To better understand the EMS system's ability to care for pediatric patients, the NC EMS for Children Program conducted a survey of EMS agencies. The following are the results of this quality improvement effort. EMS agencies can learn more about their state efforts by contacting their state EMS for Children Program Manager shown in the Resources sections of this 3-page report.

Who took the survey?



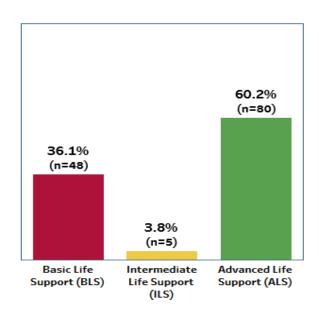


public 911 transporting & NON-transporting EMS agencies

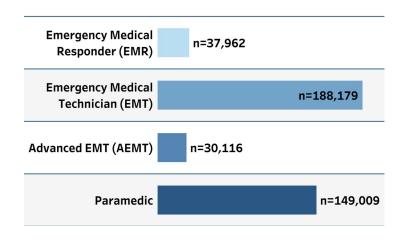


From across the state

Agencies by Highest Licensure



Type of Providers Reported



Pediatric Call Volume by Number and % of Agencies

	Num of Agencies	% of Agencies
HIGH: More than 600 pediatric calls in the last year (more than 50 pediatric calls per month)	14	10.5%
MEDIUM HIGH: Between 101-600 pediatric calls in the last year (8 - 50 pediatric calls per month)	28	21.1%
MEDIUM: Between 13-100 pediatric calls in the last year (1 - 8 pediatric calls per month)	49	36.8%
LOW: Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month)	42	31.6%
Grand Total	133	100.0%

Prepared by the National EMS for Children Data Analysis Resource Center (NED ARC), located at the University of Utah School of Medicine. Oct 2020

To better understand the EMS system's ability to care for pediatric patients, the NC EMS for Children Program conducted a survey of EMS agencies. The following are the results of this quality improvement effort. EMS agencies can learn more about their state efforts by contacting their state EMS for Children Program Manager shown in the Resources sections of this 3-page report.

Types of Methods for Physically Demonstrating Correct Use of PEDIATRIC-SPECIFIC Equipment

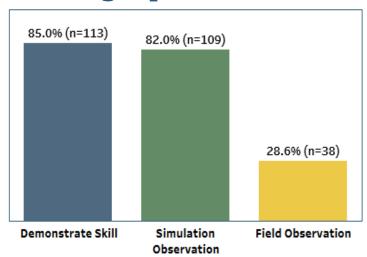






Use of Pediatric-Specific Equipment Results

Percent & Type/Method Skill Checking Reported

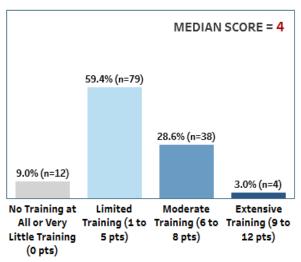


The processes & frequency of skill-checking evaluations for EMS providers has long been established as important for the maintenance of skills when treating patients for improved patient outcomes.¹⁻³

Miller's Model of Clinical Competence provides a framework for clinical evaluation that theorizes that competency for clinical skills can be demonstrated for EMS through a combination of skill stations, case scenarios & simulations, & real-life field

- Lammers, R. L., Byrwa, M. J., Fales, W. D., & Hale, R. A. (2009). <u>Simulation-based Assessment of Paramedic Pediatric Resuscitation Skills</u>. Prehospital Emergency Care, 13(3), 345–356.
- Su, E., Schmidt, T. A., Mann, N. C., & Zechnich, A. D. (2000). <u>A Rand omized Controlled Trial to Assess Decay in Acquired Knowledge Among Paramedics Completing a Pediatric Resuscitation Course</u>. *Acade mic Emergency Medicine*, 7(7), 779-786.
- Miller GE. <u>The Assessment of Clinical Skills/Competence/Performance</u>. Acad Med 1990; 65:S63-67.

Frequency of Skill-Checking on Pediatric Equipment



Resources

- Pediatric Readiness in EMS Systems
- Prehospital Education Toolkit
- (video) Use of Pediatric-Specific Equipment
- Pediatric Emergency Knowledge Translation Toolkit
- Simulation-based assessment of paramedic pediatric resuscitation skills abstract
- Your NC EMS for Children Grant Coordinator:

Greg Edwards

Office: 919.701.2656

Email: dhsr.emsc@dhhs.nc.gov

Prepared by the National EMS for Children Data Analysis Resource Center (NED ARC), located at the University of Utah School of Medicine. Oct 2020

To better understand the EMS system's ability to care for pediatric patients, the NC EMS for Children Program conducted a survey of EMS agencies. The following are the results of this quality improvement effort. EMS agencies can learn more about their state efforts by contacting their state EMS for Children Program Manager shown in the Resources sections of this 3-page report.

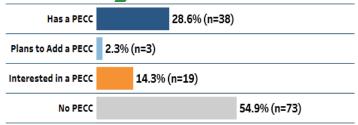
Pediatric Emergency Care Coordinator (PECC) Results

What is a PECC?



A designated individual(s), often called a Pediatric Emergency Care Coordinator or PECC, who is responsible for coordinating and championing pediatric-specific activities for an EMS agency. This individual(s) could serve as the PECC for one or more EMS agencies.

PECC at Agencies



PECC Oversees

Oversees Multiple Agencies	36.8% (n=14)
Oversees Only Our Agency	63.2% (n=24)

Significance

A study of the readiness of hospital emergency departments (EDs) to care for children has shown that EDs are more prepared to care for children when there is a PECC who is responsible for championing & making recommendations for policies, training, & resources pertinent to the emergency care of children.¹ While this study was conducted in EDs, the 2020 joint policy statement,² Pediatric Readiness in EMS Systems, states the importance of EMS physicians, administrators, & personnel to collaborate with pediatric acute care experts to optimize EMS care for children to improve outcomes. In further support of the importance of EMS agency PECCs, a recent study "found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations."

- Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). <u>A National Assessment of Pediatric Readiness of Emergency Departments</u>. *JAMA Pediatrics*, 169(6), 527–534.
- Moore, B., Shah, M. I., Owusu-Ansah, S., Gross, T., Brown, K., Gausche-Hill, M., Remick, K., Adelgais, K., Lyng, J., Rappaport, L., & Snow, S. (2020). <u>Pediatric Readiness in Emergency Medical Services Systems</u>. *Prehospital Emergency Care*, 24(2), 175-179.
- Hewes, H. A., Ely, M., Richards, R., Shah, M. I., Busch, S., Pilkey, D., Dixon Hert, K., & Olson, L. M. (2018). Ready for Children: Assessing Pediatric Care Coordination and Psychomotor Skills Evaluation in the Prehospital Setting. Prehospital Emergency Care, DOI:

Agencies who Have a PECC – Reported PECC Duties

-	
Promotes pediatric continuing education opportunities	97.4%
Ensures that fellow providers follow pediatric clinical practice guidelines and/or protocols	94.7%
Ensures the availability of pediatric medications, equipment, and supplies	89.5%
Ensures that the pediatric perspective is included in the development of EMS protocols	81.6%
Promotes agency participation in pediatric prevention programs	73.7%
Oversees pediatric process improvement initiatives	73.7%
Promotes family-centered care	55.3%
Other Activities	44.7%
Coordinates with the emergency department pediatric emergency care coordinator	42.1%
Promotes agency participation in pediatric research efforts	36.8%

Resources

- <u>Pediatric Readiness in EMS Systems</u>
- <u>Pediatric Emergency Care Coordinator Learning</u>
 <u>Collaborative</u>
- (video) <u>Pediatric Emergency Care Coordinator</u>
- Prehospital Education Toolkit
- Your NC EMS for Children Grant Coordinator:

Greg Edwards

Office: 919.701.2656

Email: dhhs.nc.gov

3

Prepared by the National EMS for Children Data Analysis Resource Center (NED ARC), located at the University of Utah School of Medicine. Oct 2020