
**Performance Measures - Frequently Asked Questions**

*Last updated: February 19, 2010*

## *Performance Measure 71 (On-Line Medical Direction)*

***Question 1:***

As a requirement, all of the medics in our state are Pediatric Advanced Life Support (PALS) certified. Our agencies require an annual 8 hour Pediatric refresher program that focuses on new science considerations for prehospital pediatric care. We also utilize standing orders in patient care protocols. Thus, online medical direction is not a focus in our State. Is this acceptable?

***Answer 1:***

The availability of on line medical control for BLS and ALS providers, as outlined in Performance Measure 71, is not a measure of need or use but rather the **availability** of **online** medical control should a situation arise where further guidance is needed. Online medical direction assures that if an EMS provider needs help while caring for a child, someone with a higher level of training than the EMS provider is available 24/7. Thus grantees need to have both **online** and **offline** medical direction available.

## *Performance Measure 73 (Essential Pediatric Equipment & Supplies)*

***Question 1:***

Please explain the rational for availability of pediatric nasal cannulas. Our protocols mandate high flow oxygen or blow-by for all pediatric patients and discourage the use of nasal prongs or cannulas for the administration of oxygen.

***Answer 1:***

Although blow-by oxygen administration is an effective method for administering oxygen to young children, it requires additional personnel to hold the mask and if the child is moving around, can be difficult to administer. Therefore, nasal cannulas are an option because they can be effectively utilized when children require low concentrations of oxygen. In addition, nasal cannulas are also often accepted better by older children than simple oxygen masks.

***Question 2:***

The EMSC Program has updated the Pediatric Equipment List to allow states to carry uncuffed ***AND/OR*** cuffed Endotracheal (ET) Tubes for sizes 2.5 to 8.0. Why the change from the National Guidelines?

***Answer 2:***

Historically, un-cuffed ET tubes are usually used with infants and children under the age of 8 because the round narrowing of the cricoid cartilage will serve as a suitable cuff, in those cases. A tube that is too large can cause tracheal edema and/or damage to the vocal cords.

However, some states, regions and localities have argued that a cuffed tube might help compensate for some of the guesswork involved in sizing of pediatric tubes. Studies have suggested that the use of cuffed tubes, with proper attention to cuff pressures, can provide ventilation without significant additional risk. Although very few pre-hospital providers are using this practice, after extensive discussions with experts in the field, the EMSC program has decided to include these products to the list of Pediatric Equipment. Only a handful or states and localities are choosing to allow ALS providers to use this equipment. **This change does not require states to allow this practice. It is further suggested that services using cuffed tubes in children should have specialized training programs that train providers in the use of these tubes.**

***Question 3:***
Our service prefers to use quantitative, waveform capnograpy. Colorimetric seems to be very unreliable in the prehospital setting, sometimes taking over 60 seconds to show color change in intubated arrest patients. Will waveform capnograpy be accepted in lieu of a colorimetric device?

***Answer 3:***
The National Guidelines for Ambulance Equipment state that end-tidal CO2 detection capability is a requirement and may be met with either colorimetric (adult and pediatric) or quantitative capnometry. Your use of waveform capnometry meets this requirement. Evidence supporting both methods of detecting CO2 exists in the literature. The Program realizes that there are advantages and disadvantages to both types of technology.

***Question 4:***
We do not carry pulse oximetry for pediatric patients, as we cannot find a non-disposable probe. The cost for the disposable probe is often more than typical reimbursement for an ambulance call. Can EMSC suggest a reusable pediatric SPO2 probe? This will more than likely be an issue for many prehospital providers.

***Answer 4:***
The Guidelines include a pulse oximeter with adult and pediatric probes. Neither the Guidelines nor the Program can recommend one product over another. Our limited research has identified reusable finger units for children range from $49 - $500. We have also been successful in identifying a hand held device with wrap around finger sensors for infants and children; disposable probes for this oximeter are sold in packages of 10, which range between $200 to $300. Pulse oximetry is an important metric in determining a child's respiratory status. If the cost of disposable probes is a complicating factor for your service, we suggest you work with your EMSC advisory committee and other organizations in the State to identify other mechanisms to support the purchase of these probes.

***Question 5:***
Our state has concerns related to medication dosing when using the Broselow tape. We have them and use them, but in the last few years we have treated children who were either very tall and lean or significantly over-weight.

***Answer 5:***
The National Guidelines do not refer to the Broselow tape, but rather require a length and weight based tape OR an appropriate reference material for pediatric equipment sizing and

drug dosing which is based on estimated or known weight. Again if you do not have an accurate pediatric reference guide of some sort, discuss this need and possible recommendations with your State EMSC advisory committee. You may also work with you medical director and other medical professionals in your state to develop a weight based reference guide that is appropriate for your State/Territory.