Maryland Institute for Emergency Medical Services Systems Administrative Guidance

Definitive Treatment via Telemedicine

PURPOSE

To define the requirements of EMS Operational Programs or jurisdictions that plan to implement a telemedicine solution to provide treatment without transport.

BACKGROUND

The emergency medical services system is routinely activated for a full spectrum of clinical scenarios. In some cases, resulting patients may be effectively cared for without necessarily providing transport to an emergency department or other facility.

Technologic solutions are possible to enable EMS clinicians to establish audio-video communications between themselves, and their patients, and clinicians capable of managing some conditions via such linkages. In select circumstances, definitive treatment enabled by such a scenario may obviate the need for the patient to be transported to an EMS-receiving facility.

In as much as EMS clinicians remain engaged with their patients during the telemedicine encounter, the technologic solution and the resulting interaction with the remote clinician serve as an enhancement to EMS medical control or consultation. Predictably, the result of such an encounter is binary. Definitive care is not advised or possible, and direction will be provided to transport the patient. Alternatively, definitive care is possible, and EMS clinicians are advised that no transport is necessary as the patient is prescribed appropriate treatment. In either case, EMS clinicians are receiving direction from the telemedicine clinician.

As EMS-facilitated telemedicine results in guidance or direction to EMS clinicians, it is appropriate that such telemedicine clinicians and the facilities from which they operate be qualified and designated as EMS base station clinicians and facilities, respectively. Such a standard is necessary to ensure qualified guidance to EMS clinicians and appropriate oversight.

It is incumbent upon EMS Operational Programs pursuing innovation in this manner to ensure sufficient planning, oversight, and evaluation to protect the safety of their patients and the welfare of the public they serve. Similarly, in its role of coordinating the state's EMS system, the Maryland Institute for Emergency Medical Services

Systems (MIEMSS) has a responsibility to ensure that novel approaches to emergency medical care and delivery of services are substantiated by appropriate planning and evaluation.

PROCESS

- 1) All plans for EMS Operational Programs to utilize a telemedicine solution to definitively treat patients without transport shall be approved by MIEMSS.
- EMS Operational Programs utilizing a telemedicine solution, as a prerequisite, shall transmit data to the Chesapeake Regional Information System for our Patients via eMEDS®.
- An EMS Operational Program shall submit its telemedicine plan to MIEMSS with ample time to facilitate an iterative process leading to approval. Plan elements are described below.
- 4) Depending on circumstances and at its discretion, MIEMSS may choose to visit and survey proposed telemedicine-providing sites, and require demonstration of the technologies.
- 5) Once implemented, EMS Operational Programs shall, for the first two years and longer as requested, provide MIEMSS with bi-monthly reports regarding evaluation of their telemedicine practices. Unless requested otherwise, after two years reports shall be provided quarterly.
- 6) In consultation with the EMS Board and the respective EMS Operational Program, MIEMSS may suspend or revoke its approval of an EMS Operational Program to utilize a telemedicine solution.

TELEMEDICINE PLAN ELEMENTS

Plans to implement an EMS telemedicine solution, for the purposes of definitively treating patients without transport, are required to address the following elements:

- 1) Rationale
 - a. Explain the need to utilize telemedicine within the EMS Operational Program.
 - b. State the goals, as specific as possible.
- 2) Patients

- a. Describe, specifically, the target patient population.
- b. Describe the variables or characteristics of the target patient population.
- c. Describe how potentially affected patients will be identified.

3) Technology

- a. Describe the technology to be used by EMS clinicians.
- b. Describe the technology to be used by the telemedicine site(s) and clinicians.
- c. Describe potential weaknesses or limitations of the proposed technologies.
- d. Describe how technology will be maintained and its reliability assured.

4) Telemedicine Facilities

- a. Describe telemedicine-providing facilities.
 - i. EMS base station.
 - ii. Hours of telemedicine operation.
 - iii. Primary point of contact.
 - Staffing complement, indicating presence of an emergency medicine
 base station qualified physician, physician assistant, and/or certified registered nurse practitioner at all times.
 - v. Limitations regarding geographic coverage, patient demographics, or patient payer source.
- b. Describe workflow for telemedicine clinicians.
 - i. Relationship of telemedicine duties to other responsibilities.
 - ii. Technology proximity to telemedicine clinician(s).

5) Education

- a. Describe how EMS clinicians will be educated.
 - i. With regard to protocol and procedure.
 - ii. With regard to the specific, detailed capabilities of telemedicine sites and clinicians.
- b. Describe how telemedicine facilities and clinicians will educated.
 - i. With regard to process.
 - ii. With regard to scope of service and responsibility to EMS and patients.
 - iii. With regard to the capabilities and limitations of EMS clinicians.

6) Operating Procedure

a. Describe how EMS clinicians will match patients' clinical conditions to telemedicine capabilities and limitations.

- Describe how EMS clinicians will evaluate patient demographic characteristics and payer sources, and match them to eligibility requirements and limitations of prospective telemedicine facilities.
- c. Describe how EMS clinicians will effect a telemedicine encounter, including:
 - i. Option for patient to consent or defer.
 - ii. Initiation.
 - iii. Monitoring.
 - iv. Maintenance of patient privacy.
 - v. Conclusion.
 - vi. Assurance that patient can follow prescribed treatment, in the event that definitive treatment is prescribed.

7) Quality Improvement / Evaluation

- a. Provide a quality improvement / evaluation plan.
- b. Include, at least, the following metrics:
 - i. Date, time, and day of week.
 - ii. Information regarding each patient for whom a telemedicine encounter is attempted.
 - 1. Demographic descriptors.
 - 2. EMS clinician impression (i.e., nature of the problem).
 - iii. Whether or not telemedicine connection was successful.
 - iv. Telemedicine facility and clinician.
 - v. Relevant time intervals.
 - 1. Total time of incident.
 - 2. Telemedicine time interval (from first attempt to initiate to conclusion).
 - vi. Patient disposition (e.g., no transport, transport)
 - vii. Final diagnosis.
 - viii. Follow-up (e.g., 48 hours).
 - ix. Indicators of patient satisfaction
- c. Describe how the plan will be implemented and be used for continuous improvement.
 - i. Describe who will be included in distribution of results or findings.
 - ii. Describe how any identified need for change or adaptation will be effected.
- d. Indicate commitment to report to MIEMSS as described above.

Approved:

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