



**DELTA AMBULANCE**  
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March 8, 2023

Maine Emergency Medical Services  
Department of Public Safety  
45 Commerce Drive Suite 1  
152 State House Station  
Augusta, Maine 04333

Subject: Delta Ambulance Critical Care Transport Program  
*Delivered Electronically March 8, 2023*

To Maine EMS Director Hurley, the Maine Board of EMS, and Medical Directions and Practices Board:

As requested by the Board, the MDPB, and the Maine EMS Office, please consider this as our Pilot Project submission to continue to perform Specialty Care Transports (SCTs) utilizing Delta Paramedics, medications, devices, and interventions that are outside current PIFT Guidelines. We have structured this document to exactly track the requested information, along with supporting Appendices.

*1. Description of the purpose of the project, clearly describing the expected benefits to EMS patients;*

The purpose of this project is to continue to provide SCT services in accordance with our Standard of Care Policy (Appendix A) and guidelines set by our Service Level Medical Director so that patients can be transferred safely and as efficiently as possible. Our catchment area in Central Maine is located in between three tertiary level hospitals (EMMC, MMC, CMMC) that provide advanced care not available in our local area, and we do not envision becoming a Statewide SCT resource. Our program provides for:

- Continuation of required care and services already established at the sending facility
- Staffing and equipment capacity to meet the current needs of the patient
- Ability to manage any reasonably foreseeable adverse events enroute
- Reduction in hospital staff usage that allows for better patient-to-nursing ratios

Crew composition is jointly agreed to by the sending physician and the transporting team. Either party can “opt out” and explore other avenues to affect the transfer if a plan cannot be universally agreed upon. Our goal is to provide the most effective and most appropriate care possible while making the best use of available resources.

*2. An operational plan that maximizes patient safety while minimizing potential risk to the patient, including descriptions of the roles and responsibilities for various persons involved in the program (i.e., medical director roles and responsibilities, etc.);*

Our Operational Plan starts with our Dispatch Guidelines (Appendix B). These Guidelines are used by Dispatch and the Field Supervisor to initially assign the anticipated crew configuration and equipment to the sending facility. Any questions that may arise during this phase are directed to the Clinical Quality Manager, Director of Operations, Director of Education, or the QI Coordinator for resolution. Should there be any questions that cannot be resolved at this level, our Service Level Medical Director is available 24/7 to assist us. For any transports that exceed current PIFT guidelines, the minimum crew compliment includes a Critical Care Transport Team (CCTT) Paramedic, a second paramedic, and a vehicle operator.



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Once on-scene, the transporting team, assesses the patient, reviews all pertinent patient data (HPI, PMHx, Labs, ABGs, images, etc.), and receives report from staff. For SCT level transfers, the team also consults directly with the sending physician to ensure that the transfer is properly staffed and that all orders during transport are agreed to and understood. The team also obtains a direct phone number to reach the sending physician expeditiously if needed.

CCTT Paramedic required certifications, qualifications, and competencies are contained in Appendix C. The current roster of 11 credentialed CCTT Paramedics is included as Appendix D.

3. *Thorough, complete protocols and treatment algorithms that are to be used for the project;*

There are no specific protocols and treatment algorithms per se because the sending facility determines the medications, devices, and procedures authorized for use by the transporting team. These interventions must be within the education, testing, certification, and capability of a Critical Care Paramedic from a recognized program such as UMBC. It should be noted that our SCT Program is about more than ventilators. Potentially unstable non-ventilated patients such as STEMI, severe sepsis, hemorrhagic CVA, and certain trauma patients are also candidates for SCT by Delta.

An example of the guidance that we provide to our transporting team members is included as Appendix E. This particular guidance concerns when a Respiratory Therapist should be considered to attend the mechanically ventilated patient.

4. *Complete descriptions of the initial and maintenance education associated with the programming, including requirements for frequency of continued competency and standards that must be met to maintain authorization to practice;*

*Due to the nature of this situation, please include any information about the training standards, their evolution, and related information that may be valuable in understanding the programming as it current exists;*

Delta CCTT Paramedics must maintain their CCT certification, as well as complete quarterly CCTT Proficiencies. UMBC CCEMT-P graduates must complete 48 hours in ALS topics with a focus on Critical Care every three years to maintain certification. FP-C and CCP-C requirements are similar and their certifications may also be honored at the discretion of our Service Level Medical Director. The requirements of Appendix C must be maintained to remain eligible for CCT duty.

In addition to the required education for certification, Delta Ambulance has provided CCT level classes since at least back to 2006. As an example, Appendix F lists the Maine EMS approved classes specific to mechanical ventilation from 2006 to the present. The January 2023 CEU outline submitted to Maine EMS is included as an example (Appendix G). These classes / proficiencies are currently taught by our CCTT Education Lead – Alex Wharton, PA-C, CCP-C, NRP. Our Clinical Proficiency Skill Sheet for Mechanical Ventilation is included as Appendix H.

5. *A quality assurance and improvement plan that clearly describes how the data will be collected and used, how remediation will be performed, indicators and metrics used to assess the health and functionality of the programming;*

*Due to the nature of this situation, please include information about iterative changes that have been implemented based off the quality assurance and improvement measures that you currently have in place;...*



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Delta operates under an extensive QI Plan that was first approved by the Board of EMS on October 6, 1999. This Plan authorizes our Clinical Standards & Practices Team, provides for 100% QI of all calls, establishes methods of evaluation and reparation, design of studies, and compliance thresholds.

Specific to 12 lead EKGs, SCT transfers, and M&Ms, Dr. Diaz receives monthly case packets and a spreadsheet for him to offer his feedback to the crews. Other packets such as stable PIFT Calls, Pharmacy Sheets, and Refusals are also generated and reviewed by QI staff. Our overall 2022 weighted average QI Compliance Score was 97.02%.

Iterative changes to our SCT Program have occurred. We have moved from a Delta Paramedic/Delta RN staffing model, to a Paramedic/Hospital RN or RT model, to a Critical Care Transport Team model over the years – beginning in September 2003. We have removed the mandatory Ventilator training requirement from non-CCT Paramedics and restricted its use to just the CCTT members to ensure better oversight. Quarterly CCT education has been expanded to include case reviews, actual scenarios using past cases, and CCT topics such as Acid-Base, Labs, ABGs, etc.

6. *Any ongoing training records and data regarding the number of interfacility transports that have occurred to date under the existing programming as well as any noted adverse events and how they were addressed.*

Training records are maintained for all Delta Clinicians in our IT platform, Traumasoft, and can be retrieved at any time.

Regarding SCT volumes and just counting mechanically ventilated patients, we have transferred approximately 870 patients since 2004. We have complete case packets for these since 2007. These packets are the ones reviewed by Dr. Diaz, and include the PCR, EKG/ETCO2 tracings, Vent Form, Physician Orders, and CCT QI Forms implemented in 2018. Appendix I is a MEFIRS listing of all Delta SCTs starting in 2018 (381 calls).

Adverse Events have occurred but were minimal and were mitigated by the actions of the transporting team in every case. The events were typically inadequate sedation or hypotension and were easily managed. As previously mentioned, Dr. Diaz reviews all calls and provides written feedback, which we have retained back to April 2015.

We greatly appreciate your time in reviewing this submission and look forward to further discussion. Please let us know if we can provide any clarification or further detail in any area.

Respectfully,

Chris Mitchell, B.S., CCTP  
Director of Operations, Delta Ambulance  
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cc: Matthew Sholl, MD, State EMS Medical Director  
Brent Libby, Chair, Maine Board of EMS  
Tim Beals, Executive Director, Delta Ambulance  
Steve Diaz, MD, Service Medical Director, Delta Ambulance  
Melissa Adams, Maine EMS Licensing Agent  
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