## Purpose:
To assist hospitals in the development of written protocols to establish, implement and maintain an effective, ongoing, data-driven Medical Control Service Quality Assurance/Quality Improvement Program, which is incorporated into the hospital-wide program.

## Regulation:
Hospital Licensure Regulation 105 CMR 130.1502(J)

**Each hospital that provides a medical control service shall operate an effective quality assurance/quality improvement program that includes but is not limited to regular review of trip records and other statistical data pertinent to the operation of the service with which the hospital has an affiliation agreement, in accordance with the hospital’s QA/QI standards and protocols, in those cases in which Advanced Life Support Services (ALS) were provided or in which ALS established direct contact.**

## Guideline:
The hospital QA/QI Program for the Medical Control Service includes, but is not limited to:

### Program Scope
An ongoing program for quality assurance is defined in writing, implemented and maintained. The program demonstrates measurable improvement in indicators for which there is evidence that it will improve health outcomes and identify and reduce medical errors.

A hospital staff person(s) is identified and responsible for the implementation and continuity of the Medical Control Service QA/QI program. Additionally, multi-level reviews are conducted, e.g., EMS Service, EMS Service Medical Director, Affiliate Hospital Medical Director, QA and/or other review committees, governing body.

### Program Priorities
The hospital sets priorities for performance improvement activities that:
- Focus on high risk, high volume, problem prone areas;
- Consider the incidence, prevalence, and severity of problems in those areas;
- Affect health outcomes, quality of care, patient safety.

**Examples of focus areas:**
- Untoward patient outcomes
- Critically ill patients, high risk procedures
- Deviations from Statewide Treatment Protocols
- Medication errors, other patient care errors/incidents
- EMT success or failure of critical skills
- Equipment malfunction or other related issues
Examples of routine EMS trip record review for all critically ill/high risk patients (pre-defined by hospital):
cardiac/respiratory arrests
specialized advanced life support procedures, e.g. intubation, defibrillation, cardioversion, chest decompression, cricothyrotomy
major trauma
unresponsive patients
acute pediatric patients

Program Data
- The frequency and detail of data collection is identified (type, sample size, benchmarks/thresholds for comparison).
- The hospital uses the data collected to monitor the effectiveness and safety of services and quality of care.
- The hospital uses the data collected to identify opportunities for improvement and changes that will lead to improvement.

Example of Data Sources:
- Regular review and analysis of a pre-determined percentage of random medical direction audiotapes, hospital medical direction call records, EMS trip records, real time medical direction reviews.
- Regular review and analysis of EMT/EMS Service data (e.g., all advanced level skills/procedures attempted/success rate, such as IV/IO insertion, endotracheal tube insertion, 12 Lead EKG, manual defibrillation and cardioversion).

Other:
- Reports of medication errors, other patient care errors/incidents
- Reports of equipment malfunction or other related issues
- Referred cases e.g., from hospital, EMS, long term care personnel
- EMS field supervisors’ observations

Program Activities
- track errors and adverse patient events;
- analyze the causes; identify individual and collective compliance issues;
- ensure preventive actions are implemented and feedback and learning opportunities are provided for staff;
- ensure performance is monitored after actions are implemented to ensure improvements are sustained.

Interventions
Examples of methods to improve/address compliance:
- Feedback to services and individuals
  - System related improvements
  - Equipment related improvements
  - Remedial training
- Morbidity and Mortality Rounds
- QA conferences/meetings, educational programs
“Frequently Asked Questions” in reference to QA for Medical Control Services

1. **Under the Quality Assurance/Quality Improvement (QA/QI) system required to be provided by the affiliate hospital, does the Affiliate Hospital Medical Director need to review every single trip record for an ALS call by the affiliated ambulance service, or can he or she do a sampling? If a sampling is permissible, what is the required sampling?** The QA/QI system needs to include, at a minimum, “regular” review of trip records and other statistical data pertinent to the EMS service’s operation, “in accordance with the hospital’s own QA/QI standards and protocols.” If the hospital’s QA/QI standards and protocols call for less than 100% review, then that would apply to trip record review as well. See 105 CMR 170.300(A)(4).

2. **If a sampling of trip records is reviewed under the QA/QI system, and as a result an error is not captured in time to prevent a repeat error, is the affiliate hospital medical director or the hospital liable?** If the sampling is in accordance with the hospital’s own QA/QI standards and protocols, and the QA/QI system has been operated in good faith, then the Affiliate Hospital Medical Director’s action falls under the protection of MGL c. 111C, §20’s broad liability protection. Please note that this same statutory provision applies to hospitals providing medical control to ambulance services as well.

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