Maryland Health Care Commission

Thursday, December 19, 2019

1:00 p.m.

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

MARYLAND HEALTH CARE COMMISSION

APPROVAL OF MINUTES

(Agenda Item #1)

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

MARYLAND HEALTH CARE COMMISSION

UPDATE OF ACTIVITIES

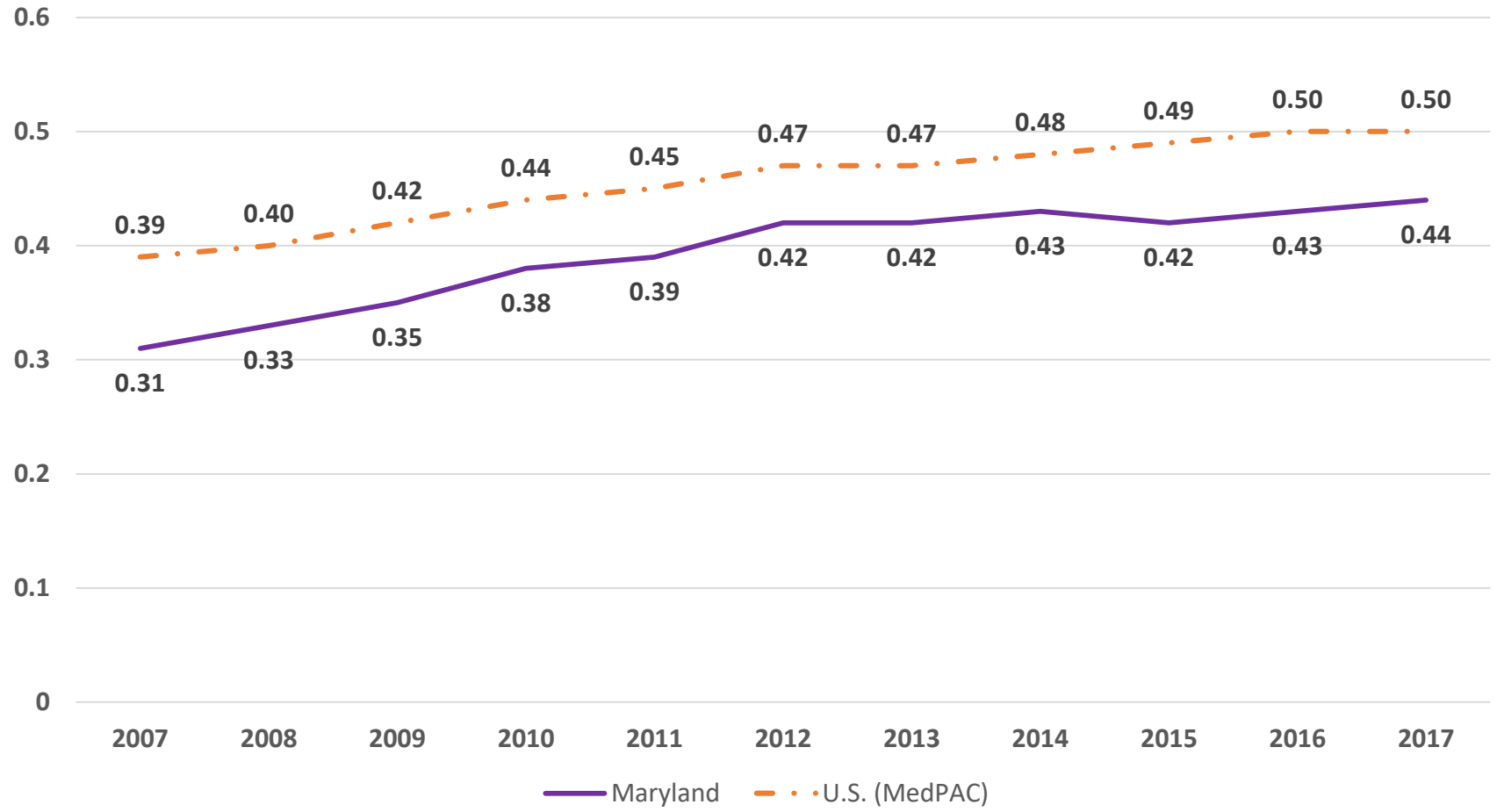
(Agenda Item #2)

Update and Clarification

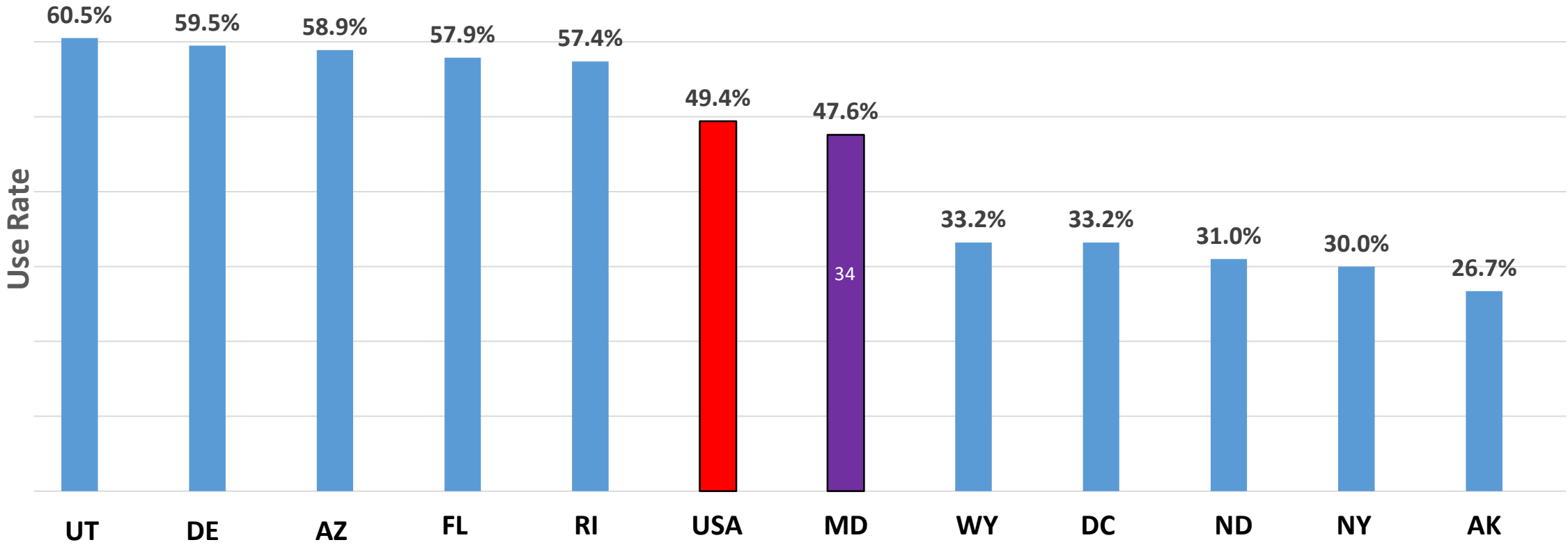
Use of Hospice Services in Maryland Compared to the U.S. and Other States

December 19, 2019

Hospice Use Rates, Maryland (35+ population) and U.S. (Medicare beneficiaries):2007-2017

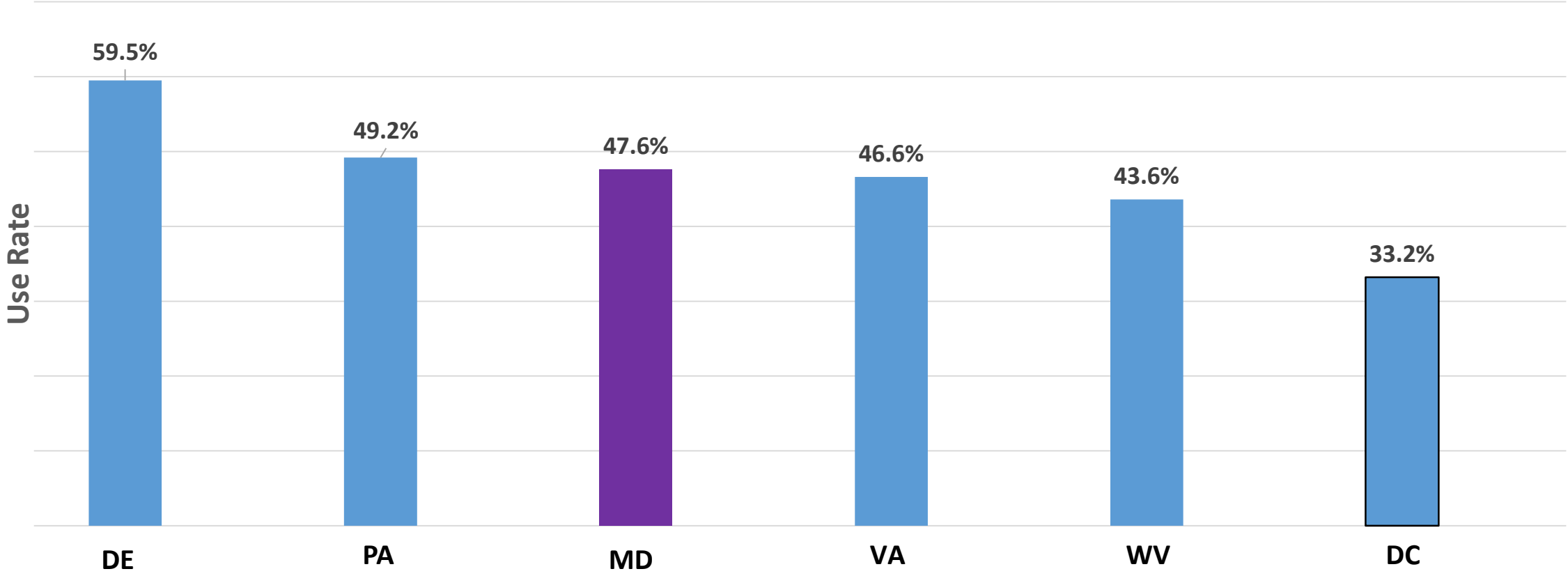


Hospice Use Rates - 2018
Maryland, the U.S., and Selected Other States
(Medicare hospice deaths / Total Medicare deaths)



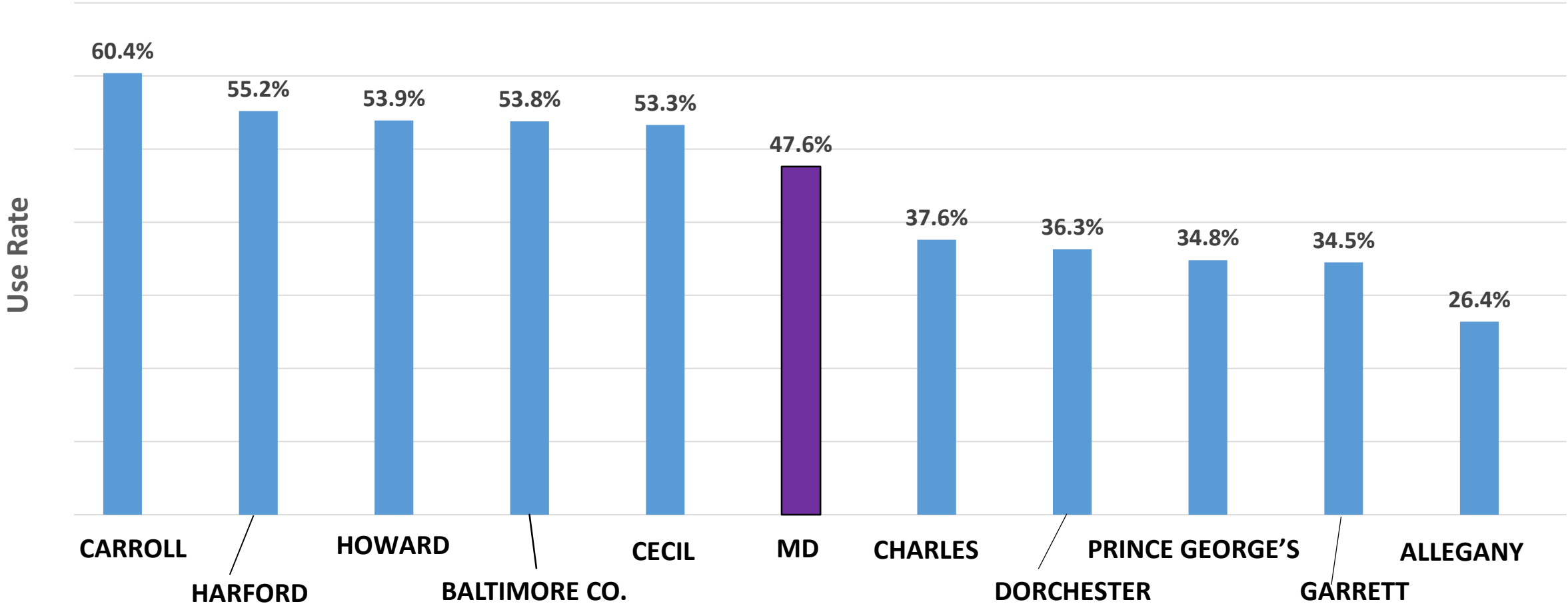
Source: HospiceAnalytics.com

Hospice Use Rates - 2018
Maryland, States Bordering Maryland, and D.C.
(Medicare hospice deaths / Total Medicare deaths)



Source: HospiceAnalytics.com

Hospice Use Rates - 2018
Maryland and Selected Jurisdictions
(Medicare hospice deaths / Total Medicare deaths)



Source: HospiceAnalytics.com

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION: Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)**

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

ACTION:

Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds
(Docket No. 18-22-2435)

(Agenda Item #3)

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION: On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown**

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

MARYLAND HEALTH CARE COMMISSION

PRESENTATION:

On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

(Agenda Item #4)

MARYLAND HEALTH CARE COMMISSION

Assessment of Changes at UM Shore Medical Center at Chestertown, 2015 – 2018, and Model for Rural Hospital Development

December 19, 2019

Overview of Projects

- *Chestertown Assessment*- The assessment of services is based on SB1010, which directs the Commission, with OHCQ, to profile changes in service types and service volume at the UM Shore Medical Center at Chestertown over the period 2015 through 2018 (SMC-Chestertown) and identify any services that were reduced or transferred from SMC-Chestertown to the University of Maryland Shore Medical Center at Easton.

- *"Models" Report.* This report will identify delivery system models that could meet the health care needs of residents in Kent and northern Queen Anne's County, the service area of SMC-Chestertown. These models should be applicable and scalable to other rural communities in Maryland and should align with the Total Cost of Care Demonstration Agreement that Maryland signed with the Centers for Medicare and Medicaid Services in 2018.

Key Project Dates

December 19	Monthly MHCC Meeting: Presentation on Assessment Report and initial discussion of “Models”.
January 1	Statutory deadline for submission of Assessment Report.
January 16	Monthly MHCC Meeting: Presentation on “Models” Report
Post-January 16	Submission of “Models” Report

MARYLAND HEALTH CARE COMMISSION

Demographics

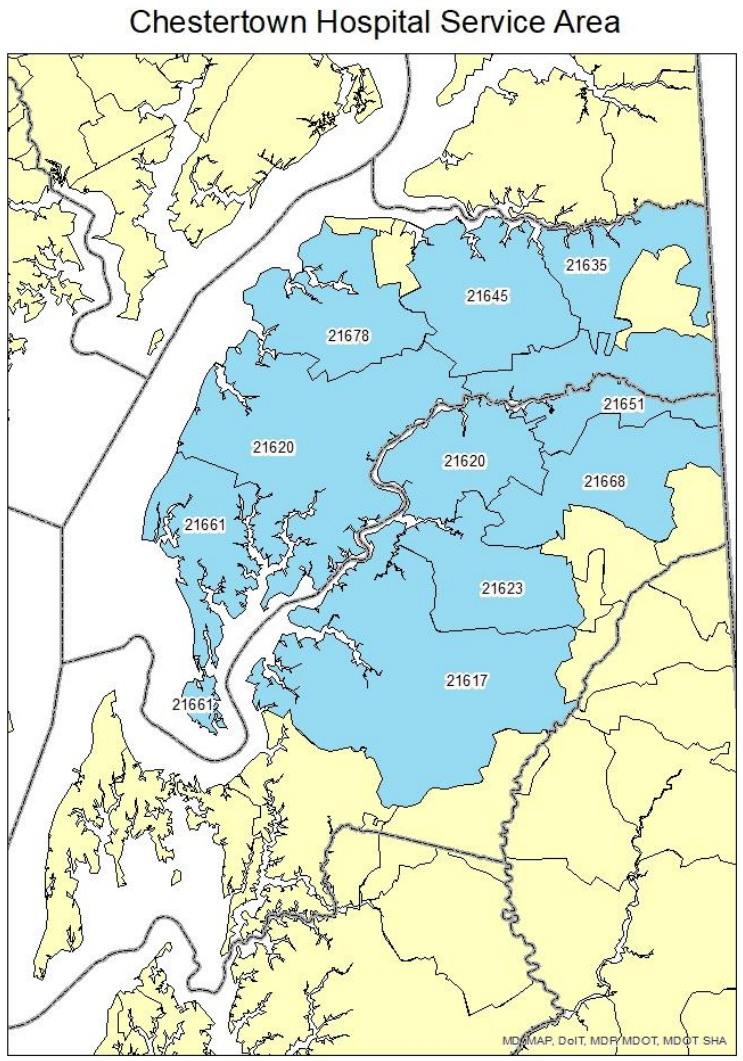
	Chestertown	Kent County	Queen Anne's County	Maryland
Population estimates, July 1, 2018, (V2018)	5,054	19,383	50,251	6,042,718
Population, percent change - April 1, 2010 (estimates base) to July 1, 2018, (V2018)	-4.10%	-4.00%	5.20%	4.70%
Persons 65 years and over, percent	27.80%	26.70%	18.80%	15.40%
Persons without health insurance, under age 65 years, percent	5.80%	8.40%	5.40%	6.90%
Median household income (in 2017 dollars), 2013-2017	$46,356	$56,638	$89,241	$78,916
Per capita income in past 12 months (in 2017 dollars), 2013-2017	$26,399	$32,217	$40,553	$39,070
Persons in poverty, percent	24.50%	12.80%	7.70%	9.00%
Population per square mile, 2010	2,023.90	72.9	128.5	594.8
Land area in square miles, 2010	2.6	277.03	371.91	9,707.24

MARYLAND HEALTH CARE COMMISSION

Source: Census Bureau Quick Facts

Chestertown Hospital Service Area - 2011

In 2011, prior to SMC-Chestertown joining the Shore system, 84.2% of hospital discharges from the hospital originated from nine zip code areas. By 2018, 85% of discharges originated in eight of these same areas. (Fewer patients from 21645 (Kennedyville) eliminated it from the 85% relevance service area for 2018.)



Chestertown21620,Rock Hall- 21611, Worton-21651, Millington-21678, Centreville-21617, Sudlersville-21668, Church Hill -21623, Galena - 21635, Kennedyville-21645

Key Assessment Finding: Changes in the Types of Inpatient Service Provided

In 2015, SMC-Chestertown provided one type of recognized acute inpatient service, medical/surgical/gynecological/ addictions (MSGA) services. It did not provide any of the other three recognized acute inpatient services; obstetric, pediatric, or acute psychiatric services. In 2018, it continued to operate as a medical/surgical hospital limited to providing general medical/surgical and intensive care services to adults.

The mix of MSGA patients, by diagnosis, changed over this time period and a substantive decline in inpatient service volume occurred. But, fundamentally, the type of general hospital service provided did not change.

MHCC MARYLAND HEALTH CARE COMMISSION

Key Assessment Finding: Changes in the Types of Inpatient Service Provided

In both 2015 and 2018, SMC-Easton provided two types of recognized acute inpatient service, MSGA and obstetric services.

While both hospitals allocated licensed bed capacity to pediatric services in 2018, neither provide substantive levels of this service: no reported patient days for patients aged 0-14 at SMC-Chestertown in 2018; only 156 patient days at SMC-Easton.

As with SMC-Chestertown, the mix of MSGA patients, by diagnosis, changed at SMC-Easton over this time period, but the same two types of acute inpatient service were provided in both years. SMC-Easton is authorized to provide acute psychiatric services after SMC-Dorchester completes conversion to an FMF.

Key Assessment Finding: Changes in the Types of Outpatient Service Provided

In both 2015 and 2018, SMC-Chestertown provided an array of outpatient diagnostic and treatment services typical of a small rural hospital. No service categories comprising the most frequently provided at the hospital disappeared or were added over this period. Four service categories (diagnostic imaging, which includes x-ray, fluoroscopic, and CT services, laboratory, emergency department services, and drugs) accounted for approximately 80% of total outpatient visits over this period. In this group, the hospital saw a significant increase in CT service visits by 2018 (16.4%) and a significant decline in drug-related visits (-7.4%).

Key Assessment Finding: Changes in the Types of Outpatient Service Provided

Significant declines were experienced between 2015 and 2018 in several frequently provided outpatient services at SMC-Chestertown. These included:

- Supply-related visits (-13.0%);
- Surgical-related visits [operating room and anesthesia services] (29.5%); and
- Electrocardiography visits (-46.2%)

Reported outpatient clinic visits saw a large increase over the 2015 to 2018 period, nearly doubling from 724 to 1,376 visits.

Key Assessment Finding: Volume of Inpatient Service

Change in Market Share of Discharged Patients, Top 5 Hospitals Used by Residents of the 2011 SMC-Chestertown Hospital Service Area

Hospital	Change in Discharge Volume 2015-2018	2015 Market Share	2018 Market Share
SMC-CHESTERTOWN	-521	41%	31%
ANNE ARUNDEL	23	23%	26%
SMC-EASTON	168	13%	20%
UNIVERSITY OF MARYLAND	-29	8%	8%
JOHNS HOPKINS	-1	3%	4%
Other Maryland hospitals	-85	12%	11%
Total Discharges	-445		

MARYLAND HEALTH CARE COMMISSION

Key Assessment Finding: Volume of Inpatient Services

- Inpatient volume at UMSMC declined between 2015 and 2018
  - 15% average annual decline in patient days*
  - 12% average annual decline in discharges*
- This decline underlines the drop in licensed acute care beds at SMC-Chestertown between FY 2015 and FY 2020, from 30 to 12 beds
- Medicare pays for 75% of inpatient care at SMC-Chestertown; Medicaid pays for 10%
- About 90% of admissions originate in the Emergency Department
- Approximately 25% of discharges are to skilled nursing facilities; 8% are to home health agency services
- SMC-Chestertown average length of stay: 3.9 days

**Calculated using compound annual rate of change*

MHCC MARYLAND HEALTH CARE COMMISSION

Key Assessment Finding: Volume of Outpatient Services

- Outpatient volume at SMC-Chestertown declined slightly between 2015 and 2018 (1% average annual decline in total outpatient visits)
- Medicare pays for just under 50% of outpatient care; Medicaid pays for 20%
- Approximately a third of total outpatient visits occur in the Emergency Department

Key Assessment Finding: Quality of Care at SMC-Chestertown

	2015	2018	Average Annual Change 2015- 2018
Total Admissions	1,829	1,262	-11.6%
Readmissions	245	152	-14.7%
Readmissions as % of Total Admissions	*13.4%*	*12.0%*	
PQI Admissions	415	129	-32.3%
PQI Admissions as % of Total Admissions	*22.7%*	*10.2%*	

MARYLAND HEALTH CARE COMMISSION

PQI = Prevention Quality Indicator

SMC-Chestertown Financial Performance 2015-2018

Net revenue **increased** at an average annual rate of 2.8% ($46.9M in 2015 vs. $50.8M in 2018)

- Gross patient service revenue **declined** at an average annual rate of 2.7% ($64M in 2015 vs. $59M in 2018).
- Total operating expenses **declined** at an average annual rate of 2% over this period
- The use of global budgeted revenue (GBR) for charge regulation in Maryland means that rates per discharge or visit go up when volume declines
  - SMC-Chestertown's declining volume makes it a high charge hospital, reducing its appeal to payers,
  - **the GBR can delay the fiscal impact of "good" volume declines, it cannot eliminate the impact**

MHCC MARYLAND HEALTH CARE COMMISSION

Informant Interview Findings

- Large older adult population is growing (27% of Kent County population is 65 or older)
- Residents of the service area are bypassing SMC-Chestertown
- Transportation is a challenge
- Certain health care services are needed locally, including hospitalization services
- SMC-Chestertown is a local economic driver and an employee recruitment tool for all employers
- Poor communication and community mistrust of SRH
- Mixed response on sufficient supply of primary care

Next Step: "Models" Report

- Additional data analysis
- Findings from interviews with key stakeholders
- "Models" for care delivery
  - Grounded in best practices from other rural states
  - Must work within the Total Cost of Care Model
  - Predicated on inclusion of inpatient care

MHCC MARYLAND HEALTH CARE COMMISSION

The Impact of GBR when Volume is Falling (patient acuity-adjusted)

All Patients (Private, Medicare, Medicaid, Uninsured)								
	SMC-Chestertown		SMC-Easton		Garrett Co. Mem.		Anne Arundel	
	2015	2018	2015	2018	2015	2018	2015	2018
Medical Admissions	1,545	1,029	7,084	6,491	1,601	1,775	21,262	21,722
Charge Per Visit	$15,680	$15,060	$ 13,618	$14,037	$ 11,577	$ 9,908	$ 10,369	$ 10,527
Surgical Admissions	236	176	1,604	1,569	530	543	9,041	7,994
Charge Per Visit	$ 16,513	$19,793	$11,809	$11,591	$9,960	$10,165	$9,874	$10,494

- A hospital is permitted to adjust its GBR by +- 5% in a given year without HSCRC approval and by +-10% with HSCRC approval
- Significant savings for payers if SMC-Chestertown average charges per surgical admission was the same as that at Garrett or Anne Arundel

The Impact of GBR when Volume is Falling (an Illustration with 4 Conditions – patient acuity adjusted)

All Patients (Private, Medicare, Medicaid, Uninsured)								
	Chestertown		Easton		Garrett		Anne Arundel	
	2015	2018	2015	2018	2015	2018	2015	2018
Medical Admissions	109	75	184	353	115	167	835	977
Septicemia & Disseminated Infections	$ 15,341	$13,563	$14,108	$12,680	$12,928	$ 9,271	$11,363	$10,650
Intestinal Obstruction	$ 11,835	$18,347	$12,899	$13,545	$11,786	$ 9,600	$ 9,715	$ 9,874
Surgical Admissions	69	66	346	255	161	211	1,425	1,000
Knee joint replacement	$ 17,887	$25,268	$10,013	$10,436	$10,007	$ 9,950	$10,938	$12,582
Laparoscopic cholecystectomy	$ 15,694	$16,021	$12,838	$13,312	$11,125	$ 9,311	$ 8,386	$ 9,340

Summary & Discussion

MARYLAND HEALTH CARE COMMISSION

Assessment of Changes at SMC-Chestertown

- The patient care services provided have not changed fundamentally. This small medical/surgical hospital has seen a proportional increase in medical inpatients and fewer surgical patients.
- Demand for inpatient services declined sharply in recent years. A more rapid fall than the continued decline seen broadly in most areas of Maryland in this decade.
- Outpatient service volume declined only slightly.
- The shrinking pool of inpatients in the hospital's service area has increased its use of the two closest alternative general hospitals while using SMC-Chestertown less.
- Elective admissions have dwindled to about 10% of total.

MHCC | MARYLAND HEALTH CARE COMMISSION

SMC-Chestertown and SMC-Easton

- While both hospitals have seen declining demand for inpatient care, SMC-Easton has been the largest recipient of Chestertown service area demand shifting away from the Chestertown hospital.
- SRH has made decisions to “regionalize” administrative functions and some clinical services. These actions do not appear unusual or inconsistent with the challenging market environment or financial incentives presented to SRH. They have the effect of further marginalizing Chestertown as a site for service delivery.

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION: Potential Models for Rural Health Delivery in Maryland**

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

PRESENTATION:

Potential Models for Rural Health Delivery in Maryland

(Agenda Item #5)

Development of Models for Rural Health Delivery

Maryland Health Care Commission Meeting

December 19, 2019

The Walsh Center
for Rural Health Analysis
NORC AT THE UNIVERSITY OF CHICAGO

NORC Walsh Center for Rural Health Analysis

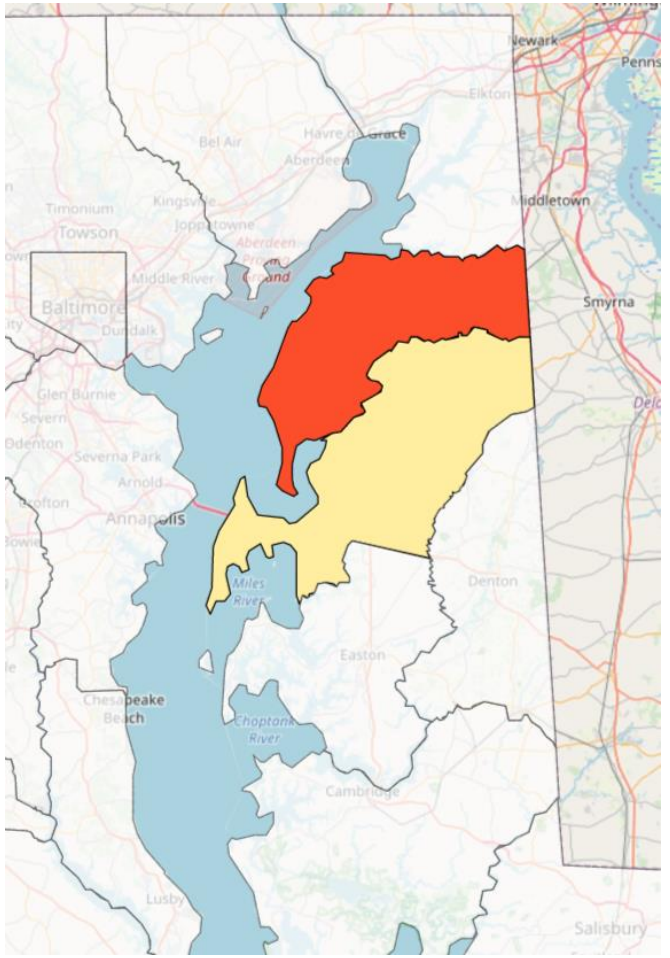
NORC at the University of Chicago is an objective and non-partisan research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions.

NORC's Walsh Center for Rural Health Analysis, established in 1996, conducts timely policy analysis, research, and evaluation that address the needs of policy makers, the health care workforce, and the public on issues that affect health care and public health in rural America. The Walsh Center is based in Bethesda, MD.

Purpose

- Identify delivery system models that could meet the health care needs of residents in Kent and upper Queen Anne's Counties

- Models are applicable and scalable to other rural communities in Maryland and consistent with the Total Cost of Care (TCOC) Demonstration Agreement with the Centers for Medicare & Medicaid Services (CMS)



Methods

MHCC/HSCRC document review

Key informant interviews

Review of data analysis conducted by LD Consulting and provided by MHCC/HSCRC

Systematic national scan for relevant rural models

Assessment of Services at UMSMCC (2018)

- Inpatient Utilization
  - 75% paid by Medicare; 10% paid by Medicaid
  - About 90% of visits originated in the ED
  - Around 90% indicated coming to the hospital from home
  - Approximately 25% of visits were discharged to SNF
  - Roughly 8% of discharges were home health
  - ALOS: 3.9 days
  - ADC: 10 patients

- Outpatient Utilization
  - Nearly 50% paid for by Medicare and 20% paid for by Medicaid
  - Approximately 1/3 of visits occurred in the ED

Key Informant Interviews: Stakeholder Perceptions

- Residents of the service area are bypassing UMSMCC
- Transportation is a challenge
- Poor communication and community mistrust of SRH
- Large older adult population is growing
- Certain health care services are needed locally, including inpatient beds
- UMSMCC is an economic driver, including as an employee recruitment tool
- Mixed response on sufficient supply of primary care

Continuum of Optional Models

Cross-Cutting Considerations

- Enhance Community Engagement
- Improve Health Literacy
- Implement Mobile Integrated Health program
- Address Adequacy of Volunteer Emergency Medical Services
- Establish Non-emergency Transportation
- Optimize Rural Workforce Training
- Expand Broadband
- Leverage Technology
- Conduct Chestertown Community Health Needs Assessment

Current Acute Care Hospital

- Current service lines: 24/7 ED, medical/surgical inpatient and ICU (12 beds), outpatient medical/surgical services, ancillary services
- Enhanced community engagement to address bypass for services offered locally
  - Community providers, specifically primary care providers
  - Potential patients

Maryland Rural Hospital (Pilot)

Critical Access Hospital (CAH)-like Delivery Model

- CAH Conditions of Participation (24/7 ED, up to 25 inpatient/observation beds, ALOS 96 hours)
  - Joint Commission CAH Accreditation or other accepted entity
  - NOTE: CAH cost-based reimbursement is not allowed under TCOC, number of beds determined by MHCC
- ICU-level care not provided
- Outpatient specialty services and surgery
- Timely transfer protocols and transportation
- Enhanced use of telehealth, such as outpatient specialty services and/or tele-emergency
- Community-based services meeting community need
- Advisory board comprised of at least 51% of members who use UMSMCC services (i.e., current patients)

Aging and Wellness Center of Excellence (Pilot)

- Geriatric medicine and outpatient specialty services most often used by the older adult population (e.g., cardiology, pulmonology, nephrology, neurology, orthopedics, etc.)
- Multidisciplinary care team including behavioral health
- Care coordination and patient health education
- Enhanced use of telehealth for outpatient specialty services
- Remote patient monitoring
- Enhanced nurse education in gerontology
- Advisory board comprised of at least 51% of members who use Aging and Wellness Center of Excellence services

Alana Knudson, PhD
Co-Director, Walsh Center for Rural Health Analysis
Knudson-Alana@norc.org
(301) 634-9326

Thank You!

The Walsh Center
for Rural Health Analysis
NORC AT THE UNIVERSITY OF CHICAGO

walshcenter.norc.org

@WalshCenter

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION: Approval for Release – Maryland Trauma Physicians Services Fund Annual Report**

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

ACTION:

Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

(Agenda Item #6)

THE MARYLAND TRAUMA PHYSICAN SERVICES FUND

Annual Report

December 19, 2019

Ben Steffen, Executive Director

MHCC | MARYLAND HEALTH CARE COMMISSION

Maryland Trauma Physician Services Fund

Background

- During the 2003 Legislative Session, the Maryland General Assembly established the Maryland Trauma Physician Services Fund to aid Maryland's trauma system by reimbursing trauma physicians for uncompensated care losses and by raising Medicaid payments to 100% of the Medicare rate when a Medicaid patient receives trauma care

- The legislation established a formula for reimbursing trauma centers for trauma-related on-call expenses for trauma surgeons, orthopedists, neurosurgeons, and anesthesiologists

  - The legislation directed HSCRC to allow trauma center hospitals to include trauma-related standby expenses in approved rates.

- The trauma fund is financed through a $5 fee on automobile registrations and renewals

Maryland Trauma Physician Services Fund

The Legislation Expands

- 2006 - Expanded eligibility to uncompensated care and extended Medicaid reimbursement to physicians providing trauma care. Increased on-call payments to Level II and Level III Trauma Centers. Replaced the per specialty limit for on call with a per center limit on hours. Extended uncompensated care payments to include the Johns Hopkins Burn Center, Johns Hopkins Eye Trauma at the Wilmer Institute, and the Hand Trauma Center at Union Memorial. Increased the ceiling on the stipend for Children's National Medical Center to $490,000.

- 2008 - Permitted the Level I Trauma Centers, Pediatric Trauma Center, and 3 specialty referral centers to receive a limited on-call stipend. Authorized physicians to receive uncompensated care payments for care provided at trauma center-affiliated rehabilitation hospitals. Raised the cap on uncompensated care reimbursement for emergency medicine physician practices. Increased the annual grant to Children's National Medical Center to $590,000. Permitted MHCC to award grants to Level II and Level III Centers for trauma related equipment from the fund balance. Permitted MHCC to adjust uncompensated care and on-call rates.

Maryland Trauma Physician Services Fund

- 2009 – Permitted Level III Trauma Centers to receive on-call stipends for up to 70,080 hours per year to maintain trauma, orthopedic, neuro, plastic, vascular, thoracic, oral or maxillofacial surgeons, and anesthesiologists. Gave MHCC authority NOT to reimburse Level III Trauma Centers for on-call hours under this change for trauma on-call exceeding 35,040 until the remaining costs eligible for reimbursement for Level I, II, III, pediatric and specialty referral centers are fully funded.
- 2012 – Removed the statutory restriction that expenditures from the fund may not exceed the fund's revenues in a fiscal year
- 2013 – Additional on call reimbursement for Level III trauma centers noted above was abrogated and of no further force and effect as of the end of September, 2013
- 2019 – Primary Adult Resource Center (PARC, Shock Trauma) – becomes eligible for standby payments

Maryland Trauma Physician Services Fund

- Provides payments to offset the costs of uncompensated and undercompensated medical care provided by trauma physicians to patients at Maryland's designated trauma centers. The MHCC has paid uncompensated care at 105% of the Medicare reimbursement rate since 2016.

- Provides a stipend to trauma centers to offset their on-call and standby expenses. The MHCC paid on-call at 105% of the allowable on-call amounts since 2016.

- Provides grant funding to trauma centers for certain equipment.

- Reimburses Medicaid for the State's portion of paying trauma providers. The MHCC has reimbursed Medicaid for paying 105% of Medicare since 2017.

Maryland Trauma Physician Services Fund

Our Resources

- *MIEMSS* – provides trauma registry data
- *CoreSource, Inc.* – third party administrator for uncompensated care claims
- *Myers and Stauffer* – auditor for practices and trauma centers
- *Medicaid* – provides reports on the State share for MCO FFS reimbursement
- *MVA* – reports to MHCC on revenues projected and collected
- *Comptroller of Maryland* – sends all reimbursements to providers via check/ACH

Maryland Trauma Physician Services Fund

Status of the Fund

- Fiscal Year 2020 appropriation is $12,300,000 and of this amount $12,000,000 is appropriated for reimbursements, $300,000 is appropriated for grants
- Equipment grants are established bi-annually and can only be 10% of the surplus in the fund
- The Budget Reconciliation Financing Act of 2018 reduced the fund balance by $8 million
- The total surplus at the close of FY 2019: $3,906,147
- Expenditures during FY 2019 were $11,826,729 (refund checks reduce expenditures)
- Revenue coming into the fund totaled $12,707,734

On-Call

- Processed twice a year: January/July
- Level I trauma centers can receive 4,380 hours annually; Level II – 24,500; Level III – 35,040 and specialty centers – 2,190 annually; current reimbursement rate is 105% of Medicare unless capped hours are reached
- The expenditures in FY 2019 were $8,130,150 an increase of $215,266 over FY 2018
- On-call is the largest cost driver of the fund; in 2019, on-call accounted for 68% of all expenditures

Trauma Center	FY 2017	FY 2018	FY 2019
Johns Hopkins Bayview Medical Center	$970,629	$987,879	$977,550
Johns Hopkins Adult Level One	168,630	171,652	174,762
Prince George's Hospital Center	709,702	726,371	725,957
Sinai Hospital of Baltimore	872,365	827,725	870,784
Suburban Hospital	782,910	797,198	863,077
Peninsula Regional Medical Center	1,257,299	1,457,490	1,493,302
Meritus Medical Center	1,349,958	1,525,565	1,372,537
Western Maryland Regional Medical Center	927,626	999,491	1,227,839
Johns Hopkins Adult Burn Center	84,316	85,826	87,382
Johns Hopkins Wilmer Eye Center	84,316	85,826	87,382
Johns Hopkins Pediatric Trauma	162,798	164,038	162,199
Union Memorial, Curtis National Hand Center	84,316	85,826	87,382
TOTAL	**$7,454,865**	**$7,914,887**	**$8,130,153**

Uncompensated Care

- Provides payments to offset the costs of uncompensated and undercompensated medical care provided by trauma physicians to patients at Maryland's designated trauma centers
- Provides for subsequent follow-up care if the treatment is directly related to the initial injury
  - Services must be provided at the trauma center or at a trauma center-affiliated rehabilitation hospital setting
- A practice must confirm that the patient has no health insurance. If the patient is uninsured and full payment is not received from the patient, the service can be written off as uncollectible and eligible for uncompensated care reimbursement
- Fiscal Year 2019 expenditures: $1,864,933
- Current reimbursement rate is 105% of the Medicare reimbursement rate

Uncompensated Care by Trauma Center

Facility	% of Uncompensated Care Payments FY 2017	% of Uncompensated Care Payments FY 2018	% of Uncompensated Care Payments FY 2019
UMD Shock Trauma Center & UMD practices	34.28	50.07	57.51
Johns Hopkins Hospital Adult Level One	8.81	8.81	5.44
Prince George's Hospital Center	31.04	15.62	12.52
Johns Hopkins Bayview Medical Center	2.71	6.58	5.75
Suburban Hospital	9.57	13.89	10.75
Peninsula Regional Medical Center	4.16	2.34	4.47
Sinai Hospital of Baltimore	1.83	0.30	0.09
Johns Hopkins Regional Burn Center	0.38	0.38	0.41
Meritus Medical Center	1.23	0.72	0.68
Western Maryland Regional Medical Center	0.15	0.46	0.03
Johns Hopkins Wilmer Eye Center	0.61	0.61	0.22
Johns Hopkins Hospital Pediatric Center	5.05	0.22	0.02
MedStar Union Memorial	0	0	2.10

Uncompensated Care Payments in FY 2019 Percentage of All Claims Paid by Practice	
Participating Practice	Percent of All Claims Paid
Abdul Cheema	0.21
Adam Schechner	5.51
Aminullah Amini	0.15
Bethesda Chevy Chase Orthopaedic Assoc., LLP	0.03
Community Surg Practice LLC	2.69
Dimensions Healthcare Associates, Inc.	0.49
Emergency Services Associates	2.61
Enrique Daza Racines MD LLC	1.37
First Colonies Anesthesia, LLC	0.39
JHU,Clinical Practice Association	12.74
Jeffrey Muench	2.36
Johns Hopkins Community Physicians	0.75
Juan A Arrisueno	0.01
Kenneth Means	2.10
Konrad Dawson	0.27
Meritus Physicians - Trauma	0.96
Mohammad Khan	0.31
Nia D Banks MD PhD LLC	0.12
Ortho Trauma Bethesda	1.10
Peninsula Orthopedic Associates, PA	0.84
Revathy Murthy	0.01
Said A Daee MD PA	0.08
Shock Trauma Associates, P.A.	34.32
The Spine and Joint Center	0.57
Trauma Surgery Associates	2.41
Trauma Surgical Associates	1.03
Univ of MD Diagnostic Imaging Specialists, P.A.	5.46
Univ of MD Oral Maxial Surgical Associates	0.44
Univ of MD Ortho Trauma Associates	20.68
All	100.00

Aligning Trauma Fund Payments to Account for Medicaid Payment

Due to the Medicaid Expansion

- The number of Medicaid trauma patients increased by 120% from 2013 to 2015
- The cost per patient decreased by 27%
- Without the Medicaid expansion, these patients were likely uninsured and trauma physicians would have been paid at 105% of the Medicare rate, and MHCC would have paid secondary procedures at the higher rate

- The MHCC and Medicaid agreed that Hilltop Institute (Hilltop) would estimate the magnitude of the difference

Aligning Trauma Fund Payments to Account for Medicaid Payment *(Continued)*

- The Hilltop study found that payments were significantly lower under Medicaid rules
  - Medicaid payments were paid at 100% of Medicare, not 105%
  - Secondary procedures were not reimbursed at full payment
- The MHCC determined that adjustments could be made for physician practices that had treated Medicaid patients
- In FY 2018, the fund reimbursed facilities, through Medicaid, with an adjustment in the amount of $1,000,448 covering FYs 2016 and 2017 due to MCO coding errors
- In FY 2019, the fund reimbursed the difference between what was paid by Medicaid (both FFS and MCO) and the Medicare reimbursement rate at 105% without regard to CPT modifiers

Trauma FFS Differential Reimbursement	
PROVIDER	Amount Paid
ATLANTIC GENERAL SURGERY ASSOCIATES	$4,561.20
DIMENSIONS HEALTH ASSOCIATES, INC	$106.18
DIMENSIONS HEALTHCARE ASSOCIATES, I	$10,994.59
J H U DEPT OF UROLOGY	$894.45
JEFFREY P MUENCH	$234.23
JHU ANESTHESIOLOGISTS	$18,560.96
JHU DEPT OF ORTHO SURGERY	$16,184.18
JHU EMERGENCY MED ASC	$478.63
JHU GASTROENTEROLOGY	$332.02
JHU GENERAL SURGERY ASSOC	$23,789.66
JHU INTENS CARE UNIT ASC	$1,052.65
JHU NEUROSURGERY	$6,099.57
JHU OLARYNGOLOGY CONS SV	$1,582.39
JHU PLASTIC SURG ASC	$3,531.70
JHU RADIOLOGY	$1,567.53
JOHNS HOPKINS COMMUNITY PHYSICIANS	$2,965.71
JOHNS HOPKINS UNIV	$506.81
JOHNS HOPKINS UNIV PED SURGERY ASC	$243.48
JOHNS HOPKINS UNIVERSITY	$2,984.82
MERITUS MEDICAL CENTER INC	$478.43
ORTHO TRAUMA BETHESDA	$4,793.11
SAID A DAEE MD PA	$499.23
SHOCK TRAUMA ASSOC PA	$228,335.77
SINAI HOSPITAL OF BALTIMORE, INC.	$318.88
SINAI SURGERY ASSOCIATES	$4,076.73
UNIV OF MD DIAG IMAG SPEC	$15,260.08
UNIV OF MD ORTHO TRAUMATOLOGY ASSOC	$71,540.96
Grand Total	$421,973.96

Trauma MCO Differential Reimbursement	
PROVIDER	Amount Paid
ATLANTIC GENERAL SURGERY ASSOCIATES	$2,020.82
AZAR P DAGHER	$502.22
CARLTON SCROGGINS	$214.25
ENRIQUE DAZA-RACINES MD	$334.84
FRANK J COLLINS MD	$2,913.11
JAMES J CATEVENIS MD	$310.41
JEFFREY P MUENCH	$672.77
JOHNS HOPKINS COMMUNITY PHYSICIANS	$6,644.23
JOHNS HOPKINS UNIVERSITY	$399,144.14
MONTGOMERY BRAIN AND SPINE LLC	$1,912.46
ORTHO TRAUMA BETHESDA	$2,809.25
SAID A DAEE MD	$1,599.43
SHOCK TRAUMA ASSOC PA	$314,483.56
UM DIAGNOSTIC IMAGING	$849.54
WASHINGTON CTY HOSP REHAB	$1,946.04
WILLIAM BOYCE MD	$252.48
Grand Total	$736,609.56

CATEGORY	FY 2017	FY 2018	FY 2019
Fund Balance at Start of Fiscal Year	$7,886,302	$10,413,745	$11,025,142
Collections from the $5 Registration Fee (and interest)	$12,399,990	$12,445,331	$12,707,734
Credit Recoveries	$226,905	$87,268	$126,931
TOTAL FUNDS (Balance, Collections, Recoveries)	$20,513,197	$22,946,344	$23,859,807
-- Uncompensated Care Payments	-$1,778,943	-$1,599,446	-$1,864,933
-- On Call Expenses	-$7,454,865	-$7,914,887	-$8,130,153
-- Medicaid Payment	-$141,650	-$109,282	-$143,642
-- Medicaid/Medicaid Differential Payment for 2017/2018	-$0	-$1,000,448	-$1,158,583
-- Children's National Medical Center Standby	-$590,000	-$590,000	-$590,000
--Trauma Equipment Grants (disbursed from the fund balance)	-$0	-$599,998	-$0
-- Administrative Expenses	-$133,994	-$107,140	-$66,349
Total Expenditures	-$10,099,452	-$11,921,201	-$11,826,729
Reduction from 2018 BRFA Legislation	-$0	-$0	-$8,000,000
TRAUMA FUND BALANCE, FY END	$10,413,745	$11,025,142	$3,906.147

Maryland Trauma Physician Services Fund

The Process for Grant Applications

- Grant Applications are processed bi-annually; total grant funding cannot exceed 10% of the surplus balance of the fund
- The MHCC sends letters to all Level II and Level III trauma centers with a copy of the grant application (setting a soft deadline for return)
- The MHCC meets with leadership of HSCRC and approves/disapproves applications
- Grants will be processed this fiscal year

Maryland Trauma Physician Services Fund

The Addition of Standby for the Primary Adult Resource Center (PARC)

- Senate Bill 901/House Bill 607 passed during the 2019 Legislative Session of the Maryland General Assembly – Maryland Trauma Fund – State Primary Adult Resource Center – Reimbursement of On-Call and Standby Costs

- The bill expands the purpose of the Trauma Fund to include subsidizing the documented costs incurred by PARC to maintain trauma surgeons, orthopedic surgeons, neurosurgeons, and anesthesiologists on-call and on standby

  - The MHCC must develop guidelines for the reimbursement of these documented costs

PARC – Payment Methodology

- Standby hours are based on data provided by PARC to the Comptroller (EMSOF)
- Standby methodology was developed in July, 2004 for trauma standby costs when standby reimbursement was initially included in the Hospital Rate setting System
  - The MHCC uses the Medicare reasonable compensation equivalents updated for calendar year 2019 to define the base standby rate for the four specialties
  - Base rate is adjusted by 5% to cover Continuing Medical Education expenses
  - Malpractice premium costs are added to the adjusted rate
- The MHCC is in discussion with HSCRC to include PARC's standby expenses in hospital rates in future years

TRAUMA STANDBY FOR PARC

Specialty	Hours per year	-	Hours in OR	=	Total Standby	X	RCE	+	Adjustments: CME ADJ	+	Adjustments: MALPRACTICE ADJ*	Total Per Specialty
							$135.67	Trauma, Ortho, Neuro	Specialty RCE x 5%			
							133.00	Anesth				
Trauma	8,760		5,245		3,515		476,868		23,843		84,268	584,980
Ortho	8,760		7,364		1,396		189,391		9,470		30,065	228,926
Neuro	8,760		1,423		7,337		995,386		49,769		74,849	1,120,004
Anthesia	8,760		5,245		3,515		467,495		23,375		19,920	510,790
TOTALS							**$2,129,140**		**$106,457**		**$209,103**	**$2,444,700**

** Malpractice adjustment premium rates provided by Medical Mutual - 2020 Rates: Trauma-$49,884; Ortho-$44, 813; Neuro-$21,227; Anesthesia-$11,792

ACTUAL AND PROJECTED TRAUMA FUND SPENDING FOR FYs 2018-2020

	Actual FY 2018	Actual FY 2019	Projected FY 2020
Carryover Balance from Previous Fiscal Year	$10,413,745	$11,025,142	$3,906,147
Collections from the $5 surcharge on automobile renewals	**$12,445,331**	**$12,707,734**	**$12,800,000**
TOTAL BALANCE and COLLECTIONS	**$22,859,076**	**$23,732,876**	**$16,706,147**
Total Funds Appropriated	**$12,000,000**	**$12,000,000**	**$12,300,000**
Credits	**$87,268**	**$126,931**	**$107,000**
Payments to Physicians for Uncompensated Care	**($1,599,446)**	**($1,864,933)**	**($2,100,000)**
Payments to Hospitals for On-Call	**($7,914,887)**	**($8,130,153)**	**($8,300,000)**
Stand-By Costs for Shock Trauma PARC	**$0**	**$0**	**($2,444,700)**
Medicaid	**($109,282)**	**($143,642)**	**($150,000)**
Medicaid/Medicaid Differential Payment for 2017 and 2018 (Paid in following FY)	**($1,000,448)**	**(1,158,583)**	**(1,000,000)**
Children's National Medical Center	**($590,000)**	**($590,000)**	**($590,000)**
MHCC Administrative Expenses (TPA & Audit)	**($107,140)**	**($66,349)**	**($90,000)**
Trauma Equipment Grants (funding drawn from Fund Balance)	**($599,998)**	**$0**	**($300,000)**
Transfers to the General Fund	**$0**	**($8,000,000)**	**$0**
PROJECTED FISCAL YEAR-END BALANCE	**$11,025,142**	**$3,906,147**	**$1,838,447**

Maryland Trauma Physician Services Fund

Recommendations to the Commission

- The fund with these recommendations will remain solvent through FY 2021
  - Reimbursement levels to remain at 105% of the Medicare facility rate through 2020
  - Reimbursement of Medicaid/Medicare Differential for FY 2020 (processed at the end of the fiscal year)
  - Reimbursement of standby costs for PARC from the fund in FY 2020 and work with HSCRC to include in hospital rates in subsequent years
- Next steps – release of the Annual Report to the Legislature

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION: An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care**

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

MARYLAND HEALTH CARE COMMISSION

ACTION:

An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

(Agenda Item #7)

Impact Estimates for Proposed Mandated EMS Benefits in Maryland: Alternative Destination, Treat and Release, and Mobile Integrated Health

Matt Kukla, Ph.D., Senior Health Economist
Valerie Hamilton, RN, MHA, JD, Senior Health Policy Manager
Larry Hart, Senior Risk Manager
Amanda Henson, MBA, Health Policy Manager
Jennifer Elwood, MS, FSA, MAAA, FCA, Principle Actuary

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

December 19, 2019

Table of Contents

Background of Proposed Mandated EMS Services

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

The medical, social, and financial impact of mandating commercial insurers to provide coverage was analyzed for the following EMS benefits:

Treat and Release

- Innovative treat and release models identify low-acuity patients who have called 9-1-1 and provide on-scene treatment by a clinician
- Includes both patients who would have been transported to the ED as well as patients who would have refused to ED transport in absence of the program

Alternative Destination

- EMS transports 9-1-1 patients with low-acuity conditions to an urgent care or other clinically appropriate setting in lieu of the ED

Mobile Integrated Health

- Patients identified by local EMS and/or health care providers
- EMS partners with health care providers to conduct home visits to assess, treat, and refer patients with chronic conditions to appropriate health care settings and community resources
- Targets high utilizers of EDs, frequent 9-1-1 callers, or those at high risk for hospital readmission

Medical Efficacy and Social Impact

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

Maryland Program

- Baltimore City Fire Department (BCFD), MD (2018)
  - The University of Maryland Medical Center Urgent Care Center
  - Tuerk House for substance use disorder patients

Similar Programs

- Med Star, TX (2015)
  - No evaluation of quality or outcomes available
- Houston Fire Department, TX (2014)[1]
  - Emergency Telehealth and Navigation Program
  - EMS time until being back in service declined by 44 minutes ($p<0.01$)[2]
  - No significant differences in mortality or patient satisfaction
- Wakebrook Center, NC (2013-14)[2]
  - Relative decline in LOS at community mental health center ($p<0.05$)[1]

1. Creed J, Cyr J, Owino H, et.al. Acute Crisis Care for Patients with Mental Health Crises: Initial Assessment of an Innovative Prehospital Alternative Destination Program in North Carolina. Prehospital Emergency Care, 22:5, 555-564. Accessed 20 September 2019: https://www.tandfonline.com/doi/abs/10.1080/10903127.2018.1428840.
2. Langabeer J, Gonzalez M, Champagne-Langabeer T, et.al. Telehealth-Enabled Emergency Medical Services Program Reduces Ambulance Transport to Urban Emergency Departments. West J Emer Med. 2016;17(6):713-720. Accessed 25 November 2019: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5102597/.

Maryland Programs

- Nine pilot programs in MD (2019), largely funded through grants
  - Baltimore City, Charles County, Frederick County, Howard County, Montgomery County, Prince George's County, Queen Anne's County, Salisbury-Wicomico County, Talbot County
- Baltimore County Fire Department, MD (2018)
  - Transitional Health Support program
  - Significantly higher patient satisfaction than controls[1]
  - Increased identification of medication-related problems, care coordination, durable medical equipment, transportation, housing/utility/food insecurity, and environmental concerns[1]

1. University of Maryland Medical Center (UMCC) and Baltimore City Fire Department (BCFD). Mobile Integrated Health Community Paramedicine Programs. Third Quarterly Report. December 2018-February 2019.

Demand and Utilization Assessment

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

- Evidence that MIH programs are associated with significant declines in ED visits, inpatient hospital admissions, number of 9-1-1 calls, and hospital readmissions

Utilization Measure	Location				
	Queen Anne's County, MD	Montgomery County, MD	Baltimore City, MD	Charles County, MD	Fort Worth, TX (Med Star)
30-Day ED Use	-46.8%	-	-25.0%	-	-
90-Day ED Use	-27.7%	-	-30.0%	-37.0%	-
365-Day ED Use	-14.4%	-64.1%	-	-	-49.0%
30-Day Inpatient Use	-81.3%	-	-	-	-
90-Day Inpatient Use	-57.5%	-	-	-58.0%	-
365-Day Inpatient Use	-36.3%	-	-	-	-
30-Day 9-1-1 Calls	-70.2%	-	-	-	-
90-Day 9-1-1 Calls	-34.0%	-	-	-	-
365-Day 9-1-1 Calls	-1.2%	-80.7%	-	-	-
30-Day Readmissions	-70.2%	-	-	-	-52.5%
90-Day Readmissions	-34.0%	-	-53.8%	-90.0%	-
365-Day Readmissions	-1.2%	-80.7%	-	-	-

- Payer options for controlling induced demand for health care services often depend on external factors, including regulatory requirements

- Patient cost sharing (e.g., copays, coinsurance, deductibles), utilization management, gatekeeping, and benefit design can impact patient care delivery decisions and volume of 9-1-1 calls

- Underlying payment structures and rates (e.g., fee-for-service, bundled payments) and rates can impact EMS provider decisions on where to transport patients, types of services provided, and care intensity

Financial Assessment

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

Financial Assessment: Data Sources

- Information and data supplied by MHCC and MIEMSS
- Surveys from commercial health insurance carriers in Maryland
- Claims data from the Maryland Medical Care Database (MCDB)
- eMEDS, a database of EMS data
- Academic literature, published reports, and population data
- Survey data from Maryland EMS model pilot programs
- Interviews with clinical experts and health care providers

Treat and Release

- Costs = the estimated cost of treat and release visit and the cost of follow-up office visit, multiplied by the number of treat and release events
- Savings = the cost of the ED visit plus the cost of EMS transport, multiplied by the number of treat and release events

Alternative Destination

- Costs = the number of additional EMS transports due to mandated benefit multiplied by the cost per transport and related services
- Savings = the difference between ED visit and urgent care visit cost, multiplied by the number of alternative destination transports

Mobile Integrated Health

- Costs = the number of MIH services multiplied by the average cost of MIH services
- Savings = the number of avoided ED visits, EMS transports, and hospital readmissions multiplied by the cost associated with those respective services

Financial Assessment: Small Commercial Population Electing EMS in MD

	# of 911 Transports	% of MD 911 Transports
Maryland 911 Transports	623,916	100.0%
Commercial (Fully Insured) 911 Transports	16,450	2.6%
% of Commercial (Fully Insured) Eligible for Alternate Destination	1,283	0.2% (7.8% of all commercial FI transports)
% Commercial (Fully Insured) Electing an Alternate Destination	905	0.1% (5.5% of all commercial FI transports)

Estimated EMS Transports to an Alternate Destination

	# of 911 Transports	% of MD 911 Transports
Maryland 911 Transports	623,916	100.0%
Commercial (Fully Insured) 911 Transports	16,450	2.6%
% Commercial (Fully Insured) Treated and Released	181	<0.01% (1.1% of all commercial FI transports)

Estimated EMS Treat and Release Services

	# of Insured	% of Insured
All Commercial (Fully Insured & Self Insured) in 4 MD Counties	948,203	100.0%
MIH Enrolled (4 Maryland Pilots) in 4 MD Counties	792	<0.01%
MIH Enrolled Commercial (Fully Insured and Self Insured) in 4 MD Counties	106	<0.01% (13.4% of MIH enrolled in 4 MD counties)
Total Commercial (Fully Insured) in MD	1,013,745	100.0%
MIH Enrolled Commercial (Fully Insured) in MD	101	<0.01%

Estimated Number of MIH Enrolled

Financial Assessment: Treat and Release Results

Cost Estimates

Estimated cost of treat and release + follow up visit

	Unit Cost
Treat and Release Unit Cost	$257.87
Office Visit Unit Cost	$56.95
Total Unit Cost	$314.82

Multiplied by the number of treat and release events

	Total EMS Transports	% Treated and Released	Number of Patients
Low Scenario	16,450	0.4%	66
Mid Scenario	16,450	1.1%	181
High Scenario	16,450	1.8%	296

Yields program costs

	Claims	PMPM Cost
Low Scenario	$20,715	$0.002
Mid Scenario	$56,966	$0.005
High Scenario	$93,217	$0.008

Savings Estimates

Estimate cost of the ED visit and EMS transport

	Unit Cost
ED Visit Unit Cost	$484.29
EMS Transport Unit Cost	$343.82
Total Unit Cost	$828.11

Multiplied by the number of treat and release events

	Total EMS Transports	% Treated and Released	Number of Patients
Low Scenario	16,450	0.4%	66
Mid Scenario	16,450	1.1%	181
High Scenario	16,450	1.8%	296

Yields the program savings

	Claims Savings	PMPM Savings
Low Scenario	$54,490	$0.00
Mid Scenario	$149,847	$0.01
High Scenario	$245,205	$0.02

Cost Estimates

Cost impacts negligible, as we estimate that only 0.3% of all 9-1-1 calls made would be transported to an alternative destination that, under current law, are not transported to an ED

This 0.3% is based on estimates that covering “alternative destinations” as an insurance benefit would not materially impact the total volume of EMS services (i.e., it would not induce additional patient demand)

Savings Estimates

Estimated marginal cost of the ED visit less urgent care visit

	Unit Cost
ED Visit Unit Cost	$484.29
Urgent Care Unit Cost	$90.88
Net Unit Cost	$393.41

Multiplied by the number of Alternative Destination Transports

	Total EMS Transports	% Eligible for Alternate Destination	% Electing an Alternate Destination	Number of Transports
Low Scenario	16,450	7.8%	3.9%	642
Mid Scenario	16,450	7.8%	5.5%	905
High Scenario	16,450	7.8%	7.0%	1,152

Yields the program savings

	Claims Savings	PMPM Savings
Low Scenario	$252,391	$0.02
Mid Scenario	$355,936	$0.03
High Scenario	$453,009	$0.04

Financial Assessment: Mobile Integrated Health Results

Cost Estimates

Estimated cost of MIH services

	Unit Cost
Average cost of MIH services	$2,004

Multiplied by the number of MIH services

	% of Fully Insured Commercial Members	MIH Enrollees
Low Scenario	0.01%	101
Mid Scenario	0.03%	304
High Scenario	0.05%	507

Yields the cost of the program

	Claims Cost	PMPM Cost
Low Scenario	$121,200	$0.01
Mid Scenario	$608,000	$0.05
High Scenario	$1,419,600	$0.12

Savings Estimates

Estimated cost of the ED visit and EMS transport and hospital readmission

	Unit Cost
ED Visit and Transport Unit Cost	$828.11
Hospital Readmission Cost	$13,144

Multiplied by avoided ED visits and EMS transport and hospital readmissions

	Enrollees	Reduce Transports / ED Visits Per Enrollee	Avoided Transports / ED Visits	Reduced Readmissions Per Enrollee	Avoided Readmissions
Low Scenario	101	1	101	0.1	10
Mid Scenario	304	1	304	0.2	61
High Scenario	507	2	1,014	0.3	152

Yields the savings of the program

	Claims Savings	PMPM Savings
Low Scenario	$216,394	$0.02
Mid Scenario	$1,050,902	$0.09
High Scenario	$2,838,911	$0.23

Net Spending Estimates for Three EMS Models (Medical Expense in $000s)

	Net Impact Alternate Destination	Cost Treat and Release	Savings Treat and Release	Net Impact Treat and Release	Cost MIH	Savings MIH	Net Impact MIH
Medical Expense and Savings Low	**-$252**	$21	-$54	**-$34**	$121	-$216	**-$95**
Medical Expense and Savings Mid	**-$356**	$57	-$150	**-$93**	$608	-$1,051	**-$443**
Medical Expense and Savings High	**-$453**	$93	-$245	**-$152**	$1,420	-$2,839	**-$1,419**
PMPM Low	**-$0.02**	$0.00	$0.00	**$0.00**	$0.01	-$0.02	**-$0.01**
PMPM Mid	**-$0.03**	$0.00	-$0.01	**-$0.01**	$0.05	-$0.09	**-$0.04**
PMPM High	**-$0.04**	$0.01	-$0.02	**-$0.01**	$0.12	-$0.23	**-$0.12**

Limitations

BerryDunn

MHCC MARYLAND HEALTH CARE COMMISSION

- Projections are only as robust as the underlying data used to develop them
  - Assumptions derived from other state studies or populations may not fully translate to Maryland's commercially fully insured population
  - For many studies, there were small sample sizes
- Estimates in this report are expressed in terms of averages; the effect on any one individual, employer group, or insurance carrier may vary
- Variation in impact will also depend on several internal and external factors including regulatory factors and patient, plan, and market characteristics
- Results are not additive due to the overlapping nature of the three EMS programs
- Implications for quality and outcomes unclear at this time

Questions?

Matt Kukla, Ph.D. | Senior Health Economist

Health Analytics Practice Area

d/f: 207.842.8128 | c: 401.440.4225

mkukla@berrydunn.com | berrydunn.com

MARYLAND HEALTH CARE COMMISSION

AGENDA

1. **APPROVAL OF MINUTES**

2. **UPDATE OF ACTIVITIES**

3. **ACTION:** Certificate of Need – Rehabilitation Hospital Corporation of America, L.L.C. d/b/a Encompass Health Rehabilitation Hospital of Salisbury – Addition of Acute Rehabilitation Beds – (Docket No. 18-22-2435)

4. **PRESENTATION:** On Assessment of Types, Quality, and Level of Services provided at the University of Maryland Shore Medical Center at Chestertown

5. **PRESENTATION:** Potential Models for Rural Health Delivery in Maryland

6. **ACTION:** Approval for Release – Maryland Trauma Physicians Services Fund Annual Report

7. **ACTION:** An Assessment of the Impact of Establishing a Mandate in the Private Insurance Market for New EMS Models of Care

8. **OVERVIEW OF UPCOMING ACTIVITIES**

9. **ADJOURNMENT**

MARYLAND HEALTH CARE COMMISSION

OVERVIEW OF UPCOMING ACTIVITES

(Agenda Item #8)


ENJOY THE REST OF
YOUR DAY