The Maryland Institute for Emergency Medical Services Systems (MIEMSS) is an independent state agency that coordinates all components of the statewide EMS system in accordance with policies set by the State EMS Board and Maryland statute and regulation. MIEMSS’ areas of responsibility include medical oversight, coordinating and supporting EMS educational programs, operating and maintaining a statewide communications system, designating trauma and specialty centers, licensing and certifying EMS providers, licensing and regulating commercial ambulance services, and participating in EMS-related public education and prevention programs.

We appreciate the opportunity to present MIEMSS’ FY 2021 budget request and to brief the committee on several programmatic areas of interest. MIEMSS and the Emergency Medical Services Board are very appreciative of the General Assembly’s support of MIEMSS and our Statewide EMS system. The analysis by Andrew Garrison is comprehensive and focuses on several important issues. We thank him for his hard work, as well as that of the Department of Budget and Management and Breanna Browne, MIEMSS’ DBM budget analyst. Before addressing the analyst’s comment, we would like to summarize progress on two of our initiatives.

**MIEMSS Communication System Upgrade.** One of MIEMSS’ most critical functions is the operation of our Statewide EMS Communications System. MIEMSS’ emergency medical communications system is a complex network that provides communications among ambulances, medevac helicopters, dispatch centers, hospital emergency departments, specialty referral centers and trauma centers. Because much of the equipment of our system is outdated, we are in the midst of a multi-year project to upgrade the system. The Board of Public Works approved the contract for the upgrade in May 2018, and we are fully immersed in the project. While the work is being conducted, the current EMS Communications System remains fully operational.

In July 2019, work began to upgrade the EMS communications system in Southern Maryland (MIEMSS EMS Region V – Montgomery, Prince George’s, Charles, Calvert and St. Mary’s Counties). Work involves communications equipment delivery (which includes microwave equipment, routers, switches, power supplies, and VoIP telephones); implementation (which includes coordination and licensing of microwave paths, hospital approval of work to be performed at their facility, and approval by the State’s Tower committee for work to be performed on State and Jurisdictional towers); and system acceptance (which include both the existing communication equipment and the upgraded system equipment operating in parallel for a period of 30 days without disruption). Work in this region is targeted to be completed midyear 2020. Next, the same work is projected to begin in April 2020 in EMS Region III (Anne Arundel, Baltimore, Carroll, Cecil, Howard Counties, and Baltimore City). In February 2021, work is planned to begin in EMS Region IV (Caroline, Dorchester, Queen Anne’s, Somerset, Talbot, Wicomico and Worcester Counties), followed by work in Western Maryland (Allegany, Garrett and Washington Counties), projected to begin September 2021. Once work is completed throughout the state, the final upgrades will occur to SYSCOM. Each phase begins upon the successful completion of the preceding phase.
New Models of EMS Care & Opportunities for Sustainable Reimbursement

Many EMS jurisdictions in Maryland are stressed by high 9-1-1 call volumes and overcrowded emergency departments (EDs). As a way to deal with these pressures, EMS programs have developed new care delivery models for providing treatment to low acuity patients who call 9-1-1:

1. **EMS treat and release/refer without transport** – As a routine part of EMS care, EMS treats a low acuity 9-1-1 patient at the scene, and the patient ultimately refuses ambulance transport to the hospital emergency department. Alternatively, EMS clinicians on the scene assess and identify low acuity patients and offer on-scene treatment provided by a physician or nurse practitioner either in-person or via telehealth (with no transport).

2. **EMS transport to an alternative destination** – EMS transports 9-1-1 patients with low acuity conditions to an urgent care clinic or similar care environment instead of transporting the low-acuity patient to a hospital emergency department.

3. **EMS mobile integrated health (MIH) services** – EMS partners with other health care professionals, such as nurse practitioners, community health workers, social workers, and physicians to conduct home visits to assess, treat and refer low acuity patients with chronic conditions who frequently call 9-1-1 to needed services in the community. MIH programs can also focus on patients identified by hospitals as being at high risk for hospital readmission.

Currently, EMS is not reimbursed by health payers for any of the three models of care. EMS services have historically been viewed as a transportation benefit; as a result, EMS is not reimbursed unless transport to a limited set of reimbursable destinations (primarily emergency departments) actually occurs. MIEMSS is working with EMS jurisdictions throughout Maryland, the Health Services Cost Review Commission, the Maryland Health Care Commission, and payers to identify and secure reimbursement for these new models of care.

In response to the analyst’s comment, MIEMSS provides the following information.

**Emergency Department (ED) Overcrowding**

**Analyst’s Comment:** MIEMSS should comment on the implementation status of the new ED alert system.

**MIEMSS Response:** ED overcrowding occurs when the identified need for emergency services outstrips available hospital resources such that there are more ED patients than there are staffed beds available in either the ED or on an inpatient unit. ED overcrowding can result in excessive ED wait times, which can slow EMS responses to 9-1-1 calls, and patient diversion from one hospital ED to another. Maryland typically has the longest ED wait times in the nation. ED overcrowding is a long-standing, multi-faceted problem in Maryland and a significant challenge for the healthcare system.

For many years, MIEMSS has conducted real-time monitoring of ED status throughout Maryland. See [https://www.miemssalert.com/chats/](https://www.miemssalert.com/chats/). The current system has a number of shortcomings, however. MIEMSS is developing a new monitoring system to replace the current system. MIEMSS has convened a stakeholder group and conducted a series of interactive queries to identify and characterize objective factors that will provide useful information to both hospital EDs and EMS personnel on the level of patient load in hospital EDs. The new system will not redirect ambulances based on ED patient load. MIEMSS anticipates the new system will be completed by July 2020.

We would be happy to answer any questions.