

EMSC

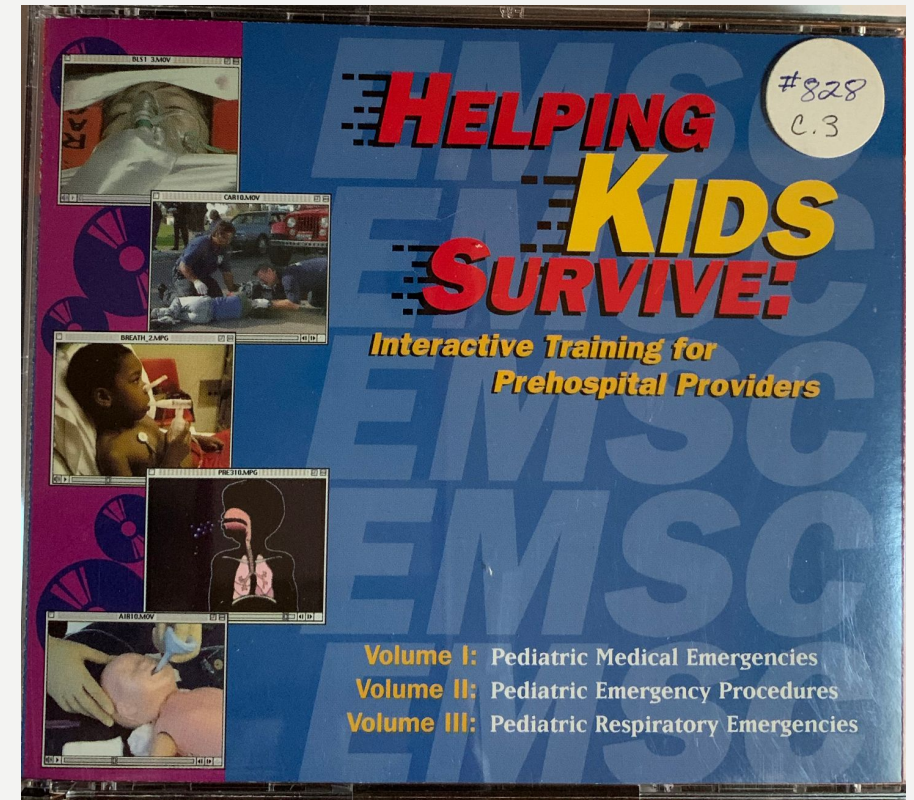
THE BEGINNING

Pioneering
Establishing the Need

JANE W. BALL, RN, DrPH

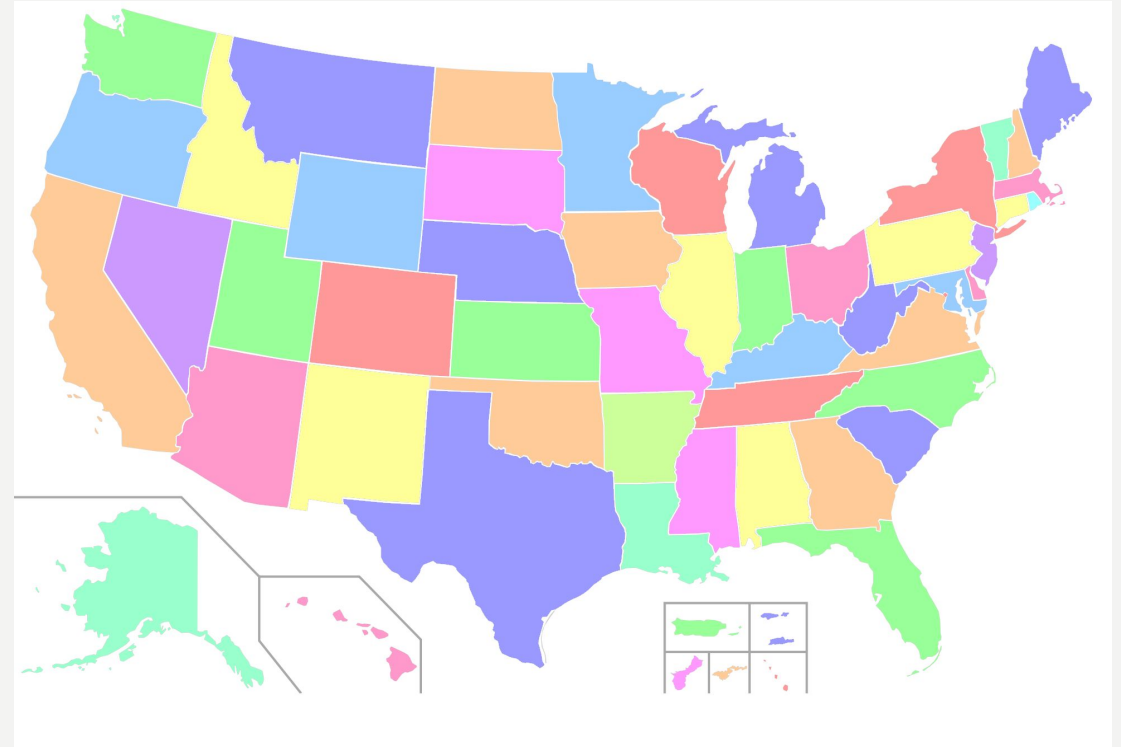
DEMONSTRATION GRANTS

- Developed education programs for EMS providers
- Identified strategies to disseminate education
- Identified pediatric emergency equipment needs
- Only grant per state



STATE PARTNERSHIP GRANTS

- Emphasis on implementation – moving EMSC forward
- Collaboration with the state EMS office
- Outreach to neighboring states
- Support for regional meetings
- Outreach to the US territories and protectorates



NHTSA- OFFICE OF EMS

- Relationship informed each program about important issues
 - EMS provider pediatric care concerns
 - EMS infrastructure challenges to support pediatric EMS care
- Promoted an EMSC relationship within State EMS Offices
- Provided a mechanism to integrate a pediatric focus into EMS education standards, model EMS practice guidelines, and other significant documents



NATIONAL RESOURCE CENTERS

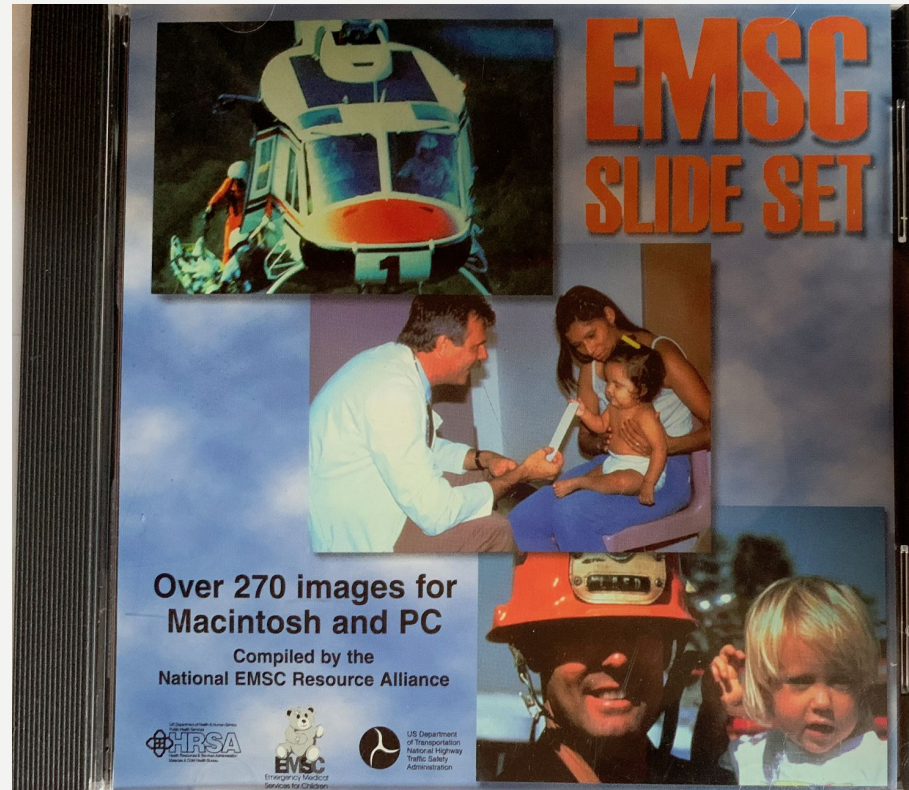
- **National EMSC Resource Alliance in California**
- **EMSC National Resource Center in Washington, DC**
- **National EMSC Data Analysis Resource Center in Utah**
- **Goal of promoting EMSC development by grantees**



NATIONAL RESOURCE CENTERS

Resources for Grantees

NERA

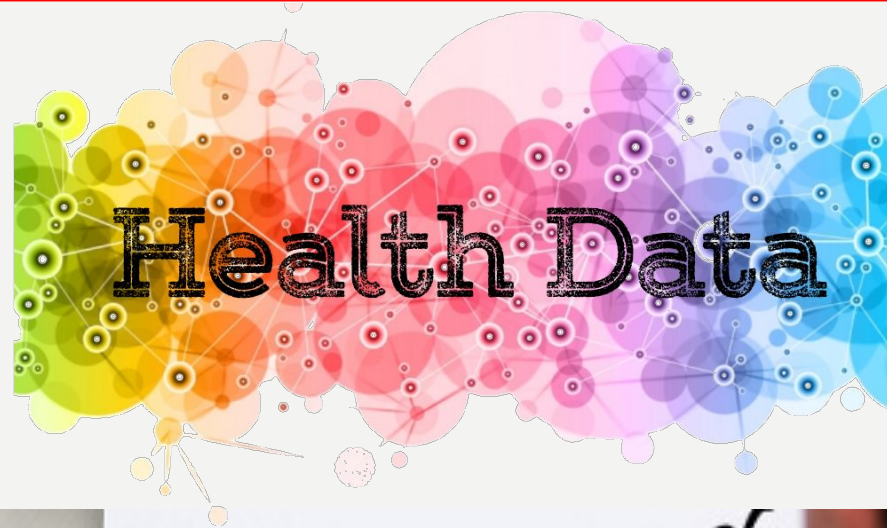


NRC Rainbow Books

- Coalition Building
- Public Policy
- Project Management
- Financing EMSC
- Children with Special Healthcare Needs
- Working with Families

NATIONAL RESOURCE CENTERS

NEDARC

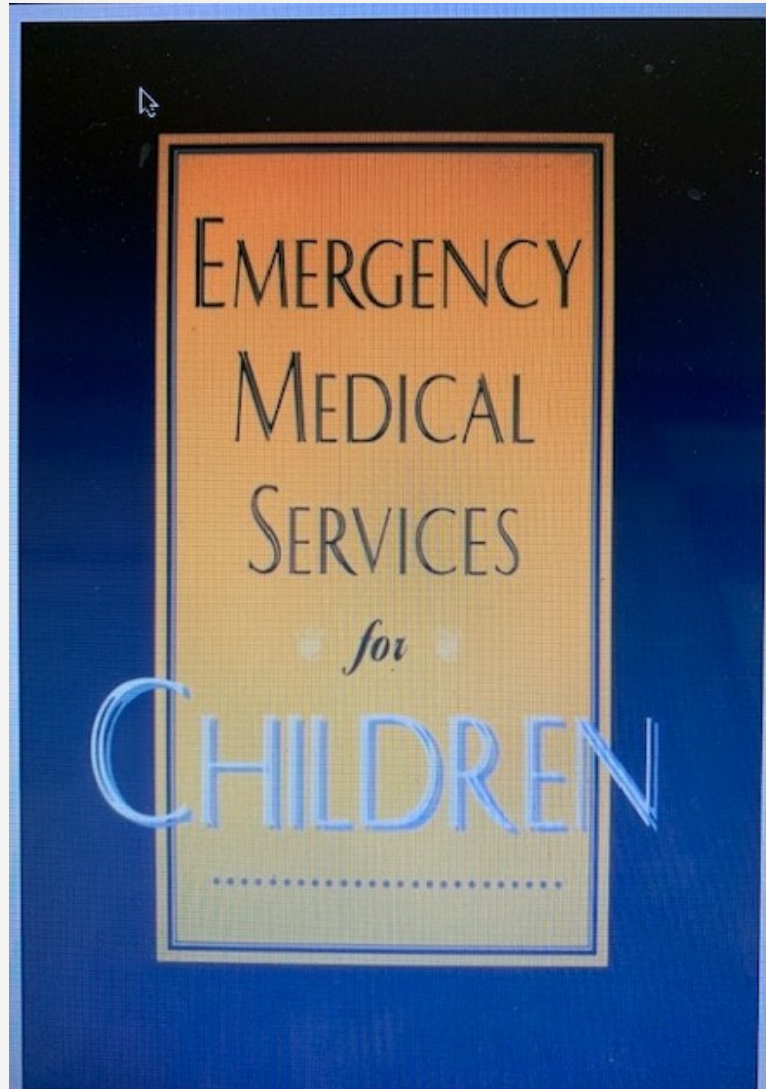


NATIONAL ORGANIZATIONS

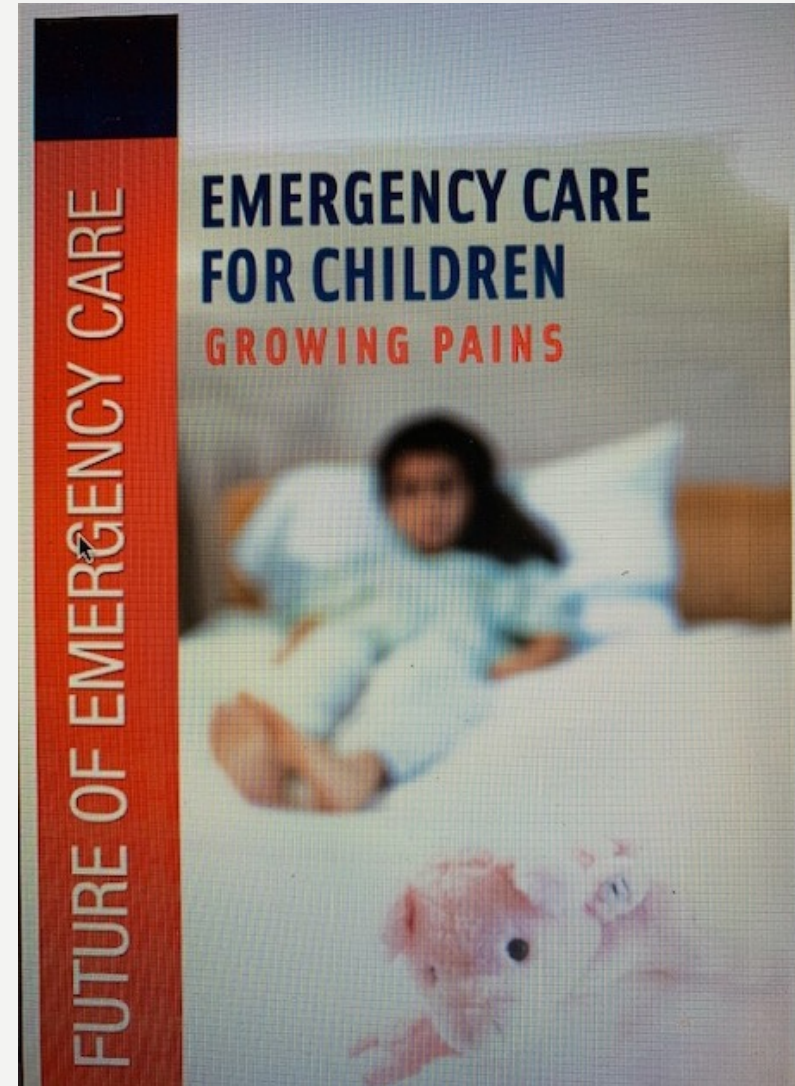


- **AAP**
- **ACEP**
- **ENA**
- **ACS**
- **NASEMSO**
- **NAEMT**
- **IAFF and IAFC**

IOM REPORTS



1993



2006



EMSC

HOW WE GOT WHERE WE ARE

TASMEEN WEIK DRPH, MPH

MY EMSC LANDSCAPE

- EMSC State Partnership Performance Measures
- EMSC Research
 - Targeted Issues
 - PECARN



STATE PARTNERSHIP PERFORMANCE MEASURES—THE DESIGN



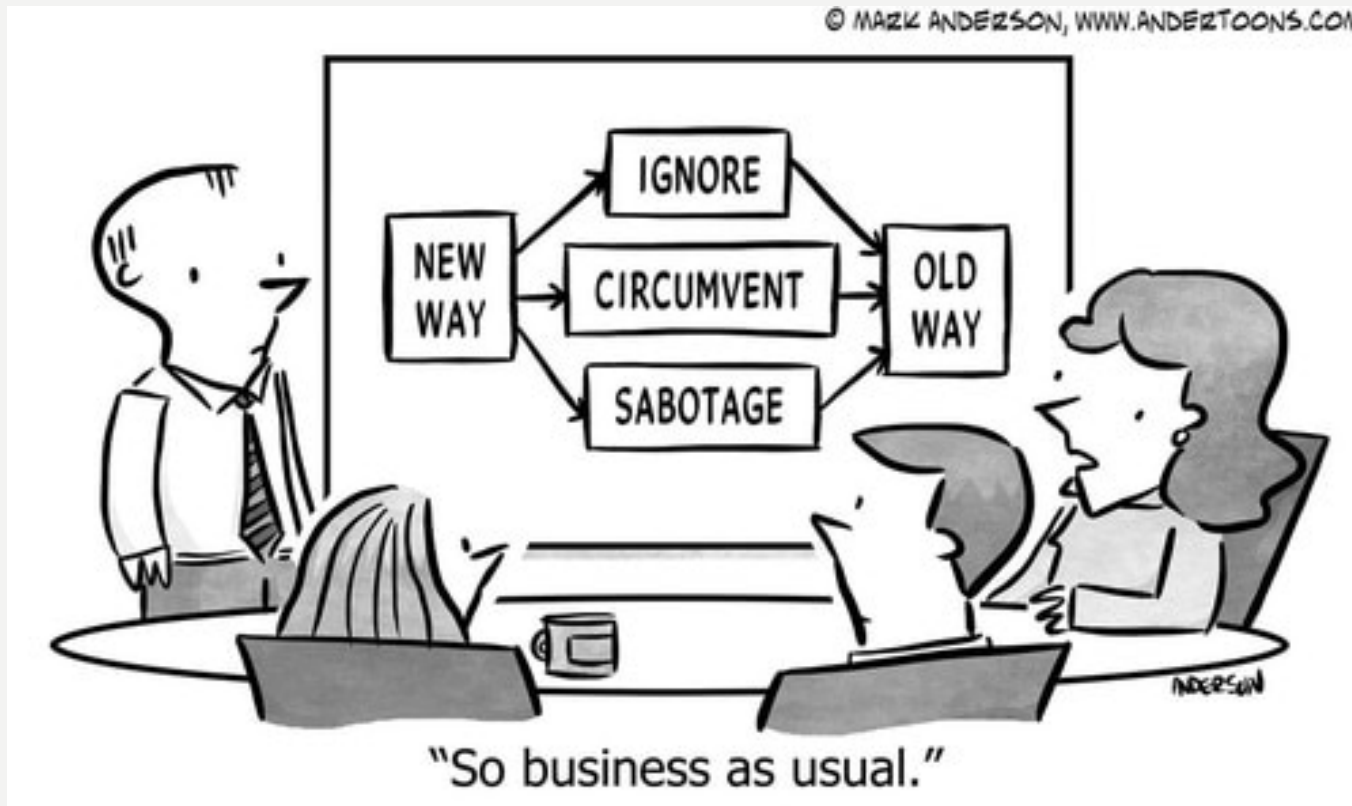
- Significant input from stakeholders (national organizations, grantees)
- Led by the NRC/Lewin group
- HRSA, OMB approval
- Comprehensive implementation manual
- National roll out
- Data submission

STATE PARTNERSHIP PERFORMANCE MEASURES—FIRST DATA SUBMISSION

- Data submitted by all State Partnership grantees through HRSA system
- Data analyzed by NEDARC and shared with the NRC and HRSA
- Results:
 - States either met the performance measures 100% or 0%
 - Data was missing
 - Data didn't make sense



STATE PARTNERSHIP PERFORMANCE MEASURES—THE IMPLEMENTATION



- Joint technical assistance from the NRC and NEDARC to understand how States were interpreting the performance measures and understand how data was derived.

STATE PARTNERSHIP PERFORMANCE MEASURES—THE IMPLEMENTATION

- Re-training
- Re-roll out
- More technical assistance
- Joint site visits from NRC/NEDARC



STATE PARTNERSHIP PERFORMANCE MEASURES—SITE VISITS



- Presented submitted data to EMSC advisory committees
- Assisted EMSC manager in strategic planning with State level stakeholders
- What do the States Need?
 - Leadership training for EMSC managers

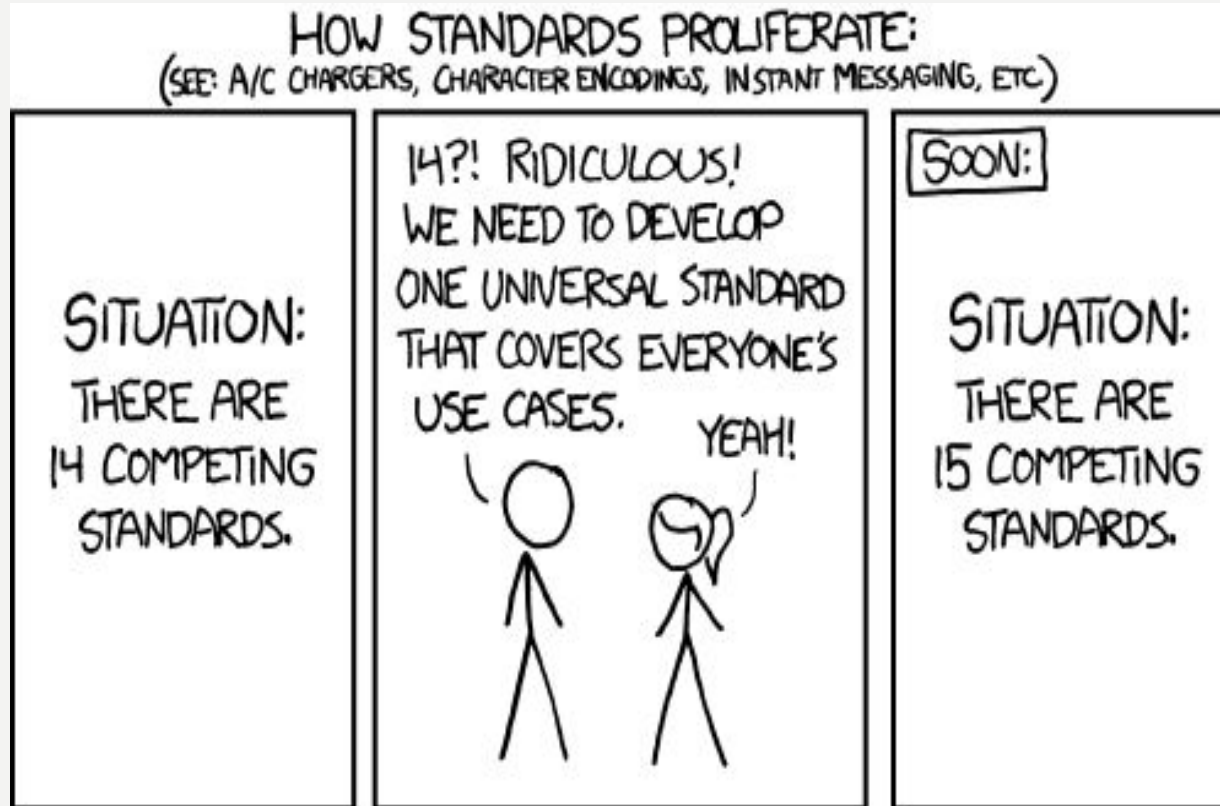
Do you have any fond memories from the site visits?

VISITS



Thank you Andrea
Genovesi for the pictures!

STATE PARTNERSHIP PERFORMANCE MEASURES—IMPLEMENTATION

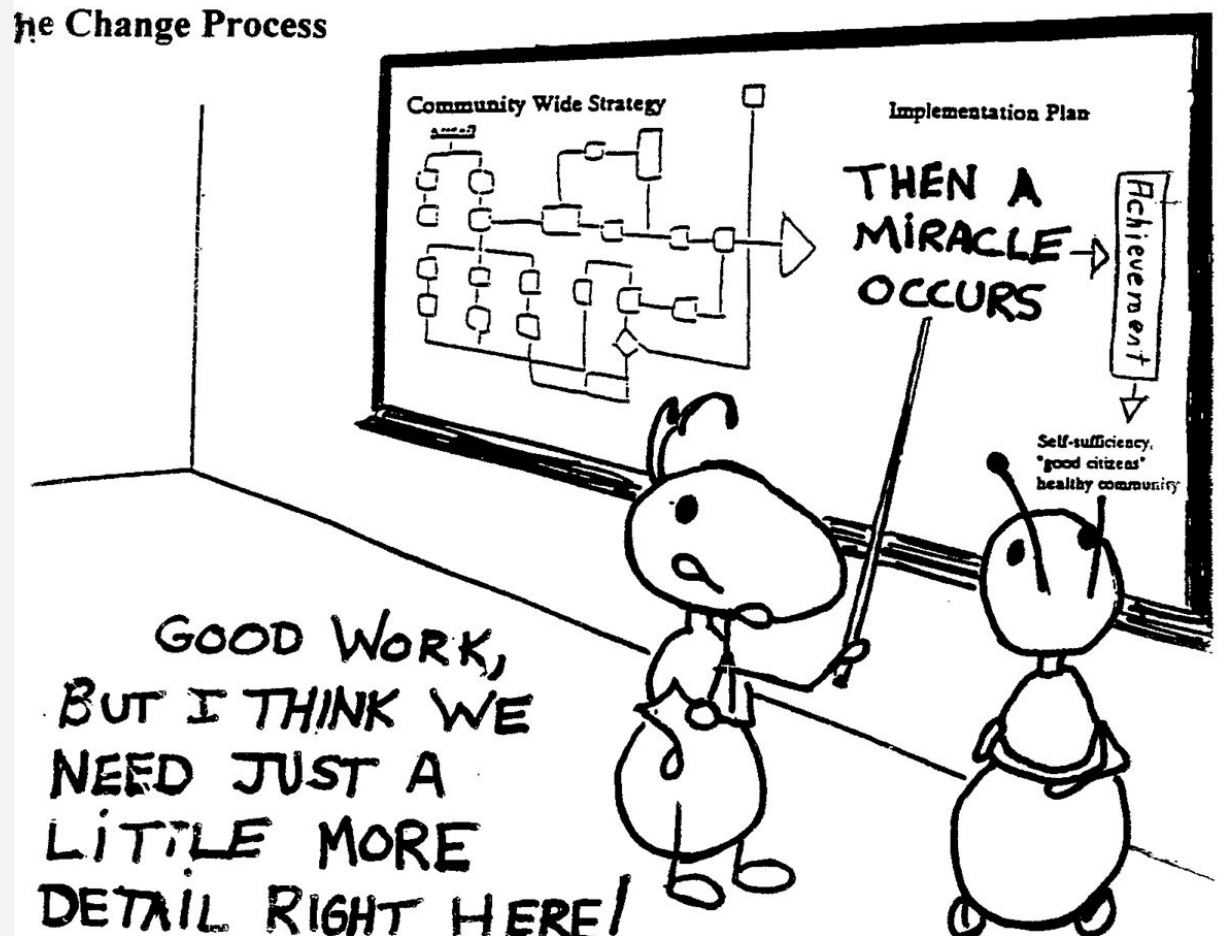


- Reconvene stakeholders
 - Grantees only meeting
 - National stakeholders presented with what grantees showed.
- More detailed measures
 - Ambulance equipment list (partnership with stakeholders)
 - HRSA and OMB approval for more detailed performance measures
- New implementation manual written by NRC
- More re-training, re-roll outs

STATE PARTNERSHIP PERFORMANCE MEASURES—OUTCOMES

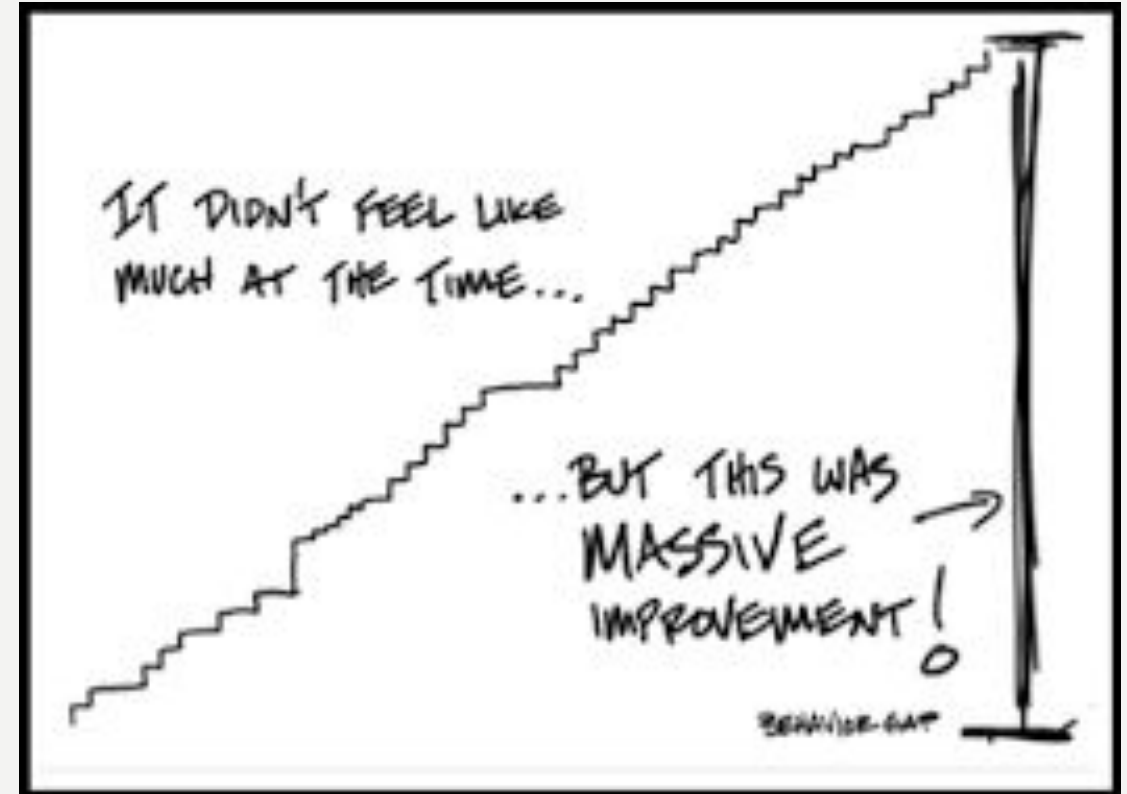
- New data submission from State grantees
 - Better data but the picture was still bleak.
- Continued site visits
- Continued technical assistance
- Best practices guide from the National Resource Center (NRC)
- States still struggling with certain measures

The Change Process



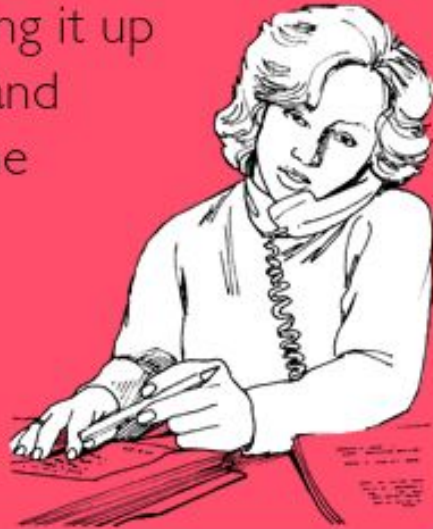
STATE PARTNERSHIP PERFORMANCE MEASURES—OUTCOMES

- After 3 years, we had to ask:
 - Should we regroup?
 - Is it too much to ask from the State Partnership grantees?
 - Are the EMSC \$\$ better spent elsewhere?
- The answer was **NO!!**



STATE PARTNERSHIP PERFORMANCE MEASURES—LESSONS LEARNED

Oh, she's not just drinking the Kool-Aid; she's mixing it up in 5-gallon batches and serving it to everyone she meets.



- Lessons learned:
 - You can't ask people to drink the Kool aid. You have to convince them it's good and let them be the ambassadors.
 - Incremental progress is meaningful and takes time.
 - One size won't fit all but it can work if you allow for small adjustments.
 - There are certain performance measures that may be very long term measures:
 - Interfacility transfer agreements (EMSC-07)
 - Permanence of EMSC (EMSC 08)
 - Integration of EMSC Priorities into Statutes or Regulations (EMSC-09)

What are some lessons you've learned from managing change in your Programs?

EMSC RESEARCH—TARGETED ISSUES

- Originally focused on **local** targeted needs:
 - Purchasing pediatric equipment
 - Training prehospital providers
 - Creating training programs/videos/books
 - Small, discrete projects
- Pilot funding for projects of national interest.
- More focused on evaluation and research oriented projects
 - Projects that support the State partnership performance measures and enhance EMS research + pilot work for PECARN projects



EMSC RESEARCH-ICER

INTERAGENCY COMMITTEE ON EMSC RESEARCH

- Interagency Research on EMSC Research (ICER)
- EMSC Program announcements
 - [PA-12-141](#) Research on Emergency Medical Services for Children (EMSC) [R01]
 - Elyse Kharbanda – R01 HD079463 “EHR-based Decision Support for Pediatric Acute Abdominal Pain in Emergency Care”
 - E. Brooke Lerner – R01 HD075786 “Use of Mechanism of Injury for the Identification of Severely Injured Children”
 - Prashant Mahajan – R01 HD085233 “RNA Biosignatures: A Paradigm Change for the Management of Young Febrile Infants”
 - [PA-12-142](#) Research on Emergency Medical Services for Children (EMSC) [R21]
 - Julie Leonard – R21 HD076108, “Pilot Study to Develop a Pediatric Cervical Spine Injury Risk Assessment Tool”
 - [PA-07-269](#) Research on Emergency Medical Services for Children (R01)
 - Rachel Berger R01 HD055986-01A2 “Novel Approaches to Screening for Inflicted Childhood Neurotrauma”
 - David Gustafson R01 NR010241-01 “Mobile CHESS Research on Emergency Medical Services for Children”
 - [PA-05-081](#) Research on Emergency Medical Services for Children
 - David Nuckley R01 HD053525-03 & -04 “The Role of Neck Muscle Mechanics in Pediatric Head and
 - [PAR-08-261](#) Research on Emergency Medical Services for Children (R01)
 - David Brousseau- R01 HD062347-01 “Intravenous Magnesium for Sickie Cell Vasoocclusive Crisis”,
 - Jeanne-Marie Guise – R01 HD062478-01 “Epidemiology of Preventable Safety Events in Prehospital EMS for Children”,
 - Nathan Kuppermann (MPI) – R01 HD062417-01 “Fluid Therapy and Cerebral Injury in Pediatric Diabetic Ketoacidosis”
 - Prashant Mahajan (MPI) – R01 HD062477-01A1 “RNA Biosignatures in the Emergency Evaluation of Febrile Infant Neck Injury”_s

EMSC RESEARCH --PECARN

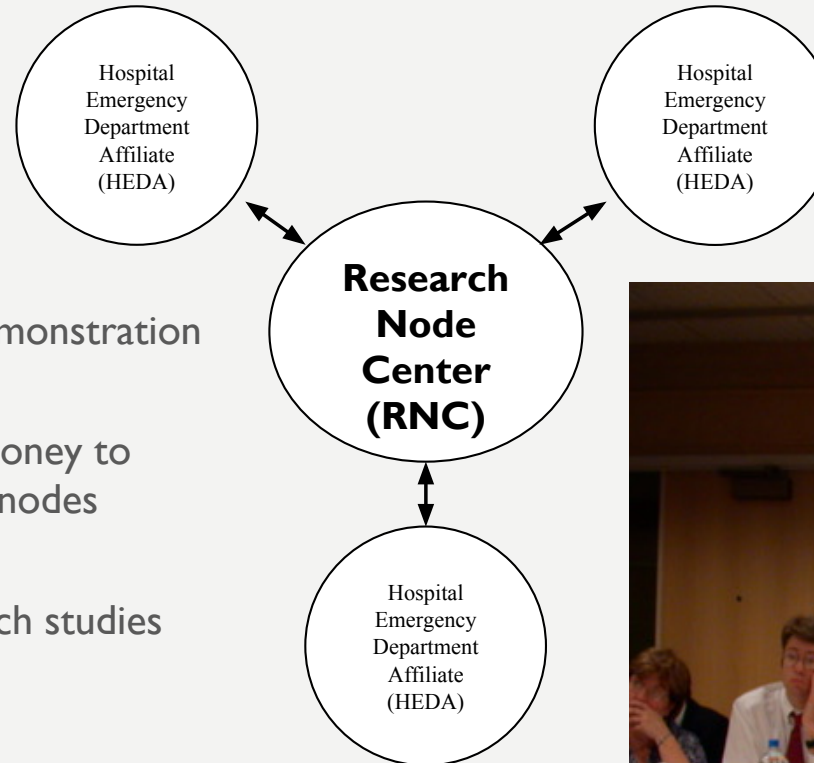


- Early Years

- Network Development Demonstration Project
- Idea was to provide seed money to bring a group of “regional” nodes together to do research
- Focus on small scale research studies

- Quick lessons

- Collaboration is key to conducting meaningful EMSC research
- Regional model may not really work—what’s more important is hospitals that have research infrastructure



EMSC RESEARCH

— PECARN



- Early Wins
 - First RCT published in the NEJM
 - Negative trial made it an even more important discovery
 - NIH funding
 - High impact peer reviewed publications
 - Name recognition
- Continued Growth
 - After 10+ years, change in funding structure
 - Increase in nodes
 - Addition of an EMS affiliate

Thank you Sally Jo Zuspan and Mike Dean for the pictures!



IN CONCLUSION...

- *Everything we do in EMSC builds on each other's efforts, brick by brick.*
- *EMSC constantly evolving.*
- *Working together and embracing change is the key.*

**How did you build your EMSC program/research?
Who is your EMSC family?**

THANK YOU!!





EMSC

HOW WE GOT WHERE WE ARE

ELIZABETH “BETH” EDGERTON, MD, MPH, FAAP

EMSC JOURNEY: THE FIRST 20 YEARS

- Establishing the field of pediatric emergency medicine
 - Education and training
 - Partnerships
- Developing structure and accountability
 - State Partnership performance measures
 - Research infrastructure

THE NEXT DECADE: ISN'T THE JOURNEY FINISHED

EMSC had established

- Close to universal presence in US
- Created a pediatric research network generating quality research findings to field
- Joint Policy on the “Care of the Child in the Emergency Department”
- Quality SP performance measure data

Critics still asked?

- **Can all areas be reached?**
- **Is there value outside of pediatrics?**
- **Does policy equal practice?**
- **Can we expand beyond structural measures?**

THE NEXT DECADE:

Being a Rebel with A Cause

People who practice “**positive deviance**” can achieve incredible feats of imagination. They know how, and when to break the rules that should be broken.

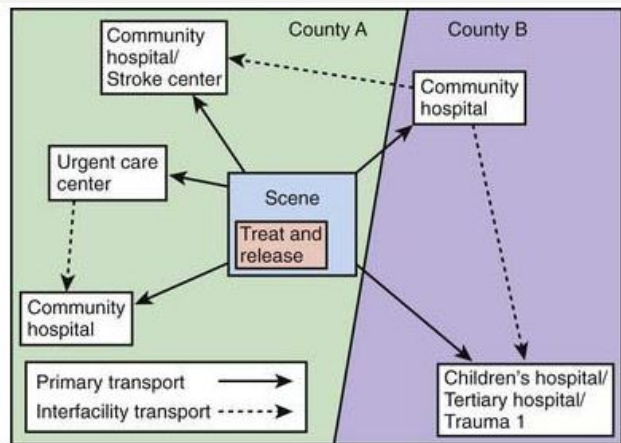
Rebels are also those among us who change the world for the better with their unconventional outlooks. Instead of clinging to what is safe and familiar, and falling back on routines and tradition, rebels defy the status quo. They are masters of innovation and reinvention

Francesca Gino, Professor Harvard Business School

- Getting to a “true” universal presence of EMSC



- State Partnership Regionalization of Care (SPROC) Initiative



**THE OFTEN
FORGOTTEN**

Pacific Basin

Tribal

Communities

Rural

Communities

Can all areas be reached?

ADVANCING MULTI-CENTER RESEARCH

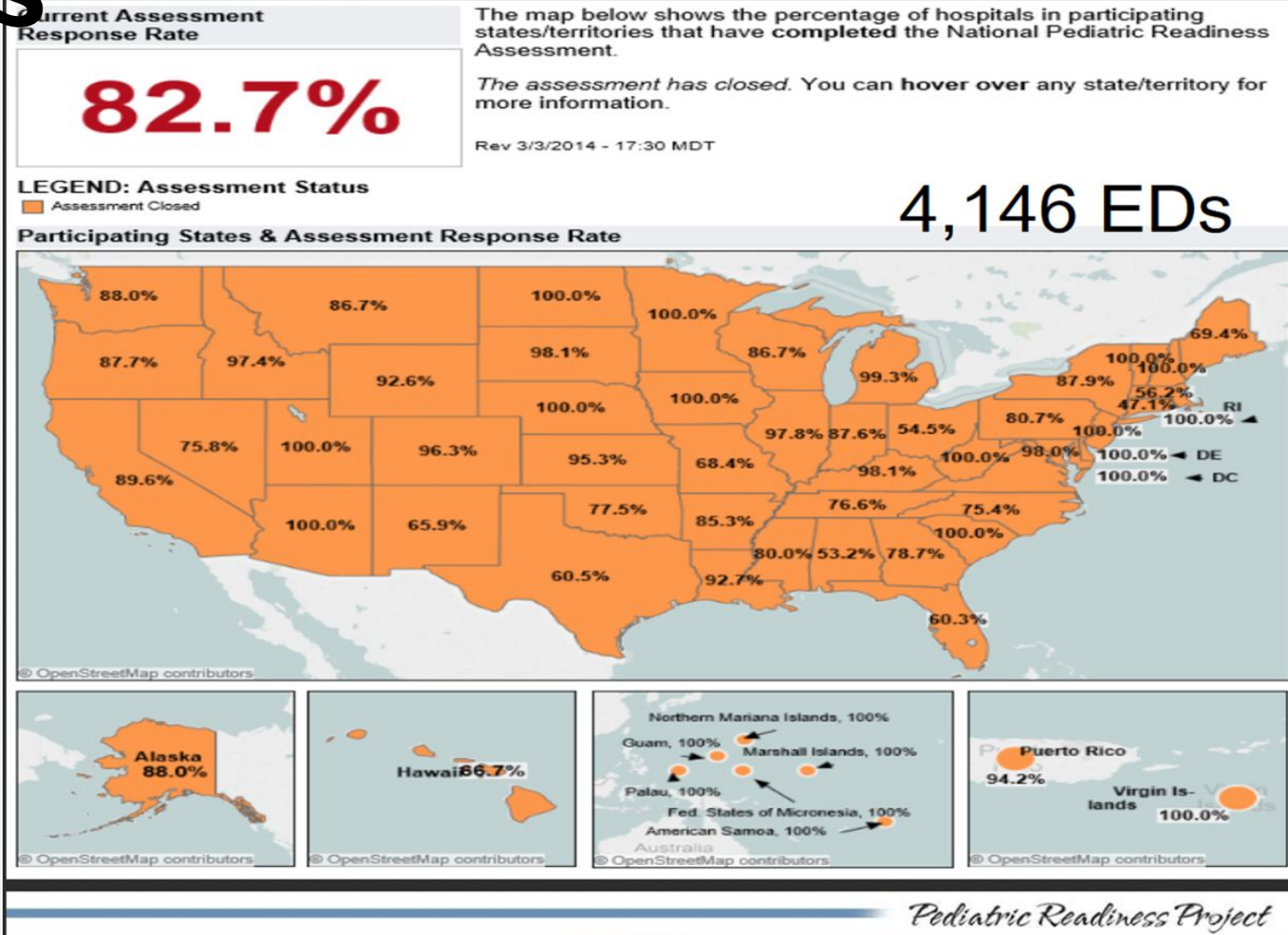


- Over 150 peer-reviewed publications
- Accepted practice guidelines in non-pediatric settings
- Funding in six NIH institutes other than NICHD, the only NIH pediatric focused institute
- Leading field in multi-site emergency care research
 - First pediatric emergency care study to use “exempt from informed consent” EFIC study
 - Successful submission of a dual principal investigator RO1 study
 - Modeling efficient monitoring of multi-site clinical studies
- Model for successful new investigator mentoring
- Model for emergency care research

Is there value outside of pediatrics?

COLLIDING ON RELATIONSHIP

\$



Administrative oversight of pediatric emergency care including the identification of Pediatric Emergency Care Coordinators (PECCs)



Quality Improvement programs that include pediatric patients



Professional pediatric competencies of health care workers in the ED



Pediatric patient safety measures



Support services (laboratory, radiology) needed to facilitate care of children



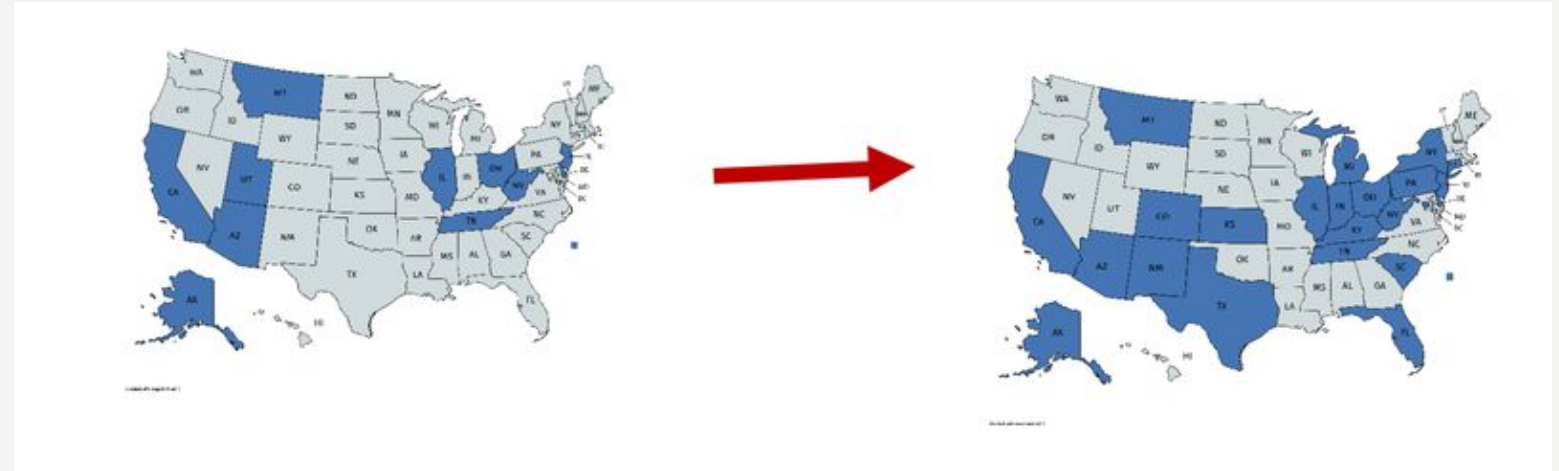
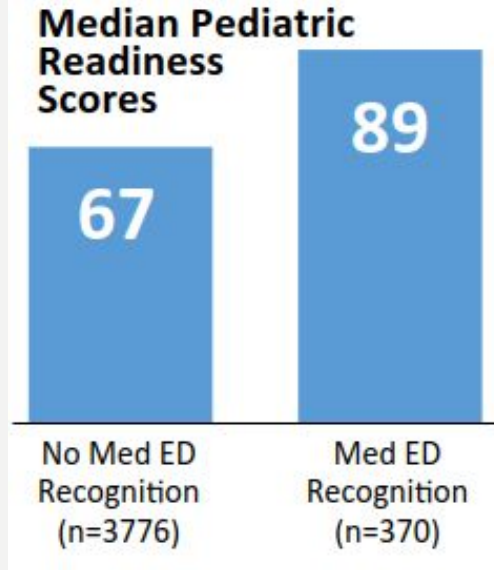
Policies and procedures that include children



Equipment, medications, and supplies for children

Does policy equal practice?

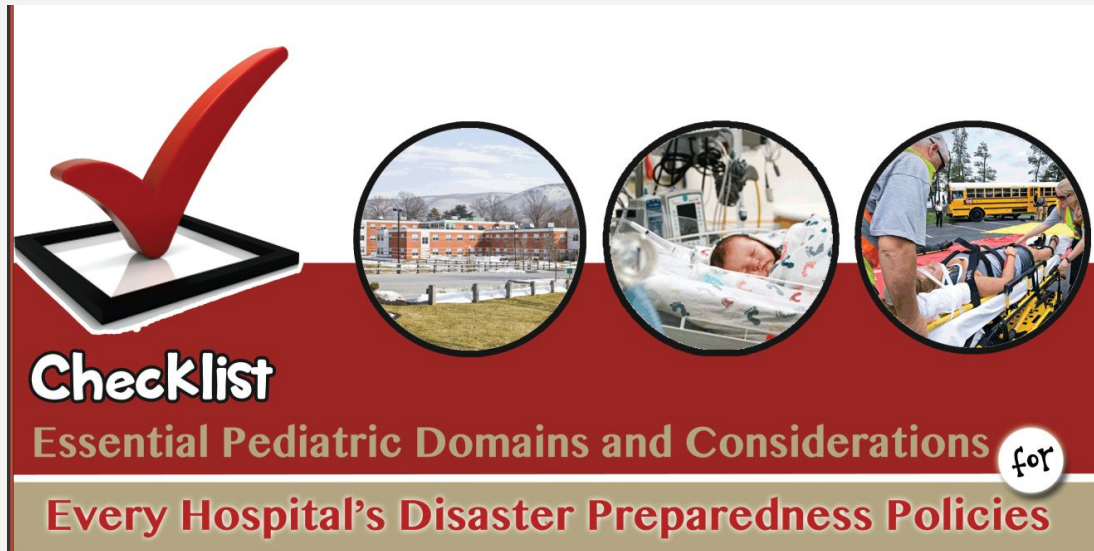
MOVING TOWARD PRACTICE



Does policy equal practice?

INTEGRATING RESPONSE SYSTEMS

- National Pediatric Readiness Project assessed “Disaster Readiness”
- EMSC State Partnership grantees are the “pediatric” infrastructure to disaster
- Integrate NPRP with the Disaster Domains
- Hospital Preparedness Program links their grantees with the EMSC hospital performance measures
- Making the pitch that “every day readiness” is “disaster readiness”



Does policy equal practice?



EMSC 01

**SUBMISSION OF NEMESIS
COMPLIANT VERSION 3.X DATA**



EMSC 02

**PEDIATRIC EMERGENCY CARE
COORDINATOR (PECC)**

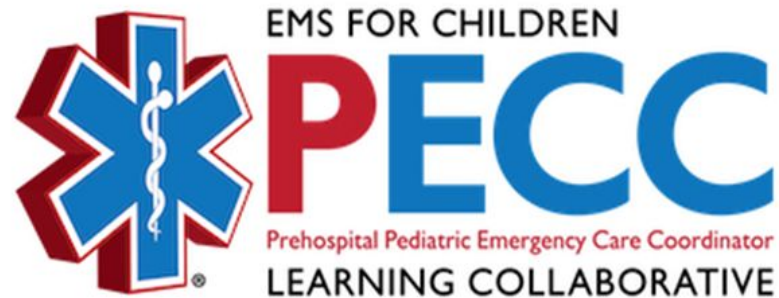


EMSC 03

**USE OF PEDIATRIC-SPECIFIC
EQUIPMENT**

Can we expand beyond structural measures?

MAKING THE MARK IN PERFORMANCE MEASURE



2019 Targeted Issue Grants Focus on Quality and Outcomes

years, EMSC will invest 6.5 million dollars into projects that will demonstrate the link between ED and EMS system readiness improvements and improved pediatric clinical care and health outcomes. Two of the new grants will focus on improving ED pediatric readiness and assessing how adoption of the Pediatric Readiness national guidelines is associated with changes in the quality of pediatric clinical care and pediatric health outcomes. Three grants will assess the impact of the presence of a Pediatric Emergency Care Coordinator (or PECC), a designated individual or combination of individuals responsible for key coordination roles focused on improving pediatric patient care and management within a local EMS agency. The grants and their objectives are

Can we expand beyond structural measures?

“Radical open-mindedness and radical transparency are invaluable for rapid learning and effective change...

The more open-minded you are, the less likely you are to deceive yourself—and the more likely it is that others will give you honest feedback...

It can also be difficult because being radically transparent rather than more guarded exposes one to criticism. It's natural to fear that. Yet if you don't put yourself out there with your radical transparency, you won't learn.”

Ray Dialo, Bridgewater Associates-“Radical Transparency”

EMSC CONTINUES TO FIND THE BALANCE

