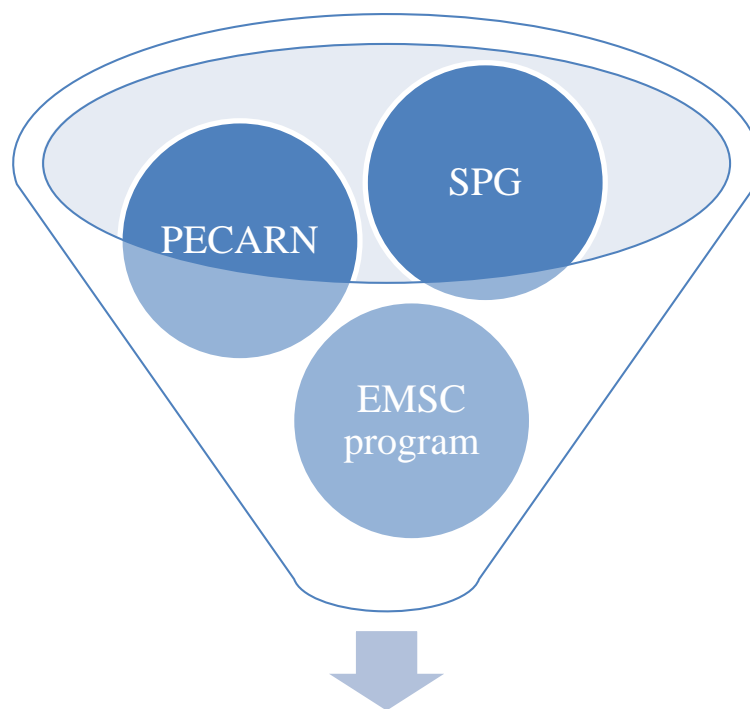




Leveraging PECARN investigators to support the State Partnership Program



Brainstorm future collaborations between PECARN faculty and the State Partnership Program



Improved care for children

State Partnership Manager questions

What is the most challenging part of your role?

How can PECARN investigators help you in your role?



Goals of this session

To describe some past, current and future planned work from PECARN investigators relevant to SP managers

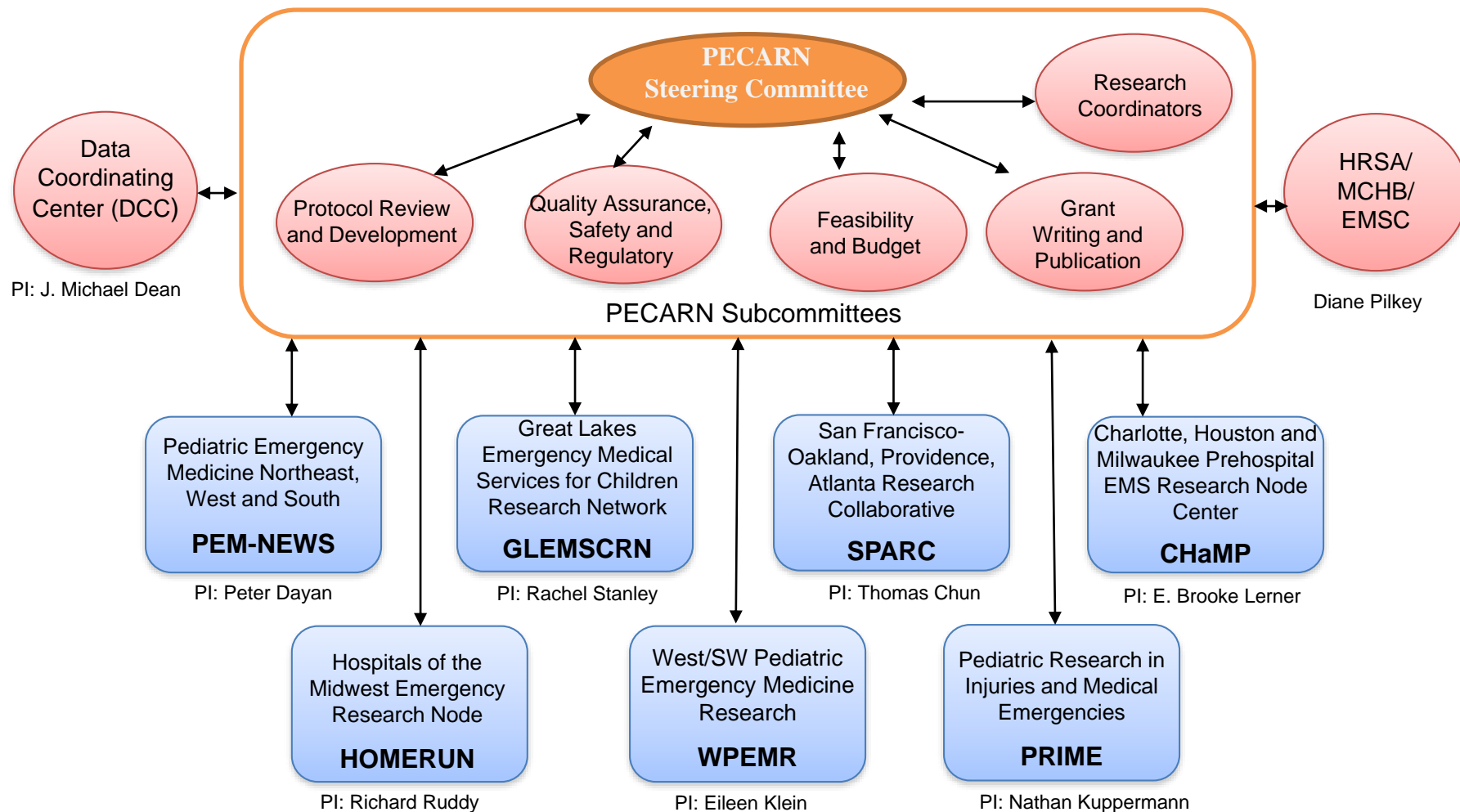
Brainstorm future collaborative activities between PECARN/TIG investigators and SP managers



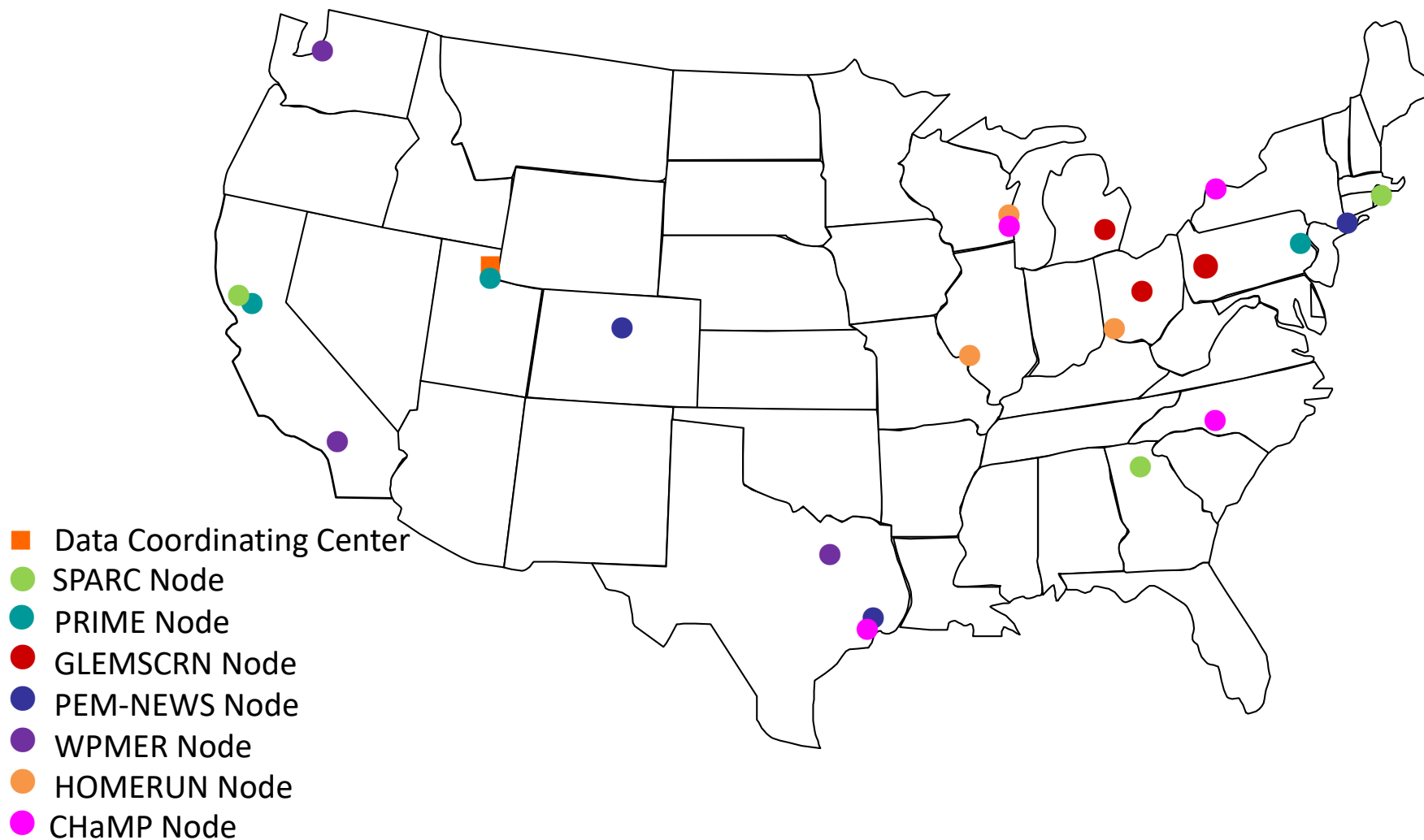
Overview


- Describe PECARN network structure and completed projects
- Describe PECARN faculty involvement in the PECC collaborative – Example of Ohio
- Describe the EIIC- EMSC Dissemination Committee
- Example of future Quality Improvement projects involving TIG/PECARN/EIIC faculty – NPRP QI data registry
- Brainstorm future collaborations between PECARN faculty and the State Partnership Program

PECARN – Network Structure



The Pediatric Emergency Care Applied Research Network (PECARN)



A photograph of two young children sitting side-by-side on a light-colored surface. The child on the left is a white baby with light skin and blue eyes, wearing a white diaper. The child on the right is a Black baby with dark skin and curly hair, also wearing a white diaper. Both children have surprised or questioning expressions on their faces. Three speech bubbles are overlaid on the image: one on the left pointing to the white baby, and two on the right pointing to the Black baby.

I am in critical condition-how do you treat me?

Should you CT scan me?

How will you treat my seizures?

PECARN Research

Trauma related research

- Evaluation of head trauma
- Evaluation of abdominal trauma
- C-spine spinal motion restriction and imaging
- Knowledge translation of TBI rules
- Identifying teens at risk for suicide



Medical emergency research

- Therapeutic hypothermia after pediatric cardiopulmonary arrest
- Which drug for management of SE?
- Can we treat acute gastroenteritis?
- How to treat sickle cell pain?
- How to diagnose febrile infants?
- Steroids in acute bronchiolitis
- Which fluids for DKA in kids?
- How to identify teens at risk for drug/alcohol use?

PECARN has answered these questions

- Do steroids work for children with bronchiolitis?
- When can you avoid CT scans for kids after head injury?
- When can you avoid CT scans after abdominal injuries?
- Can we use RNA technology to figure out whether infants with fever have a bacterial or viral infection?
- What are the characteristics of c-spine injuries in children?
- What is the best treatment for children with status epilepticus?
- What type and volume of IV fluids should we use for children with DKA

PECARN faculty involvement in the PECC movement

RESOURCE DOCUMENT: COORDINATION OF PEDIATRIC EMERGENCY CARE IN EMS SYSTEMS

Katherine Remick, MD, Toni Gross, MD, MPH, Kathleen Adelgaiz, MD, MPH,
Manish I. Shah, MD, MS, Julie C. Leonard, MD, MPH, Marianne Gausche-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

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 CINAHL, 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. Three 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. **Conclusions:** 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." **Keywords:** emergency medical services (EMS); systemic pediatric; EMS for Children; administration; quality improvement

PEDIATRIC 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

- PECARN infrastructure creates forum for ...
 - Interacting with federal partners
 - Sharing ideas
 - Networking
- PECARN research reflective of diverse needs of EMSC community
 - Epidemiology- define the problems
 - Discovery- provide evidence for practice
 - Implementation- promote adoption of evidence based practice
 - Quality Improvement- improve healthcare delivery

Received September 1, 2016 from Austin Travis County EMS System, Office of the Medical Director, Austin, Texas (KR); Dell Medical School at the University of Texas at Austin, Austin, Texas (KR); University of Arizona College of Medicine - Phoenix, Phoenix, Arizona (TG); Phoenix Children's Hospital Emergency Department, Phoenix, Arizona (TG); Children's Hospital of Colorado, Section of Pediatric Emergency Medicine, Aurora, Colorado (KA); Section of Emergency Medicine, Baylor College of Medicine, Department of Pediatrics, Houston, Texas (MS); Emergency Center, Texas Children's Hospital, Houston, Texas (MS); Nationwide Children's Hospital and the Ohio State University College of Medicine, Division of Emergency Medicine, Department of Pediatrics, Columbus, Ohio (JCL); Los Angeles County EMS Agency, Los Angeles, California (MG-H); Harbor UCLA Medical Center, Department of Emergency Medicine, Los Angeles, California (MG-H); David Geffen School of Medicine at University of California, Department of Medicine and Pediatrics, Los Angeles, California (MG-H). Revision received October 28, 2016.

K. Remick, T. Gross, K. Adelgaiz, M. I. Shah, J. C. Leonard, and M. Gausche-Hill conceived the study. K. Remick, T. Gross, and M. Gausche-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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The authors report no conflict of interest. The authors alone are responsible for the content and writing of the paper.

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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.aacnline.com/pec.

doi:10.1093/pec/pep007

PECARN faculty involvement in the PECC collaborative

Collaborative Basics

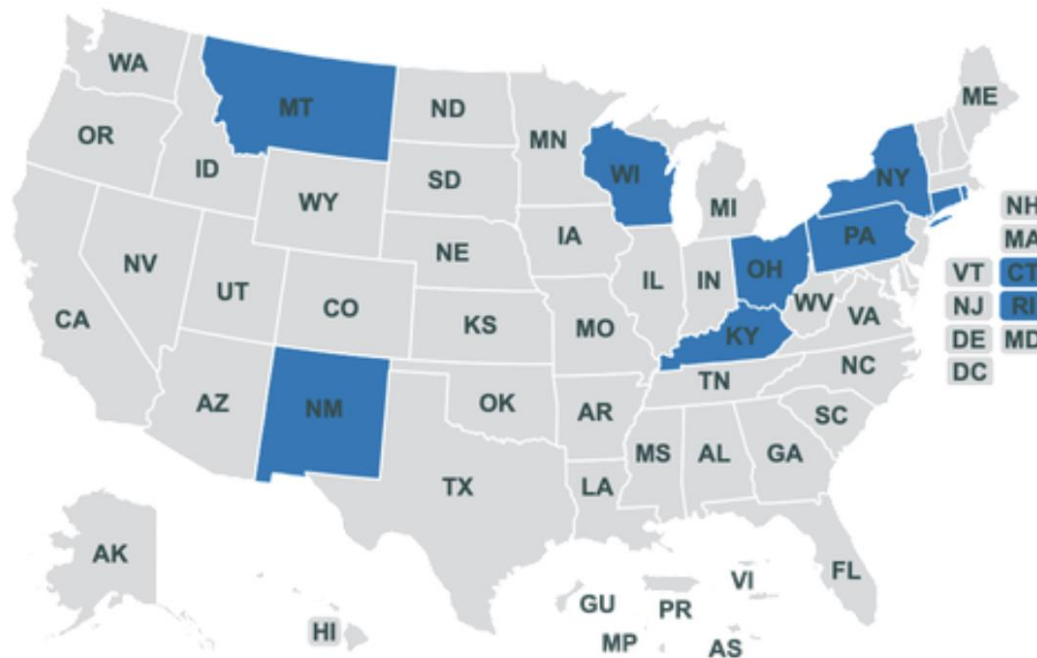
About the
PECCLC >

Objective & Aim
Statements >

Final Numbers >

Participating
States >

Participating States



Spreading the word...

- PECC workshops
 - Locally, regionally, and nationally
 - Multiple target audiences
 - EMS leadership
 - EMS providers
 - Medical directors
 - Future pediatric emergency physicians
 - Curriculum focused on
 - Evidence for PECC
 - Barriers and facilitators to PECC implementation
 - Core PECC roles and responsibilities
 - Protocol development
 - Skills assessment
 - Quality improvement

Starting in Ohio...

Ohio: EMSC Pediatric Emergency Care Coordinator Workshops



- Leveraged Ohio EMSC Committee for expertise
- Timed with the EMS for Children Agency Survey: Fall 2017
- Target audience agency leadership and PECCs- 200+ attended
- Diverse and accessible geographic locations
- Lunch donated by Children's Hospitals
- Continuing education credit offered by Ohio Department of Public Safety
- Online registration portal
- Flyers, mailings, websites and e-blast

PECC Workshop structure

9:30 AM - 10:00 AM	Registration		
10:00 AM - 10:15 AM	Welcome		
10:15 AM - 10:45 AM	Introduction to PECC		
10:45 AM - 11:15 AM	Overcoming Barriers to PECC Implementation		
Concurrent Breakout Sessions			
11:20 AM - 11:50 AM	Pediatric-focused Quality Improvement	Developing and Implementing Pediatric Guidelines/Protocols	Best Practices in Conducting Pediatric Skills Assessment
11:55 AM - 12:25 PM	Pediatric-focused Quality Improvement	Developing and Implementing Pediatric Guidelines/Protocols	Best Practices in Conducting Pediatric Skills Assessment
12:30 PM - 1:00 PM	Lunch		
Concurrent Breakout Sessions			
1:05 PM - 1:35 PM	Pediatric-focused Quality Improvement	Developing and Implementing Pediatric Guidelines/Protocols	Best Practices in Conducting Pediatric Skills Assessment
1:40 PM - 2:25 PM	EMSC and the Pediatric Readiness Project: The EMS Agency Survey		
2:25 PM	Wrap-up		

Spread it nationally...

NAEMSP workshop



Optimal Pediatric Care: Making It Happen in Your System

- January 2019
- Leveraged national leadership
- Target audience Agency leadership and PECCs
- Continuing education credit offered by NAEMSP

Engage future generations...

back to Ohio...

Ohio PEM Fellow's Conference



AGENDA

Ohio PEM Fellows Conference Tuesday – March 26, 2019

- EMS Medical Direction- *Lecture*
- PECC- *Lecture*
- Pediatric Prehospital Protocols- *Interactive session*
- QI in the Prehospital Setting- *Interactive session*
- Simulation in the Prehospital Setting- *Interactive session*

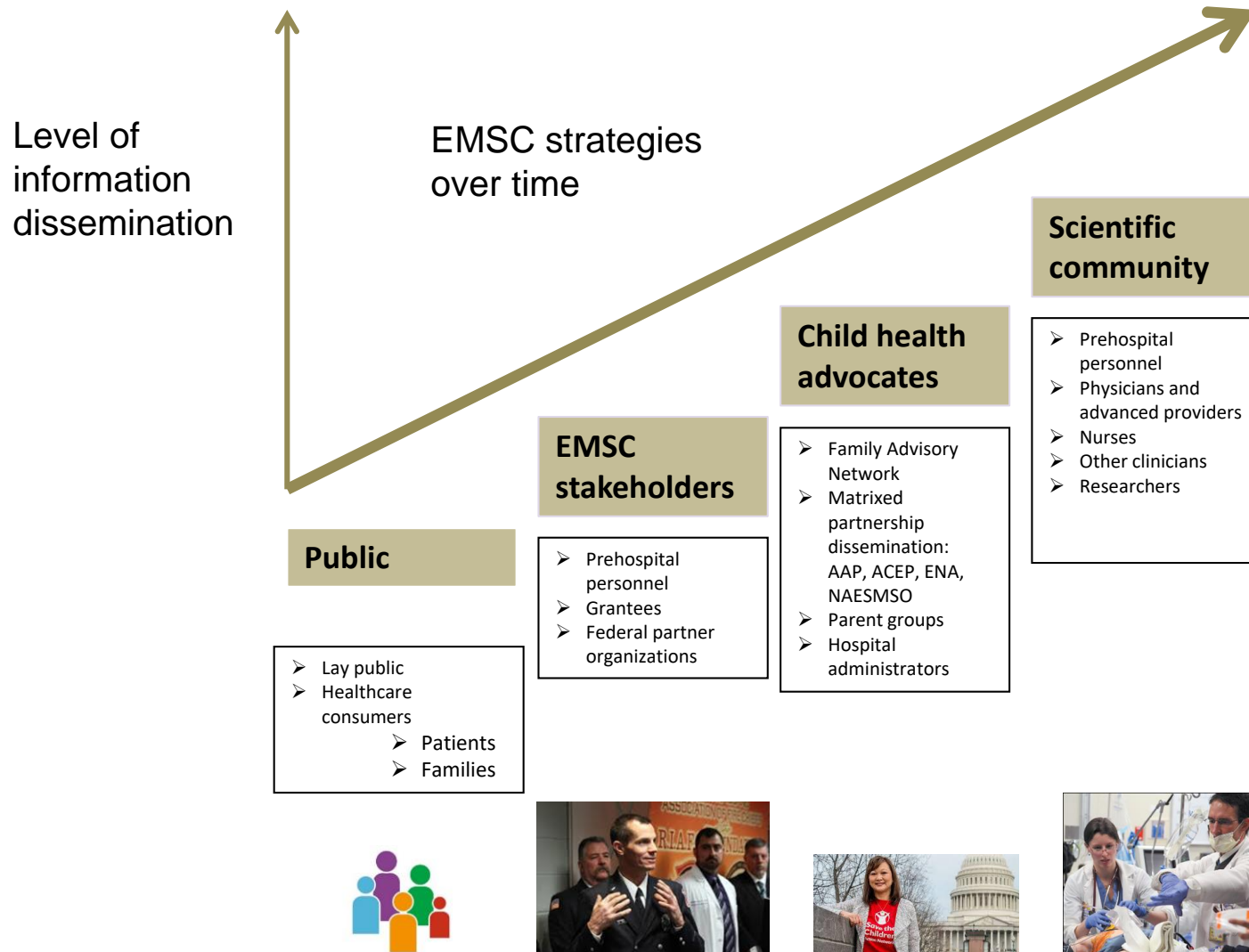
Discovery->Dissemination->Implementation

- A National Assessment of Pediatric Readiness of Emergency Departments- April 2015
- Resource Document: Coordination of Pediatric Emergency Care in EMS Systems- Jan 2017
- Revised EMSC Performance Measures- March 2017
- Ohio PECC Conference- Fall 2017
- EIIC PECC Learning Collaborative- Oct 2018-Mar 2019
- NAEMSP PECC Workshop- Jan 2019

ElIC-EMSC Dissemination Committee



Targeting personas



Web-based pediatric modules

Algorithms/pathways

- Evidence references

Pocket cards

Order sets

Age/weight based drug binders

Infographics (recommendations) for clinicians

Infographics for patients/families

Transfer checklists

Triage poster

Videos for families

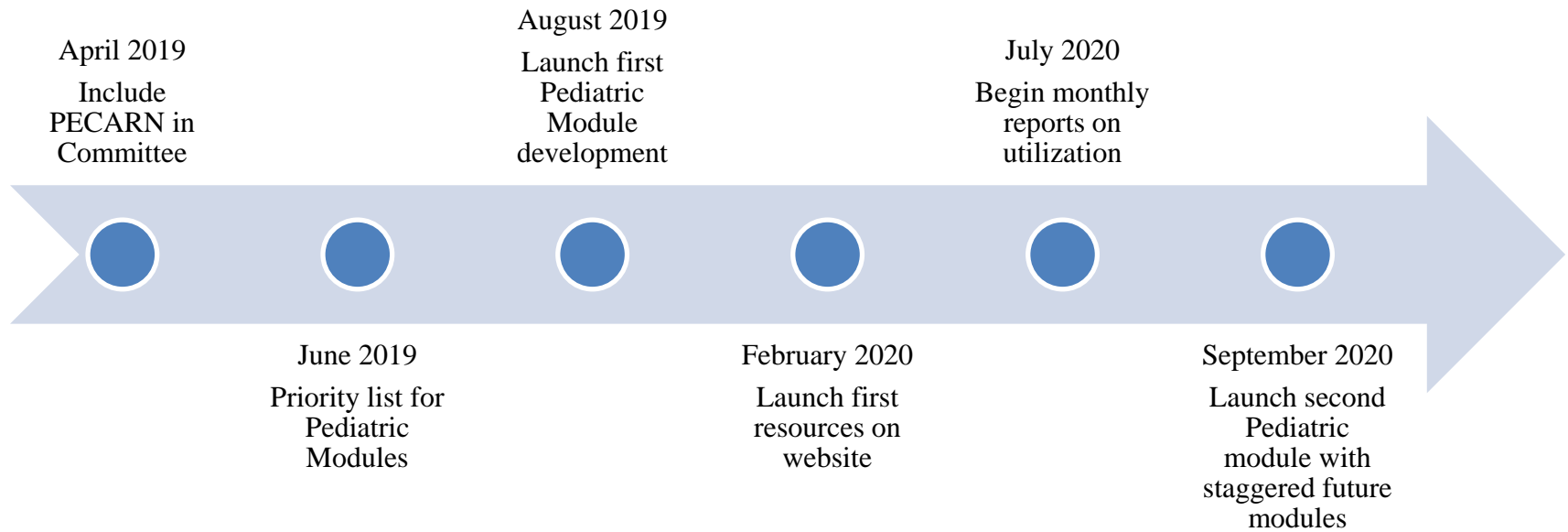
Videos for prehospital and hospital based providers

Topic meetings linked to grantee meetings

- Potentially simulation

Mobile applications

Pediatric Modules timeline



Example of QI projects involving PECARN/EIIC faculty

The National Pediatric Readiness Project QI data registry

No current data registries exist specifically to evaluate pediatric emergency care in the U.S.

The NPRP does not link pediatric readiness with pediatric-specific health outcomes

We need to prove that the pediatric performance metrics make a difference for kids!



Objectives of the project

1. Define Quality Indicators for Pediatric Emergency Care
2. Develop an Online Data Management system
3. Analyze the Relationship of Pediatric Readiness and Delivery of Evidence-Based Care (Quality and Outcomes)
4. Facilitate a National Engagement and Dissemination Strategy and Sustainability Plan



Objective 4

Work with EMSC State Partnership Managers to link Registry activities with state Pediatric Facility Recognition Programs

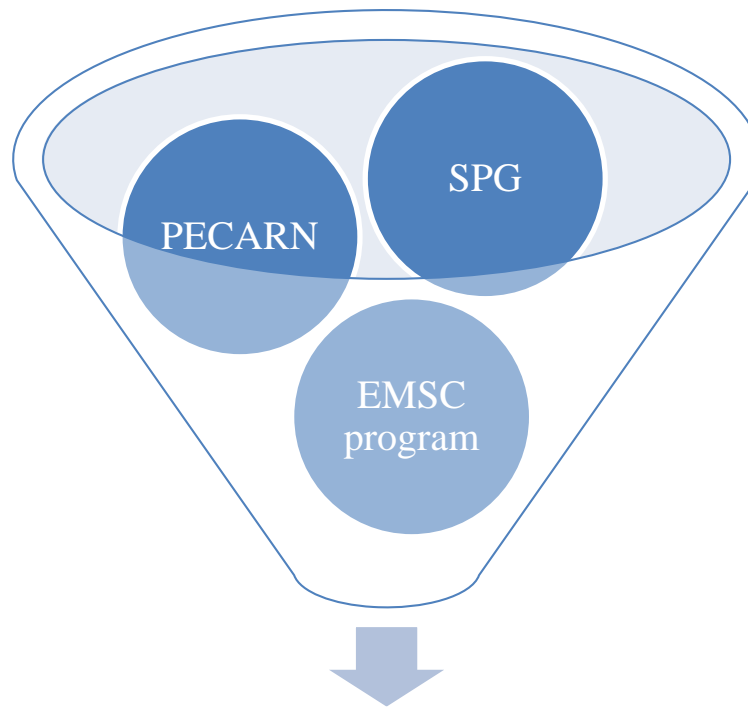


Summary

- Describe PECARN network structure and completed projects
- Describe PECARN faculty involvement in the PECC collaborative – Example of Ohio
- Describe the newly formed EIIC- EMSC Dissemination Committee
- Example of future Quality Improvement projects involving TIG/PECARN/EIIC faculty – NPRP QI data registry



Brainstorm future collaborations between PECARN faculty and the State Partnership Program



Improved care for children

State Partnership Grantee questions

What is the most challenging part of your role?

How can PECARN help you in your role?



Thank you