impact to the entire system.

E. Recommendations to the Medicaid Administration

The Trauma Funding Commission recommends the Healthcare Financing Administration conduct biennial audits to confirm that managed care organizations (MCOs) are reimbursing trauma center providers at the Medicare rate.

Rationale: Several trauma centers contend that MCOs do not always reimburse trauma physicians at 100 percent of the Medicare rate. The Healthcare Financing Administration and Medicaid MCOs are not financially responsible for paying the Medicare fee levels paid for hospital care or trauma center services. The Trauma Fund reimburses the trauma centers the difference between what the MCOs pay and the Medicare payment rate.

Prior to the start of the Covid-19 pandemic, MHCC staff contracted with the Hilltop Institute to assess the level of underpayments for trauma costs. Hilltop determined that some MCOs were reimbursing trauma centers at the lower Medicaid rates. Hilltop identified over $1 million in underpayments.

The MHCC made retrospective payments to trauma physician practices that were underpaid. After the Hilltop assessment, several large practices negotiated with Medicaid for standard fee levels at or above the Medicare rate. This Medicaid reimbursement change negated the need to make retrospective payments.

Cost Impact: Administrative cost to Medicaid $250,000 for a biennial audit.

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[17] According to HSCRC leadership, historically HSCRC assessed a hospital's relative efficiency and then scaled inflation based on that assessment, which is an Integrated Efficiency under the global budget methodology. This means that a hospital that was relatively efficient but still had above average costs per case and/or regulated margins could get additional revenue, i.e. higher updates, if the hospital met a standard less stringent than the full rate application. In this situation the rate enhancement would not be as significant since the increase is limited by adjustments to inflation versus a full rebasing of the hospital's revenue that would occur under a full rate application.

[18] The $51 million was derived from the HSCRC MIEMSS Incremental Trauma Cost worksheet for 2022 that is part of the HSCRC filing that all hospitals complete.

F. Recommendations on Children's National Hospital, Pediatric, and Specialty Referral Centers

1. The Trauma Funding Commission recommends increasing funding to the Children's National Hospital Trauma Center to $900,000.

Rationale: The trauma center at Children's National Hospital is considered part of the Maryland Trauma System and specialty referral centers play an important role in treating burns, eye, and hand injuries. Currently, this pediatric trauma center receives a payment based on documented costs of up to $590,000 for uncompensated care provided to Maryland children and for on-call costs associated with trauma readiness. This increase would be roughly consistent with the proposed increase for on-call payments.

Cost Impact: Adds $310,000 to Trauma Fund Cost.

2. The Trauma Funding Commission recommends that the revised RCE percent factor be applied to Johns Hopkins Pediatric Trauma Center and the trauma specialty referral centers on-call payments. The Johns Hopkins Pediatric Trauma Center is currently eligible for 4,380 hours of trauma on–call per year and the trauma specialty referral centers are eligible for a maximum of 2,190 on-call hours. The limitation on hours would remain, but the payment maximum would double as the RCE percent would increase from 30% to 60% consistent with the ceiling proposed for the Level II and III trauma centers.

Rationale: The pediatric trauma center at Johns Hopkins plays a critical role in treating children with traumatic injuries. Costs for increasing payments to specialty trauma centers are incorporated in on-call calculations but we are referencing these facilities specifically in the recommendations.

Cost Impact: Adds approximately $175,000 to Johns Hopkins Pediatric Trauma Center's on-call stipend.

G. Recommendations on Aligning the Trauma Data System with HSCRC and MHCC Data Systems for Improved Cost and Quality Reporting

1. The Commission recommends that MIEMSS work with the State-Designated Health Information Exchange to add the same encrypted patient identifier to the MIEMSS Trauma Registry as already exists in MHCC and HSCRC data systems.

Rationale: The MIEMSS Trauma Registry is the trusted source of information on trauma care in the state. This data system provides the complete information on a patient from the start of a trauma event to the conclusion including:

- demographics of the patient,
- mechanism and level of injury and aspects of the trauma event,
- details of the pre-hospital care delivered by EMS personnel,
- documentation on the initial care provided in the emergency department care at the trauma center and
- information on scope and duration of inpatient and outpatient care services.

The Trauma Registry does not contain financial information on the cost of care. MHCC and HSCRC data systems contain detailed cost information by types of providers and a common encrypted patent identifier that enables linkage of the two data systems when approved by the MHCC and HSCRC.

The addition of the encrypted patient identifier would give policymakers complete information on the total cost of care of a trauma episode including hospital, physician, rehabilitation, and pharmacy costs.

2. The Trauma Funding Commission also recommends that MIEMSS and MHCC in collaboration with TraumaNet and the trauma centers convene a workgroup to develop quality measures and new education initiatives for Maryland trauma centers.

Rationale: Direct State funding for trauma care could double if recommendations are adopted. As the level of public dollars increases, it is appropriate for trauma centers to be more publicly accountable for the care delivered. Identifying meaningful measures that can be constructed for all trauma centers could promote collaborative efforts to improve care throughout the Maryland trauma system.

H. Recommendations on Trauma Funding

1. The Trauma Funding Commission recommends raising the MVA assessment on vehicle registrations and registration renewals from $5 per biennial registration. The amount of the increase depends on whether other funding sources are also developed.

2. The Trauma Funding Commission recommends that additional potential sources of funding for trauma center costs be identified (automobile moving violations, gun and ammunition sales, cannabis sales). Several Trauma Funding Commission members were enthusiastic about identifying these revenue sources because they align

with contributors to trauma center patient volumes. Notable is the cost of firearm injuries (including assaults, accidental injuries, and attempted death by suicide).

3. It is also recommended that there be the ability to have a transfer of general funds to the Trauma Fund.

Rationale: Currently approximately $12.5 million in revenue is produced from the $2.50 annual ($5 biennial) MVA surcharge on motor vehicle registrations and registration renewals. The Trauma Fund has approximately $7 million currently in reserve owing to the inflexibility of the funding framework. Reforms to the Trauma Fund would potentially add about $8.7 million to spending ($7.6 for on-call and $1.1 million for other expansions). Current trauma center needs are greater than current revenue. Statutory changes are required for all recommendations.

Cost Impact: Table 15 presents the estimated revenue by increasing the surcharge by increments of $.50 on a registration. If the surcharge is the only increase in revenue, the surcharge would need to increase from $2.50 to $4.00 annually ($5 to $8 Biennial).

Table 15: Estimate of Additional Revenue Derived from Three Different Increases in the MVA Surcharge

	Annualized Surcharge in Statute	What Consumers See in their Biennial Vehicle Registration	% Increase from $2.50 Base	Projected Revenue
Current Law	$2.50	$5.00	0.0%	$12,349,547
Increase $1.00 in annualized Surcharge	$3.50	$7.00	40.0%	$17,289,366
Increase $2.00 in annualized Surcharge	$4.50	$9.00	80.0%	$22,229,185
Increase $3.00 in annualized Surcharge	$5.50	$11.00	100.0%	$24,699,094

I. Proposals Considered but Not Recommended at This Time

1. Implement Fees for Trauma Activation

Rationale: Activation fees are not permitted in Maryland hospitals, although HSCRC permits trauma center hospitals to include certain incremental costs specific to trauma centers in hospital rates. The incremental trauma center costs the HSCRC permits in Maryland do not have a parallel in the rest of the United States. Elsewhere trauma activation fees may be applied for any visit to a trauma center. The trauma activation fee is a charge for the mobilization of the medical professionals who make up the trauma team. Trauma activation fees were first approved in 2002 after it was argued to CMS that the high cost of running trauma centers threatened to shut down many essential trauma centers. Trauma activation fees may be justified, but they are hardly

transparent, and vary widely across the United States. Recent [19]media articles have condemned the large activation fees charged for mobilizing the trauma team for what turns out to be minor injuries.

A recent cross-sectional study of trauma centers published in JAMA Open Network found activation fees varied from $1,000 to $61,734 at Level I trauma centers.[20] Activation fees varied significantly by region, with activation fees higher in the West, and by the ownership status of a trauma center, with for-profit trauma centers generally charging more. The authors recommended more standardization of fees, which could be easily accomplished in Maryland due to the HSCRC's control of hospital rates. Should Maryland adopt activation fees, it is likely that the HSCRC would remove some incremental trauma centers costs from hospital rates.

The MHCC made a rough estimate that an average trauma activation fee of $4,000, which is modest by standards elsewhere, would produce an additional $85-$90 million in revenue to trauma centers. Those funds would probably more than offset the incremental trauma costs included in hospital rates today. Winners and losers would vary among trauma centers. High volume trauma centers such as RACSTC, Johns Hopkins Adult Trauma Center, and University of Maryland Capital Region would benefit because the activation fee would apply to all trauma cases.

Low volume trauma centers might suffer losses relative to current policies. Keeping both, embedded incremental costs in hospital rates and permitting trauma activation fees, would be a win-win for all trauma centers, but such a policy could jeopardize various Total Cost of Care tests. Moreover, trauma activation fees would pose a significant cost to patients with high deductible health plans. Several members of the Trauma Funding Commission condemned activation fees as presenting a significant access barrier to patients with high deductible health plans and even more so for the uninsured. On balance, the Trauma Funding Commission staff felt the negative impact on patients more than offset any funding benefits to the trauma centers.

2. Reduce the Level II and III Trauma Center Requirements

The American College of Surgeons (ACS) established credentials for trauma centers in most parts of the United States. MIEMSS set standards for trauma centers in Maryland based on specific Maryland needs. Hospital representatives from Level III centers discussed whether Maryland should revert to the standards developed by the ACS. The

[19] KFF News, "In Alleged Health Care 'Money Grab,' Nation's Largest Hospital Chain Cashes In on Trauma Centers" June 14, 2021 accessed at https://kffhealthnews.org/news/article/in-alleged-health-care-money-grab-nations-largest-hospital-chain-cashes-in-on-trauma-centers/

[20] Zitek T., Pagano K., Mechanic O., et al, Assessment of Trauma Team Activation Fees by US Region and Hospital Ownership JAMA Network Open. 2023;6(1):e2252520. doi:10.1001/jamanetworkopen.2022.52520) accessed at https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2800716

ACS standards for Level II and III centers are less comprehensive than what currently exists in Maryland. For example, requirements for ensuring neurosurgeon readiness are optional in the ACS standards for Level III trauma centers. Lowering standards would potentially reduce physician resources and hospital costs but force more ambulance transports to Baltimore trauma centers.

The Trauma Funding Commission agreed that the higher Maryland standards for Level III trauma centers were beneficial to trauma patients as the higher standards enable Level IIIs to treat patients locally, rather than having to transport by air ambulance to RACSTC or to the Level I trauma center at Johns Hopkins Hospital (or out-of-state). Several representatives from Baltimore hospitals observed that reducing the capabilities of the Level III trauma centers in Western Maryland and the Eastern Shore would put additional pressure on the capacity of their facilities. Trauma Funding Commission staff pointed out that this issue should be more appropriately addressed when COMAR 30.08 *Designation of Trauma and Specialty Referral Centers* is next opened for review, at which time the review panel should consider efficiencies that could reduce administrative and clinical costs.

A stakeholder panel specifically convened by MIEMSS to consider updates to COMAR 30.08 *Trauma Designation* regulations is the appropriate workgroup to review and update these complex regulations and balance the high standards with costs to trauma center hospitals of complying.

3. Expand Access to On-call and Standby Payments to all Surgical and Non-Surgical Specialists

Hospitals contend they should be eligible for on-call and standby payments for non-surgical and surgical specialties that are sometimes needed to provide trauma care.[21] These specialists are eligible for payment when they provide care to trauma patients. The Trauma Funding Commission staff considered the feasibility of paying hospitals for these readiness costs and concluded that it would be difficult to segment trauma and non-trauma readiness costs for these specialists. A more efficient approach that aligns with the design principles of the reform recommendations is to focus first on readiness payments for the four primary specialties mobilized to deliver trauma care. Staff also concluded that payment policies would need to be clearly defined and rigorously applied to avoid paying hospitals for non-trauma readiness costs.

[21] Non-surgical specialties include (Emergency medicine and critical care), other surgical specialties include (cardiac, hand; microvascular replant or flaps, obstetric and gynecologic, ophthalmic, maxillofacial, otorhinolaryngologic, pediatric, plastic, thoracic, urologic, and vascular) and other non-surgical (cardiology, pulmonary medicine, interventional radiology, interventional angiography, pediatrics, gastroenterology, infectious disease, internal medicine, nephrology, neurology, pathology, physiatry, psychiatry).

Appendices

Appendix 1– Commission on Trauma Funding Meeting Summaries

- ***Meeting 1- August 29, 2023***- At the introductory meeting the Committee reviewed budget language and the group's responsibilities for handling the distribution of the $9.5 Million to the Trauma Centers. It was discussed that MHCC's charge was to establish criteria for the distribution for allocating funds to trauma centers that are experiencing the most financial challenges. It was also determined MHCC did not need to follow the methodology used for disbursements from the Maryland Physician's Trauma Fund and that it may allocate the entire funds in fiscal year 2024 or over a multi-year period.

- ***Meeting 2- September29, 2023***- At the beginning of this meeting there was a discussion of the Trauma Center experience in the US and Maryland, parallels and differences. Dr. Raymond Fang, who Chairs TraumaNet and Maryland American College of Surgeons (ACS) Committee on Trauma lead the discussion. Maryland's Trauma Center System is a well thought out system that is divided into regions allowing patients living within their area to get to a center within the "golden hour." As discussed at the meeting, the biggest difference between Maryland and other states is its verification process which evaluates each Center. In other states, ACS conducts the verification process every three years allowing one year of prepping, the visit, and relation period before starting the prepping process over. However, in Maryland, trauma centers go through the verification process every five years as stated in the Code of Maryland Regulations (COMAR). Another difference is that in the ACS, PARC and level 3 centers do not need to have anesthesiologist or a neurosurgeon. In Maryland, Trauma Center verification is the responsibility of the MIEMSS per criteria specified in (COMAR Md. Regulations 30.08.05 Trauma Center Designation and Verification Standards).

    - The Commission looked at what impact the Total Cost of Care Model and reimbursement has on Trauma Services. Regulated hospitals entered the Global Budget Revenue (GBR), which means that each would have a fixed revenue at the beginning of each fiscal year. Under the GBR hospitals have utilization and quality incentives to focus on keeping people well, reducing avoidable admissions and readmissions. The GBR methodology adjusts for inflation, population and volume, quality spending funding programs and more. Direct costs associated with Trauma costs are included in the annual update factor. The HSCRC purposely does not cover or fund all trauma costs such as unregulated physicians' subsidies, because the costs are beyond its regulatory authority.

    - The Committee looked at the current working framework of payment streams of the Maryland Physicians Fund such as: on-call, uncompensated care, Medicaid-underpayments, equipment grants and opportunities to utilize a surplus. To increase funding, there was discussion of increasing flexibility in the Trauma Fund, increasing Trauma Fund Revenue as well as other possible sources of funding for the Trauma Centers. For the last 20 years there has been a $5 surcharge from vehicle registration for funding. Possible legislation to increase the amount by $1.00 was discussed. MHCC estimates that the increase could

generate $2 million in revenue from the MVA surcharge on registrations and registration renewals.

- *Meeting 3- November 3, 2023*- During the third meeting the Committee recapped progress in the previous meetings and patient mix. The group discussed Trauma Fund options such as increasing flexibility and increasing revenue to the fund as well as other possible sources of funding for the Centers. The Trauma Cost Survey and the Analysis of Hospital Utilization Data, On-call and Standby Expenses and Other Trauma Center Requirements were highlights of the meeting as well. Trauma Centers (community-based centers) were asked to complete a cost survey which showed that labor costs were the major driver of trauma operations 20 years ago and remains consistent today. Trauma Centers rendered costs could be changed if hospitals were willing to undergo a broader rate review through HSCRC. The review could potentially have additional rate relief or costs that had been previously considered may no longer be under consideration.

- *Meeting 4-November21, 2023*- There was a recap of the Trauma Cost Survey and the analysis of Hospital Utilization Data. The Committee also discussed the overview of recommendations from TraumaNet, Johns Hopkins, MHCC as well as the Comprehensive List of Recommendations. Hopkins suggestions overlapped with other recommendations such as removing the limitations due to allowed hours caps and Reasonable Compensation Equivalent (RCE) amounts by providing each trauma center with a specific dollar amount (or percent of Trauma Fund) to cover a portion of the on-call costs. If the preference is to keep limits and formulas in Statue, Hopkins suggest other changes to be considered increasing the hour limits for on-call reimbursement for each trauma level; increasing the provider/physician type allowed to receive reimbursement for on-call costs through the Trauma Fund; and lastly updating the formulas, so reimbursement is not based on RCE, but rather a statewide average for the salary of each subsidized provider type. Other allowable uses of the Fund should be expanded to included Trauma survivorship programs, to support capital costs associated with updating hospital space to accommodate the trauma service, such as dedicated trauma bays.

- Meeting 5- December- A subset of the Commission met to discuss additional cost information needed to assess the total cost for the four principal specialties that need to be available either in the hospital or available with in 30 minutes of notification. The group discussed a revised survey which focused on the short fall or gap in revenue vs, costs that are already partially recognized in the Trauma Physicians Service Fund. The subset of the Commission recommended that the staff develop a second survey that collected information on all sources of reimbursement for the four principal specialties. The smaller workgroup agreed that focusing on expanding reimbursement for these principal specialties should be the first priority given the State's budgetary outlook. The tables that were developed are shown below. At the time of the completion of the report, several hospitals had still not responded.

Table 1 – Specialists' Costs (to the Health System) for Trauma Readiness and Care

	Trauma Surgeon			Anesthesiology			NueroSurgery			Orthopedics		
Physician Costs in FY 2022	**Standby Costs**	**OnCall Costs**	**Other Specialty Specific costs**	**Standby Costs**	**OnCall Costs**	**Other Specialty Specific costs**	**Standby Costs**	**OnCall Costs**	**Other Specialty Specific costs**	**Standby Costs**	**OnCall Costs**	**Other Specialty Specific costs**
Meritus												
UM Cap Region												
JHMS Hopkins Main												
JHMS Hopkins Peds												
JHMC Bayview												
JHMS Suburban												
LifeBridge Sinai												
Tidal												
UMMS SHOCK Trauma												
UPMC Western Maryland												

Table 2 – Specialists Costs Specific to Trauma Readiness and Care Including Revenue from Payers															
Revenue and Transfers in FY 2022	**Standby Costs captured in Hospital Rates**	**OnCall Payments Through the Trauma Fund**	**Trauma Surgeon Revenue from Insurers for Trauma Care if Employed**	**Other Specialty Specific Transfers from the Hospital**	**Standby Costs captured in Hospital Rates**	**OnCall Payments Through the Trauma Fund**	**Anesthesiologist Revenue from Insurers for Trauma Care if Employed**	**Other Specialty Specific Transfers from the Hospital**	**Standby Costs captured in Hospital Rates**	**OnCall Payments Through the Trauma Fund**	**Neuro Surgeon Revenue from Insurers for Trauma Care if employed**	**Other Specialty Specific Transfers from the Hospital**	**Standby Costs captured in Hospital Rates**	**OnCall Payments Through the Trauma Fund**	
Meritus															
UM Cap Region															
JHMS Hopkins Main															
JHMS Hopkins Peds															
JHMC Bayview															
JHMS Suburban															
LifeBridge Sinai															
Tidal															
UMMS SHOCK Trauma															
UPMC Western Maryland															

Notes:

Appendix 2– Recommendations on Changes to Trauma Funding

JOHNS HOPKINS
UNIVERSITY & MEDICINE

November 15, 2023

Ben Steffen, Executive Director
Maryland Health Care Commission
4160 Patterson Ave
Baltimore, MD 21215

Dear Mr. Steffen,

Thank you for the opportunity to provide suggestions on ways to improve the Maryland Trauma Physician Services Fund ("Trauma Fund" or "Fund") to better support the State's trauma centers. Johns Hopkins Medicine operates four of the ten trauma centers in the State:

- Johns Hopkins Hospital - Level I
- Johns Hopkins Children's Center -only pediatric trauma center in the State – Level I
- Johns Hopkins Bayview Medical Center – Level II, and
- Suburban Hospital - Level II

There are two changes to the Trauma Fund that will have the greatest immediate impact on improving the financial condition of the trauma centers. One is to increase flexibility in the allowable uses of the Trauma Fund; the other is to increase the amount of money in the fund. These are both described below in further detail.

Increase Flexibility

On-Call Costs

Despite significant changes in the needs of the State's trauma centers, the allowable uses of the Trauma Fund have been limited to the same four areas: uncompensated trauma care, payment for trauma on-call services, payment for Medicaid patients, and Trauma Equipment Grants. Specifically, the spending to ensure the availability of the required on-call providers has far outpaced the other needs. Allowing the Trauma Fund to better cover these costs would more appropriately support the state trauma network. Some ideas on how to achieve this include:

- Removing the limitations due to allowed hours caps and Reasonable Compensation Equivalent (RCE) amounts by providing each trauma center with a specific dollar amount (or percent of Trauma Fund) to cover a portion of the on-call costs.
- Alternatively, if the preference is to keep limits and formulas in Statute, there are other changes that could be considered:
    - Increasing the hour limits for on-call reimbursement for each trauma level.

- Increasing the provider/physician type allowed to receive reimbursement for on-call costs through the Trauma Fund, and
- Updating the formulas so reimbursement is not based on Reasonable Compensation Equivalent, but rather a statewide average for the salary of each subsidized provider type.

Other Costs

The allowable uses of the Trauma Fund should also be expanded to support not only the clinical services provided by each trauma center but also the community-based services as well, such as injury and violence prevention education programs and trauma survivorship programs. These programs effectively keep patients out of our trauma centers and therefore, should be supported by the State through the Trauma Fund. For example, trauma centers have led efforts on providing Marylanders with Stop the Bleed training, an international training program to educate the public on what to do if they are faced with a life-threatening situation of severe bleeding. Trauma survivorship programs are essential for the physical and mental recovery of the patients. This work has largely been completed without State resources but has provided an infinite benefit of reducing injuries.

Additionally, the Fund should be allowed to support capital costs associated with upgrading hospital space to accommodate the trauma service, such as dedicated trauma bays. This could be done by updating the guidelines of to the Equipment Grants currently allowed in the Trauma Fund. For example, removing the limitation that the grant is limited to 10% of the Fund balance, or only allocated biennially.

Increase Funding

The Trauma Fund is currently funded through a $5 surcharge on motor vehicle registrations, which has not been increased since it was created in 2003. The Maryland Health Care Commission estimates that the Fund would recoup $2 million for every $1 the fee is increased. Even a modest increase to the fee would help to cover the recommended flexibilities above.

Longer Term Considerations

Beyond implementing the recommended immediate changes above, it would be helpful for the work of this Commission, or a similar Commission, to extend for another year to evaluate the State support for the specialty trauma centers. There are several specialty trauma centers throughout the State, of which Johns Hopkins runs three: the Adult Burn Center at Johns Hopkins Bayview Medical Center, the Pediatric Burn Center at Johns Hopkins Children's Center, and the Wilmer Eye Institute at the Johns Hopkins Hospital. The sustainability of these programs has been absent from the conversation of State support for the Trauma System.

If the work of this Commission were to continue, there could also be consideration of other financing options for trauma centers outside of the Trauma Fund. For example, the Commission could look at the cost and benefit of a State-based trauma activation fee outside of the hospital rate setting system as is done in many other States. These kinds of changes would come at a

significant cost (and likely provide a significant benefit for the State's Trauma System) and therefore, require further evaluation.
Additionally, considerations should be made for the sustainability of the recommendations for immediate changes. Prior to this evaluation, there has not been an increase to the surcharge on motor vehicle registrations or any significant changes to the allowable uses of the Trauma Fund to address the needs of trauma centers. The Commission should recommend regular increases to the surcharge and evaluation of the needs of trauma centers for alignment of the uses of the Trauma Fund.

Johns Hopkins is committed to this work in caring for our most seriously injured Marylanders and incredibly grateful for the opportunity to provide suggestions to improve the State support for trauma centers. We are also appreciative of the support the State has provided thus far, and the time they are dedicating to this evaluation. We hope you consider Johns Hopkins to be a partner in this work.

If you have any questions, please contact, Michael Huber, Director of Maryland Government Affairs, at mhuber@jhu.edu.

Sincerely,

Michael Huber

Michael Huber, Director, Maryland Government Affairs
Johns Hopkins University
Government, Community & Economic Partnerships

Maryland Institute for Emergency Medical Services Systems

Maryland Health Care Commission

Trauma Physician Services Fund Recommendations Discussion

Maryland Commission to Study Trauma Funding

November 21, 2023

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November 3, 2023
Meeting #4

Agenda

1. Welcome and Introductions
2. Recap of Trauma Cost Survey and the Analysis of Hospital Utilization Data
3. Recommendation Discussion:
   a. Overview of TraumaNet recommendations
   b. Overview of Johns Hopkins Health Recommendations
   c. MHCC Recommendations
   d. Review of the Comprehensive List of Recommendations
4. Next Steps:
   e. Plans for the Report to the General Assembly
   f. Next Meeting Date – December? at 1:00 PM
   g. Draft Legislation (?)

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Recommendation Discussion

3

Overview of Johns Hopkins Health Recommendations

4

Increase Flexibility

On-Call Costs: Spending to ensure the availability of the required on-call providers has far outpaced other needs.

Ideas on how to achieve this include:

Removing the limitations due to allowed hours caps and Reasonable Compensation Equivalent (RCE) amounts by providing each trauma center with a specific dollar amount (or percent of Trauma Fund) to cover a portion of the on-call costs.

5

Increase Flexibility con't

Alternatively, if the preference is to keep limits and formulas in Statute, there are other changes that could be considered:

- Increasing the hour limits for on-call reimbursement for each trauma level;
- Increasing the provider/physician type allowed to receive reimbursement for on-call costs through the Trauma Fund; and
- Updating the formulas, so reimbursement is not based on Reasonable Compensation Equivalent, but rather a statewide average for the salary of each subsidized provider type.

6

Increase Flexibility con't

Other Costs

The allowable uses of the Trauma Fund should be expanded to support:

- Not only the clinical services provided by each trauma center but also the community-based services as well, such as injury and violence prevention education programs;
- Trauma survivorship programs; and
- The Fund should be allowed to support capital costs associated with upgrading hospital space to accommodate the trauma service, such as dedicated trauma bays. (This could be done by updating the guidelines to the Equipment Grants currently allowed in the Trauma Fund).

7

Increase Flexibility con't

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- The Fund should be allowed to support capital costs associated with upgrading hospital space to accommodate the trauma service, such as dedicated trauma bays. (This could be done by updating the guidelines to the Equipment Grants currently allowed in the Trauma Fund).

© Maryland Health Care Commission

8

Increase Funding

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- The Maryland Health Care Commission estimates that the Fund would recoup $2 million for every $1 the fee is increased.

9

Longer Term Considerations

It would be helpful for the work of this Commission, or a similar Commission, to extend for another year to evaluate the State support for the specialty trauma centers.

There are several specialty trauma centers throughout the State, of which Johns Hopkins runs three:

the Adult Burn Center at Johns Hopkins Bayview Medical Center;

the Pediatric Burn Center at Johns Hopkins Children's Center; and

the Wilmer Eye Institute at the Johns Hopkins Hospital.

Sustainability of these programs has been absent from the conversation of State support for the Trauma System.

10

Longer Term Considerations con't

If the work of this Commission were to continue, there could also be consideration of other financing options for trauma centers outside of the Trauma Fund.

- For example, the Commission could look at the cost and benefit of a State-based trauma activation fee outside of the hospital rate setting system as is done in many other States.
- Additionally, considerations should be made for the sustainability of the recommendations for immediate changes.
- The Commission should recommend regular increases to the surcharge and evaluation of the needs of trauma centers for alignment of the uses of the Trauma Fund.

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Overview of MHCC Recommendations

12

A. Recommendations Pertaining to HSCRC's Authority to Establish Hospital Rates

- HSCRC should continue to include costs already included and should *consider* adding the costs that are currently not incorporated. Information on trauma costs should be provided in a transparent manner.

- HSCRC should study the feasibility of allowing trauma center hospitals to bill trauma activation fees *in lieu of the approach currently utilized today related to trauma costs.*

(*Should HSCRC implement trauma activation fees, consideration should be give appropriately scale the activation fees to the scope of the trauma team that needs to be activated*).

13

B. Recommendations Pertaining to Changes in Trauma Center Regulations

When COMAR 30.08 Designation of Trauma and Specialty Referral Centers is next open for review, the review panel should consider efficiencies that could reduce administrative and clinical costs.

14

C. Recommendations to the Medicaid Administration

Medicaid shall conduct a periodic audit to confirm that Medicaid MCOs are appropriately reimbursing trauma providers at the Medicare rates.

15

D. Recommendations To Modify the Existing Scope of the Maryland Trauma Physician Services Fund (Fund)

1) The General Assembly should give Maryland Health Care Commission more discretion in distributing funds.

a. The cap on trauma equipment grants should be removed.

b. The MHCC should be permitted to award other operating grants subject to the availability of funds.

c. The MHCC should be directed to maintain a Fund reserve of no more than 10% of total MVA revenue in a given year and given the ability to disburse these funds above the 10% reserve requirement.

d. MHCC should be given authority to reimburse non-physician practitioners operating at the trauma center hospital to receive uncompensated care and Medicaid underpay adjustments from the Fund.

16

D. Recommendations To Modify the Existing Scope of the Maryland Trauma Physician Services Fund (Fund) con't

2) On-call payments from the Trauma Fund should be expanded to on-average 50% of trauma on-call stipends.

3) Hospitals that pay on-call stipends for non-surgical specialties should be eligible to collect a portion of those costs from the Trauma Fund.

17

D. Recommendations To Modify the Existing Scope of the Maryland Trauma Physician Services Fund (Fund) con't

4) Hospitals that pay standby stipends (which are allowable hospital costs) for non-surgical specialties (Emergency medicine and critical care), other surgical specialties (cardiac, hand; microvascular replant or flaps, obstetric and gynecologic, ophthalmic, maxillofacial, otorhinolaryngologic, pediatric, plastic, thoracic, urologic, and vascular) other non-surgical (cardiology, pulmonary medicine, interventional radiology, interventional angiography, pediatrics, gastroenterology, infectious disease, internal medicine, nephrology, neurology, pathology, physiatry, psychiatry) **should be eligible to collect a portion of those costs through HSCRC rates.**

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Review of the Comprehensive List of Recommendations

19

Next Steps

- Plans for the Report to the General Assembly
- Next Meeting Date – December? at 1:00 PM
- Draft Legislation (?)

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Appendix 3 – Communications from Level II and III Trauma Centers

UPMC LIFE CHANGING MEDICINE

UPMC Western Maryland

12400 Willowbrook Road
Cumberland, MD 21502
240-964-7000

January 8, 2024

Ben Steffen
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Mr. Steffen,

As the Level 3 Trauma Centers in Maryland, we are grateful for your dedication and hard work in establishing the commission focused on the vital issue of trauma care funding. Your commitment to this significant cause is truly admirable, and we want you to know that your efforts are greatly valued, especially by those in our rural communities. We are encouraged by the attention given to enhancing our healthcare system, considering the original funding models and distributions were established over two decades ago and no longer align with the current structures.

The Maryland Institute for Emergency Medical Services Systems (MIEMMS) Code of Maryland Regulations, (COMAR), requirement, which mandates additional subspecialties for Level 3 trauma centers, undoubtedly adds a financial strain on our hospital systems. These added costs, unfortunately, fall outside the current scope of support provided by the Health Services Cost Review Commission, (HSCRC), and the Trauma Fund. It is important to recognize that Level 3 Trauma requirements exceed Level 3 requirements by the American College of Surgery found in other States. This gap in funding is a matter of concern that we hope can be addressed collaboratively.

Level 3 Trauma Centers support the notion of increased funding and of the greater capabilities that we provide the citizens of Maryland. Increasing the surcharge on automobile registrations is an option that will be a minor benefit and it's clear that we need a multi-faceted approach to funding. A legislative tax targeting activities directly related to the causes of trauma incidents could be a viable part of this strategy but should be seen as a last-resort effort.

Introducing a new block grant or a carve-out funding stream from the HSCRC, separate from the regulated hospital rates, could greatly benefit our efforts. It's also crucial that we maintain flexibility in how these funds are disbursed, including support for the additional specialties mandated for level 3 trauma centers, for which

there is currently no funding mechanism. This is our preferred method of funding distribution as we believe that the HSCRC should play an integral role.

We suggest reassessing and possibly expanding the on-call and standby pay support to include other COMAR-mandated surgical as well as non-surgical specialties expected for all level III programs, which include OB/Gyn, Thoracic, Urologic, Cardiology, Internal Medicine, Nephrology, Neurology, Pathology,

Psychology and Pulmonary. This expansion is essential for our trauma centers to effectively manage a broad range of emergencies. Regarding clinical services that exist solely to meet COMAR requirements, it is only logical that these, too, should be financially supported. Such measures will ensure that our trauma centers are not only compliant with regulations but also financially sustainable. We agree that a revision and flexibility of the specialty, subspecialty, and non-surgical COMAR requirements should be considered with the next revision of the regulations. This would help with the physician recruitment and coverage challenges faced by rural hospitals and decrease the financial burden. While we align with many of the Maryland Health Care Commission's recommendations, we believe there is room to introduce more flexibility. Specifically, in terms of subspecialty coverage, we should consider models that address the gaps and recruitment challenges without resorting to expensive locum coverage. We must find a balance that maintains quality care without imposing undue financial strain. Considering rates for subspecialties warrants careful consideration to avoid any potential financial harm to our already strained systems.

We do agree with the additional recommendations regarding MCO reimbursement, removing the cap on the MHCC distribution of funds as well as the ability to expand what can be collected through HSCRC rates. We trust that together; we can find innovative and sustainable solutions to these challenges.

Thank you for your continued commitment to improving trauma care in Maryland. We look forward to your response and are eager to contribute further to this vital discussion.

Sincerely,

Michele Martz

UPMC Western Maryland
Michele Martz
President

Cc:
Trauma Commission Members
Western Maryland Delegation

TidalHealth

Executive

100 E. Carroll St.
Salisbury, MD 21801

O 410-543-7111
F 410-543-7102

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Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215

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Introducing a new block grant or a carve-out funding stream from the HSCRC, separate from the regulated hospital rates, could greatly benefit our efforts. It's also crucial that we maintain flexibility in how these funds are disbursed, including support for the additional specialties mandated for level 3 trauma centers, for which there is currently no funding mechanism. This is our preferred method of funding distribution as we believe that the HSCRC should play an integral role.

We suggest reassessing and possibly expanding the on-call and standby pay support to include other COMAR-mandated surgical as well as non-surgical specialties expected for all level III programs, which include OB/Gyn, Thoracic, Urologic, Cardiology, Internal Medicine, Nephrology, Neurology, Pathology,

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We do agree with the additional recommendations regarding MCO reimbursement, removing the cap on the MHCC distribution of funds as well as the ability to expand what can be collected through HSCRC rates. We trust that together; we can find innovative and sustainable solutions to these challenges.

Thank you for your continued commitment to improving trauma care in Maryland. We look forward to your response and are eager to contribute further to this vital discussion.

Sincerely,

TidalHealth, Inc
Steven Leonard, PhD, MBA, FACHE
President and CEO

cc: Trauma Commission Members
Eastern Shore Delegation

LIFEBRIDGE HEALTH

Good afternoon,

First and foremost, we would like to thank the MHCC and the Commission for the diligent work and dedication in re-examining the current Maryland Trauma Physician Services Fund (the Fund) and putting together a comprehensive plan to support the Maryland Trauma System.

We think it is most important to emphasize that Maryland's Trauma System cannot function without the sum of all of its parts. It is vitally important that all trauma centers are equitably funded to secure that we remain the best state in the nation to receive Trauma Care.

1. Increase On-Call Payments (slide 11)

We believe it is important to note that Level 2 Trauma Centers are required to have a Trauma Surgeon and Anesthesiologist on stand-by (in hospital) 24/7. Orthopedics and Neurosurgery are 24/7 on-call and must be available with-in 30 minutes of emergent consultation per COMAR for Level 2 Trauma Centers. Currently, the Fund excludes Level 2 Trauma Centers from any reimbursement for anesthesia and limits the amount of hours available for reimbursement to 24,500 for trauma surgeon, orthopedics and neurosurgery at a rate of 30% of the reasonable cost equivalents (RCE). We support the increase to 60% of the RCE and ask that Anesthesia be added to the reimbursement of costs incurred for Level 2 trauma centers, as they are with Level 3 Trauma Centers. We agree with MHCC recommendations to increase the hours available for request to 8,740 per specialty except, this should include anesthesia for Level 2 Trauma Centers, increasing the FTE from 3 to 4.

2. Allow flexibility in Administering the Trauma Fund

We support flexibility in the amount to be dispersed under the grant awards and the ability to cover additional costs. We recommend language that secures the funding to be used solely for the Trauma Fund Program, not to be diverted for other general fund needs.

3. Enable Non-physician providers to receive payment from the Fund

As was discussed during the stakeholder process, additional support to Trauma Centers to receive compensation for Trauma Administrative cost, i.e. Trauma Medical Director, Trauma Program Manager, Trauma Registrars, Trauma Quality Coordinator, and Injury Prevention enable critical functions of all trauma centers and required under current COMAR regulations.

4. Audit of Incremental Costs Related to Trauma Services

We don't disagree that the HSCRC should study the ongoing incremental trauma costs that trauma centers report as part of the annual rate update; there needs to be consideration on the fixed costs associated with these programs due to state requirements that, irrelevant of utilization, are unavoidable. These costs will count against the overall

TCOC model savings target. HSCRC may consider asking CMS/CMMI to not include trauma center costs against the model metrics goals.

5. Conduct Biannual Audits on MCOs

We support occasional scheduled audits to ensure providers are being compensated at current Medicare rates.

6. Children's and JHH Peds inclusion

We support from a Trauma System perspective.

7. Aligning Trauma Data System with HSCRC and MHCC Data Systems

We support linking the Maryland Trauma Registry with HSCRC and MHCC in the interest of transparency and collaboration across the state for trauma quality.

Regarding the MHCC, HSCRC, and MIEMSS developing quality measures for Trauma Centers, this is already being done at the State level through the Trauma Quality Improvement Council (TQIC) as required by COMAR. This would be an unnecessary redundancy and possibly interfere with the high-level quality improvement already occurring at TQIC. We recommend utilizing this council for additional advisement on quality or program measure development.

8. Trauma Funding Sources

Not all solutions offered in this report were discussed through the stakeholder process. The existing funding source through vehicle registration fee is an established mechanism that is spread across the entire state. This source likely does not meet the full funding needs should the state support each recommendation. Other sources should be identified with an equity lens to ensure we don't place the burden inappropriately. This could include, but not limited to, alcohol, cannabis, speeding (especially in work zones), DUIs, and other motorist (including boating) infractions with further exploration.

Best regards,

Jaime

James Gannon MS, RN, CEN
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