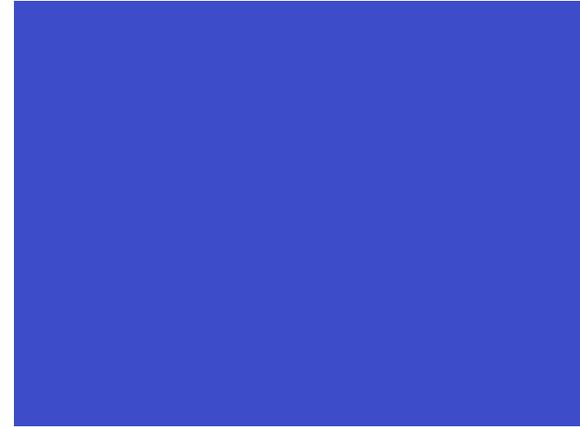


Innovation and Improvement Center



Emergency Medical Services for Children



Prehospital Pediatric Emergency Care Coordinator

National EMS Advisory Council

July 9, 2019

Acknowledgement

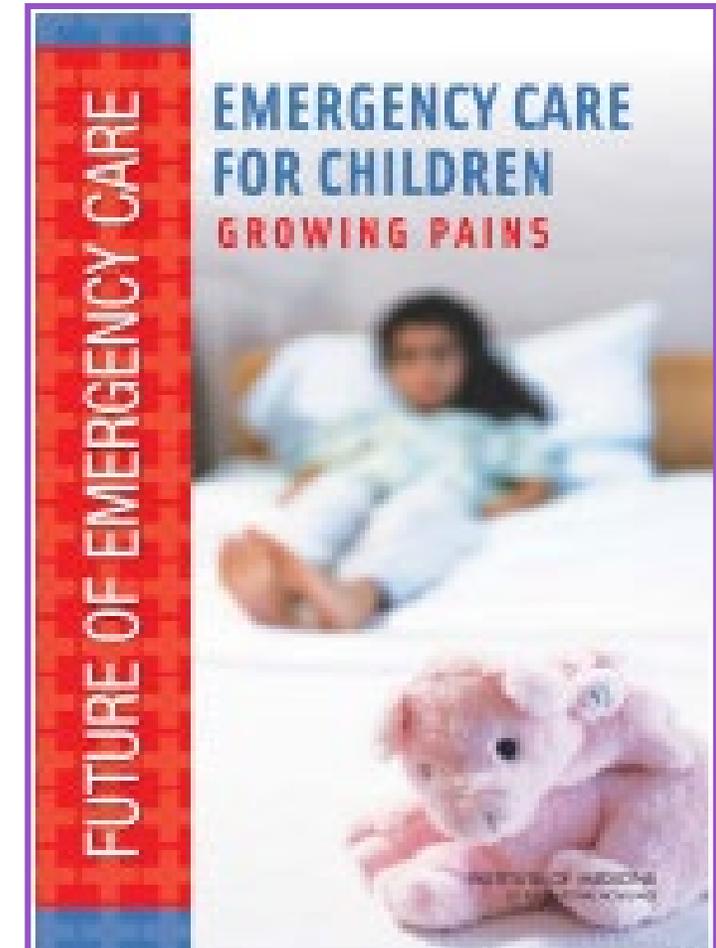
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- This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

The State of Prehospital Emergency Care for Children

- Children account for 13% of EMS patients
 - Most EMS agencies (>80%) see < 8 children/month
- Known gaps in day-to-day readiness
 - Unique pediatric characteristics and needs
- Lags in translation of pediatric evidence base

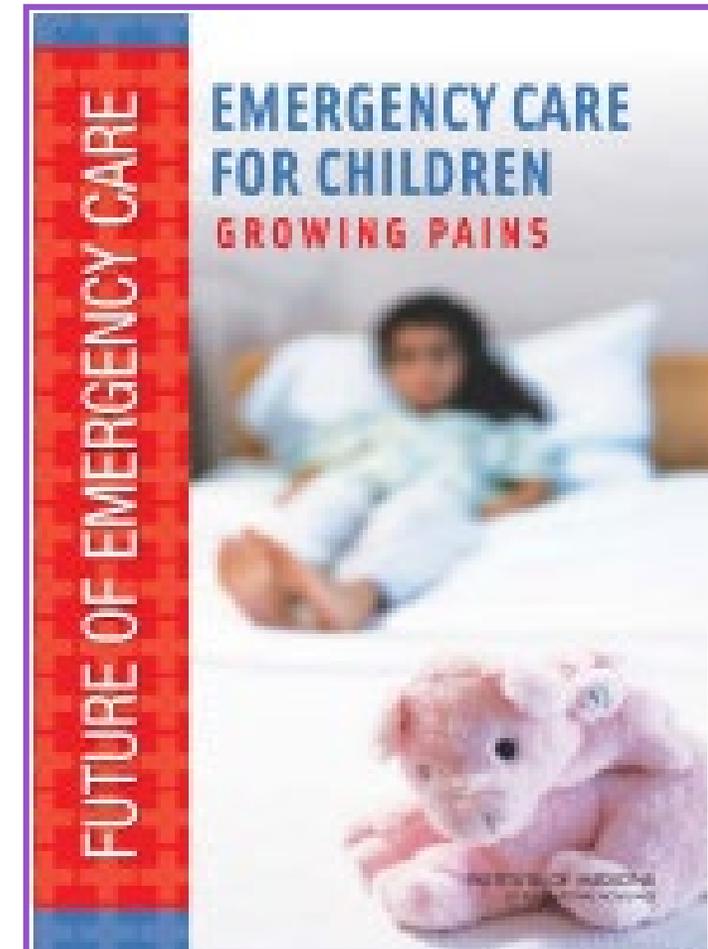
Institute of Medicine: Call to Action

- More training and guidelines is not sufficient
- EMS agencies should appoint a pediatric emergency care coordinator (PECC)
 - Ensure adequate skill and knowledge of EMS providers
 - Oversee pediatric clinical QI initiatives
 - Ensure availability of pediatric medications/equipment/supplies



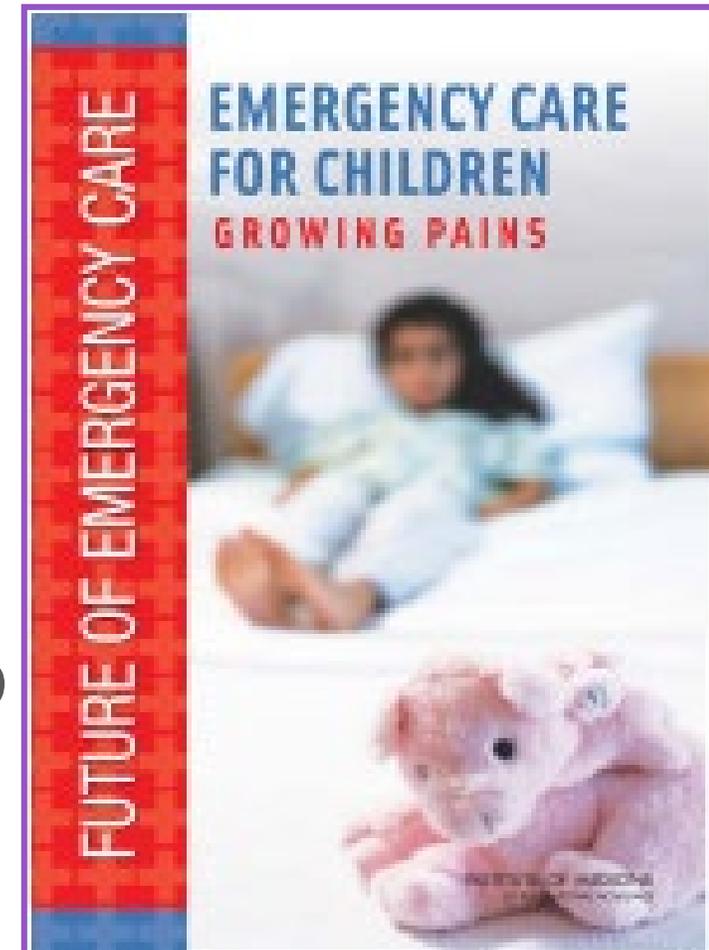
Institute of Medicine: Call to Action

- Adoption of clinical protocols
 - Represent the pediatric perspective re: development of protocols and procedures
 - Participate in prevention and research programs
-
- Credentialing and certification organizations should define pediatric emergency care competencies



Institute of Medicine: Call to Action

- Paramedics could serve in this role
- Must have interest, knowledge and skills in pediatric emergency care
- Coordinators are most important for EMS agencies that lack strong pediatric expertise
- A PECC can also be the liaison to get feedback/ close the loop between EMS and ED and hospitals



Coordination of Pediatric Emergency Care in EMS Systems

- PECC associated with:
 - improved documentation
 - Improved clinical management
 - Increased staff awareness of high-priority pediatric areas

RESOURCE DOCUMENT: COORDINATION OF PEDIATRIC EMERGENCY CARE IN EMS SYSTEMS

Katherine Remick, MD, Toni Cross, MD, MPH, Kathleen Adelgais, MD, MPH, Manish I. Shah, MD, MS, Julie C. Leonard, MD, MPH, Marianne Gauscho-Hill, MD

Abstract

Background: Citing numerous pediatric-specific deficiencies within Emergency Medical Services (EMS) systems, the Institute of Medicine (IOM) recommended that EMS systems appoint a pediatric emergency care coordinator (PECC) to provide oversight of EMS activities related to care of children, to promote the integration of pediatric elements into day-to-day services as well as local and/or regional disaster planning, and to promote pediatric education

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K. Remick, T. Cross, K. Adelgais, M. I. Shah, J. C. Leonard, and M. Gauscho-Hill conceived the study. K. Remick, T. Cross, and M. Gauscho-Hill conducted the systematic review of the literature. K. Remick oversaw statistical analysis. K. Remick drafted the manuscript and all authors contributed substantially to its revision. K. Remick takes responsibility for the paper as a whole.

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Supplemental data for this article can be accessed on the publisher's website.

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Color versions of one or more of the figures in this article can be found online at www.aonlinelibrary.com/doi.

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across all levels of EMS providers. **Methods:** A systematic review of the literature was undertaken to describe the evidence for pediatric coordination across the emergency care continuum. The search strategy was developed by the investigators in consultation with a medical librarian and conducted in OVID, Medline, PubMed, Embase, Web of Science, and CINAHL databases from January 1, 1983 to January 1, 2016. All research articles that measured a patient-related or system-related outcome associated with pediatric coordination in the setting of emergency care, trauma, or disaster were included. Opinion articles, commentaries, and letters to the editor were included. These investigators independently screened citations in a hierarchical manner and abstracted data. **Results:** Of 149 identified titles, nine were included in the systematic review. The nine articles included one interventional study, five surveys, and three consensus documents. All articles favored the presence of pediatric coordination. The interventional study demonstrated improved documentation, clinical management, and staff awareness of high priority pediatric areas. **Conclusion:** The current literature supports the identification of pediatric coordination to facilitate the optimal care of children within EMS systems. In order for EMS systems to provide high quality care to children, pediatric components must be integrated into all aspects of care including day-to-day operations, policies, protocols, available equipment and medications, quality improvement efforts, and disaster planning. This systematic review and resource document serves as the basis for the National Association of EMS Physicians position statement entitled "Physician Oversight of Pediatric Care in Emergency Medical Systems." **Key words:** emergency medical services (EMS) systems; pediatric; EMS for Children; administration; quality improvement

PREHOSPITAL EMERGENCY CARE 2016; Early Online:1-9

INTRODUCTION

Providing high-quality emergency medical services (EMS) to children requires an infrastructure designed to support the care of pediatric patients. Unfortunately, the 2006 Institute of Medicine (IOM) report on the Future of Emergency Care in the United States Health System described multiple challenges facing EMS systems when it comes to meeting the needs of children.¹ Gaps exist in both the clinical and administrative arenas. EMS providers face challenges related to infrequent encounters with children, particularly the critically ill, and maintenance of pediatric skills. Furthermore, there is a paucity of research on best



EMSC 02

PEDIATRIC EMERGENCY CARE COORDINATOR (PECC)

The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care.

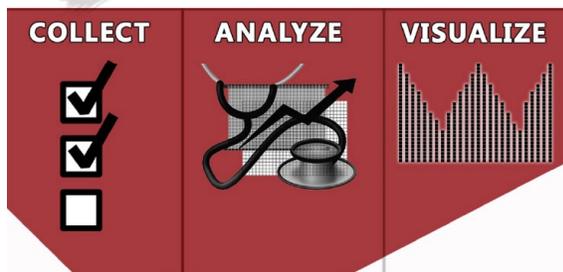
Goal for this measure is that by 2026:

Ninety percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

EMS for Children Data Collection 2017-2018

- 11,027 EMS agencies contacted
- 8,730 EMS agencies responded (79.2%)
- 80% of EMS agencies see fewer than 8 pediatric patients per month

20 Years of Data Helping Children
NEDARC

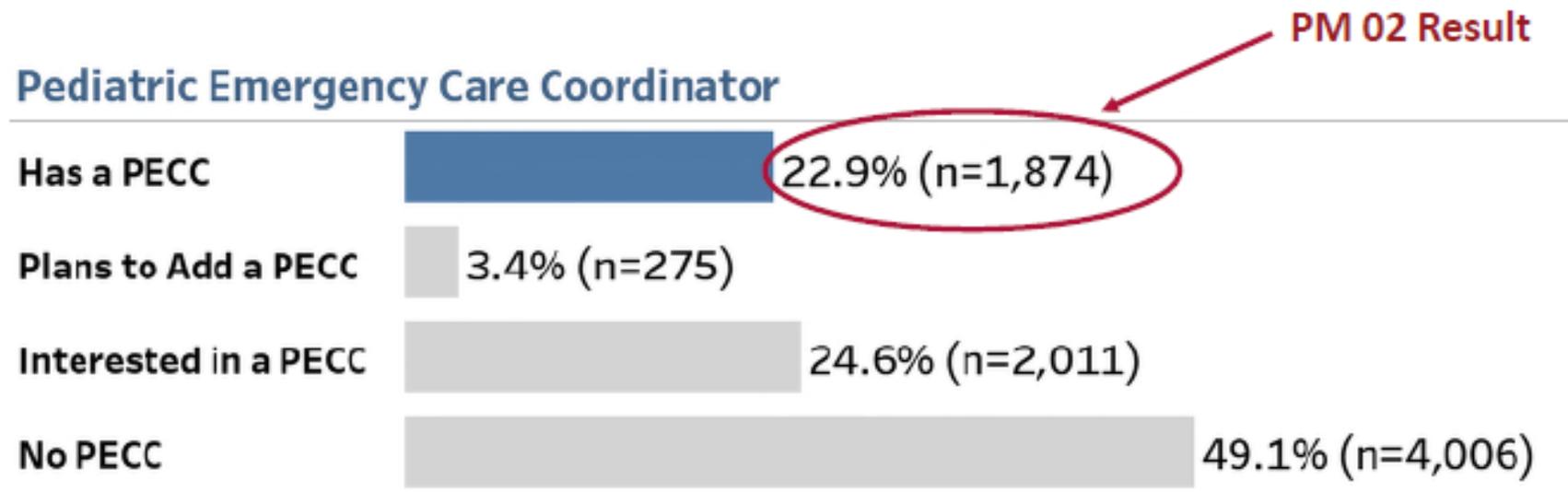


Annual 911 Pediatric Call Volume*

| | |
|--|----------------------------------|
| None - Zero pediatric calls in the last year | 2.8% n=226 agencies |
| Low - Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month) | 39.4% n=3,219 agencies |
| Medium - Between 13-100 pediatric calls in the last year (1 - 8 pediatric calls per month) | 39.0% n=3,186 agencies |
| Medium High - Between 101-600 pediatric calls in the last year (8 - 50 pediatric calls per month) | 13.9% n=1,138 agencies |
| High - More than 600 pediatric calls in the last year (more than 50 pediatric calls per month) | 4.4% n=357 agencies |
| Pediatric Call Volume Not Reported | 0.5% n=40 agencies |

EMS for Children Performance Measure 02

- *The percent of EMS agencies in the state/territory that have a designated individual who coordinates pediatric emergency care*





EMS FOR CHILDREN

PECC

Prehospital Pediatric Emergency Care Coordinator

LEARNING COLLABORATIVE

Objective

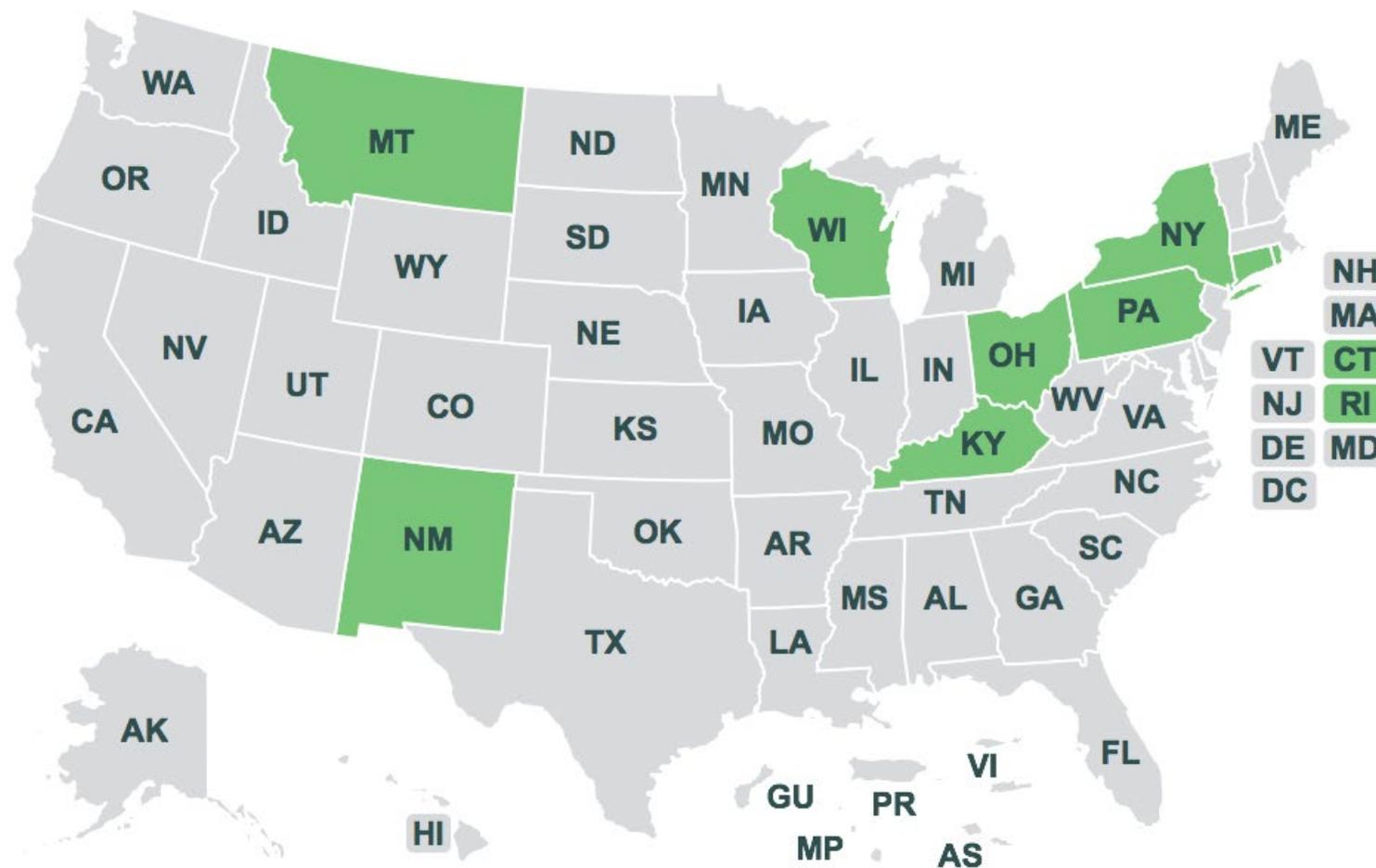
To form a cohort of EMSC State Partnership Grant recipients to participate in a learning collaborative that will demonstrate effective, replicable strategies to increase the number of local EMS agencies with a PECC.

Focused Aim

By March 31, 2019, nine participating states will have established a PECC in > 50% of local EMS agencies that indicated an interest in adding this role on the 2017 – 2018 National EMSC Survey.

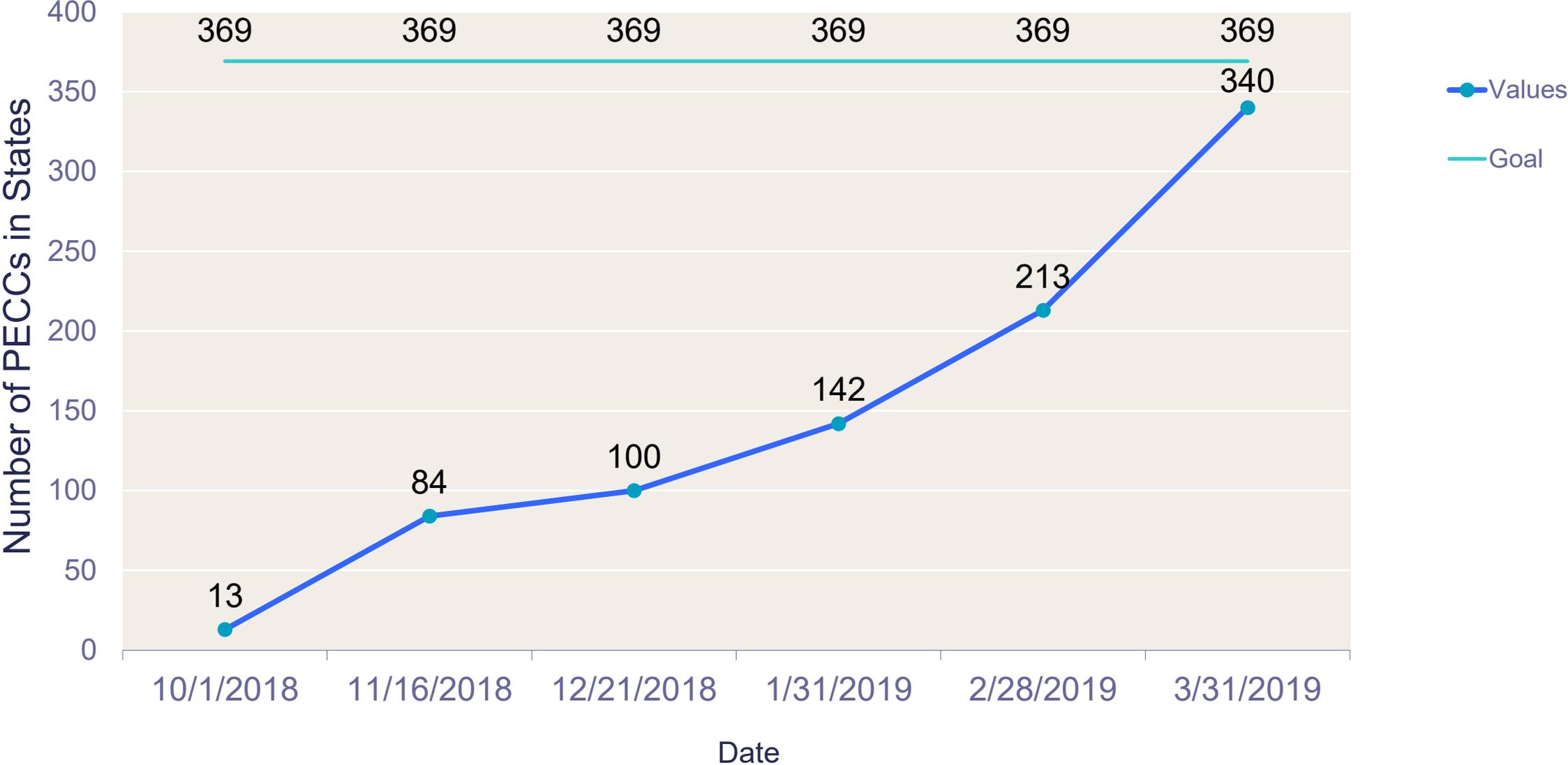
State Partnership Teams

- Connecticut
- Kentucky
- Montana
- New Mexico
- New York
- Ohio
- Pennsylvania
- Rhode Island
- Wisconsin



Participating states represent 10% of EMS agencies in the US.

New PECCs Established



Next Steps

- NASEMSO Resolution on PECC in EMS
- EMSC PECC in EMS Community of Practice
- Prehospital Pediatric Readiness Initiative

Questions



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