Innovation and Improvement Center
EIIC
Emergency Medical Services for Children

EMSC*Pulse*

An online digest of EMSC Program News and Activities from the EIIC

EMSC, FIMR, and CDR: Stronger Together

Fetal and Infant Mortality Review (FIMR) is a community-based, action-oriented process that aims to improve service systems and resources for women, infants and families and ultimately prevent fetal and infant deaths. FIMR brings together a multidisciplinary community case review team to review confidential, de-identified cases of fetal and infant deaths. Over the course of the review, the team works to identify significant social, economic, cultural, safety, health and systems gaps or issues that may have contributed to the death – with a focus on systems improvement, not assigning blame. A community action team then uses the results of the review to design and implement community-based action plans aimed at preventing future fetal and infant deaths. There are currently more than 174 FIMR programs working in 29 states and territories.

Similar to FIMR, Child Death Review (CDR) is a process for conducting a comprehensive and multidisciplinary review of child deaths in order to better understand how and why children die. The findings can inform efforts to prevent other deaths and improve the health and safety of children. There are more than 1,200 state and local teams in all 50 states and the District of Columbia, and emerging teams in Guam and the Navajo Nation.

Though both of these processes differ in their scope and operations at the state and local level, FIMR and CDR reviews follow the same guiding principles:

- The death of a child is a community responsibility;
- A child's death is a sentinel event that should urge communities to identify other children at risk for illness or injury;
- A death review requires multidisciplinary participation from the community;
- A review of case information should be comprehensive and broad;
- A review should lead to an understanding of risk factors; and
- A review should focus on prevention and should lead to effective recommendations and actions to prevent deaths and to keep children healthy, safe and protected.

The synergy between FIMR, EMSC, and CDR offers many opportunities for collaboration, which could ultimately strengthen all programs. For example, FIMR and CDR could provide an avenue for EMSC stakeholders to connect with the public health community and contribute in a meaningful way to the prevention of fetal, infant, and child mortality. As first responders and emergency medical providers, EMSC stakeholders offer a unique perspective and could be a valuable member of a case review team or community action team. FIMR, CDR, and EMSC programs could also consider combining or leveraging program data to better identify gaps or inform joint quality improvement efforts.

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EMSC*Pulse* is published about every 4 weeks by the EMSC Innovation & Improvement Center, 1102 Bates Avenue, Suite 1850, Houston TX 77030.
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http://EMSCImprovement.Center
Subscriptions are free. Subscribe:
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The EMSC Innovation & Improvement Center (EIIC) is supported in part by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) Maternal and Child Health Bureau Emergency Medical Services for Children grant number U07MC29829. 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.

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The EMSC Program is collaborating with HRSA MCHB Division of Child, Adolescent, and Family Health Injury and Violence Prevention Programs, and the Division of Healthy Start and Perinatal Services; the National Center for Fatality Review and Prevention; and, the Association of Maternal and Child Health Programs to leverage opportunities for synergy and to engage in the FIMR Collaborative Innovation Network (FIMR COIN). The FIMR COIN aims to improve fetal and infant mortality review and prevention systems in the US Affiliated Island Jurisdictions. The jurisdictions involved in the collaborative include Guam, Federated States of Micronesia, Marshall Islands, American Samoa, Commonwealth of the Northern Mariana Islands, Palau, Puerto Rico, and the U.S. Virgin Islands.

Contact Sarah O'Donnell for more information at sodonnell@hrsa.gov.

Job Opportunity

New Hampshire is seeking a new **EMSC Program Manage**r. To view the position description and submit an application, click here and use 'EMSC' as the key word.

Key Pediatric Funding Opportunities of Potential Interest to EMSC Grantees – Due June 12, 2017

Follow this link for further details.

Save the Dates!

- **EMS Week - May 21-27, 2017** *EMS Strong* will make EMS week a 365-day a year initiative to give EMS a significantly greater visibility among other health professions and communities. This initiative puts EMS squarely where it belongs as an indispensable part of the healthcare continuum. While National EMS Week (May 21-27) will be an integral part of the campaign, EMS Strong will become the vehicle to drive awareness, interest and excitement about the profession year-round. Be sure to visit the EMS Strong website at http://www.emsstrong.org.

EMS for Children Day

EMSC Day – May 24, 2017 Children have unique physiological and psychological needs compared to adults – needs that are amplified in emergency situations. **EMS for Children Day** highlights the distinctive aspects of caring for children, and raises awareness about improving specialized care for children in prehospital and acute care settings.

- **EMSC Town Hall for State Partnership Grantees, May 10, 4:00-5:00 pm ET** Registration is not required. https://hrsa.connectsolutions.com/hrsa-emsc-townhall. Audio connection 877-918-3033 and passcode 7532772#.

- **EMSC Quality Transformation Meeting: Moving Froward with the Mission** will be held in Arlington, VA on ***August 15-17, 2017***. Grantees mark your calendars! Registration details, hotel information and reservation links will be provided soon.

Resources Available

ASPR TRACIE Exchange: The most recent issue of the ASPR TRACIE newsletter focuses on behavioral health in disasters and the concept of resilience. Be sure to also check out the newly-released ASPR TRACIE document Disaster Behavioral Health: Resources at Your Fingertips and the Mental Health/Behavioral Health Topic Collection.

EMS Agenda 2050 Technical Expert Panel Selected: The EMS Agenda 2050 team will host multiple opportunities to provide input and feedback, including in-person meetings held in four cities, webinars, conference sessions and association meetings. Anyone with ideas for EMS Agenda 2050 is also encouraged to share them via the project website, emsagenda2050.org.

Are you, or do you know of any new EMSC personnel?

If so, please forward name, position, and contact information to HRSAEMSC@hrsa.gov so we can keep our information up to date.

EMSC*Pulse* welcomes articles about people, programs, and initiatives related to emergency medical services for children. Submit to mailto:EMSCInnovation@TexasChildrens.org

NASEMSO Releases Guidance on Safe Transport of Children by EMS

In March, the National Association of State EMS Officials (NASEMSO) announced the release of ***Safe Transport of Children by EMS: Interim Guidance.*** The guidance is a result of the work of NASEMSO's Safe Transport of Children Ad Hoc Committee, which is focused on establishing evidence-based standards for safely transporting children by ground ambulance. While there are a variety of products available to secure children being transported in ambulances, the EMS provider (and the children being transported) must depend on the manufacturer for determining if the restraint would operate as intended in an ambulance crash. Unlike the child restraints (car seats) used in passenger vehicles, which must meet the crash standards defined by the Federal Motor Vehicle Safety Standard (FMVSS) 213, there are no required crash-testing standards for these devices in the United States. NASEMSO is working with its partners to obtain funding to conduct the necessary crash-testing research to develop standards to be met by manufacturers. Until such research can be completed and standards developed, NASEMSO has issued *Interim Guidance* to maximize the safety of children in ambulances. This guidance is based on what is known at present and includes, in part:

- All EMS agencies that transport children should develop specific policies and procedures that address, at minimum the following elements: methods, training, and equipment to secure children during transport in a way that reduces both forward motion and possible ejection.
- The primary focus should be to secure the torso, and provide support for the head, neck, and spine of the child, as indicated by the patient's condition.
- A prohibition on children being transported unrestrained.
- A provision for securing all equipment during a transport where a child is an occupant of the vehicle, with mounting systems tested in accordance with the requirements of SAE J3043.
- To only use child restraint devices in the position for which they are designed and tested.
- All device(s) (including a combination of devices) should cover a weight range of between five and 99 pounds (2.3 - 45 kg), ideally supporting the safest transport possible for all persons of any age or size.
- Only the manufacturer's recommendations for the weight/size of the patient should be considered when selecting the appropriate device for the specific child being transported.

NASEMSO does not endorse any product but urges prospective buyers to request testing information from the vendor/manufacturer.

The NASEMSO Safe Transport of Children Committee is comprised of members from state EMS for Children programs, federal partners, children's hospitals, the Ambulance Manufacturers Division of the NTEA, and the Association of Air Medical Services (AAMS). More information about the Committee is available at on the committee web page. The full text of the *Interim Guidance* is available on the NASEMSO website.

Introducing Stop the Bleed to the EMSC Community

The webinar presented on March 29 is now available for online viewing on the EIIC website or directly via the live recording. EMSC personnel are encouraged to investigate more about becoming a B-Con instructor. More information about becoming a trainer can be found at BleedingControl.org.

Celebrating EMS Week 2017

EMS for Children Day

is Wednesday, May 24.

Children comprise 27% of the U.S. population and account for approximately 20% of all hospital ED visits. Data show that 90% of emergency pediatric visits take place in a local general hospital rather than a facility with pediatric specialization or expertise. But few hospitals have all the specialty resources pediatric patients need. The National Academies of Science, Engineering, and Medicine describes pediatric emergency care as being uneven in America as a result of the inequity of available pediatric care resources.

Emergency Medical Services for Children (EMSC) is a federal program that aims to ensure that pediatric care is well integrated into the entire emergency medical services system so that no matter where a child lives or travels, he or she can receive appropriate and timely care. The **EMSC Innovation and Improvement Center (EIIC)** focuses on improving outcomes for children in emergency situations by using improvement science as the basis for collaborative efforts to address gaps in the US healthcare system. The EIIC offers EMSC stakeholders a variety of resources to leverage quality improvement sciences, the knowledge expertise of multiple professional societies and federal organizations to transform healthcare outcomes for children in the US.

Click on the icon for:

Pre-hospital Resources

Disaster Preparedness Resources

Quality Improvement Resources

Celebrations of EMSC Day, 2017

EMS for Children of Georgia and Children's Hospital of Georgia at Augusta University are sponsoring their 8th Annual EMS for Children Conference on EMSC day, Wednesday, May 24, 2017. The full day conference is entitled ***Pediatric Legal and Ethical Challenges for Pre-Hospital Personnel*** and will be held at Education Commons Conference & Simulation Center on the Augusta University Campus. Registration is required https://ghsu.wufoo.com/forms/k1tc7a5f0cuqg7o/

EMS for Children Day is Wednesday May 24!

Here are some examples of ideas to celebrate EMS providers as important health professions and to highlight the special needs in emergency care for children.

EMSC Day Proclamation

Here is a sample EMS for Children Day Proclamation that you can tailor for your state/territory if you want to pursue getting an official governmental proclamation from your elected officials.

An EMSC Day proclamation is a great way to rally awareness for the needs of children in emergencies and how your state/territory EMSC program is working to address those needs.

World CPR Challenge for EMS Week

The American College of Emergency Physicians (ACEP) is promoting a **World CPR Challenge for EMS Week**. This is a great opportunity for EMS services and hospitals in your state/territory to promote educating the public in how to perform bystander CPR. ACEP will be tracking CPR training for the public that is offered during EMS Week, May 21 - 27, 2017. This is designed to be basic information training on Compression-Only CPR for the public, but CPR certification courses could also be offered. Although compression-only CPR is not recommended for children, promoting bystander CPR in general does save lives, including children's lives.

How to Join the Effort

Support the training of individuals, organizations, businesses, bystanders or students in your communities during EMS Week 2017.

To Report Your Numbers

At the end of your training session, log into the CPR Challenge Reporting webpage to document the number of individuals you trained. The URL is available at: https://www.acep.org/emsweek/cprchallenge/

Find Other Ideas

Resources | Outreach Activities | Order a Planning Guide

Articles of Interest to the EMSC Community

- Alphonso A et al. **Development of a Child Abuse Checklist to Evaluate Prehospital Provider Performance**. *Prehosp Emerg Care.* 2017; 21(2): 222--232
- Ayub EM et al. **Prehospital Providers' Perception on Providing Patient and Family Centered Care**. *Prehosp Emerg Care.* 2017; 21(2): 233-241.
- Calhoun A et al. **Do Pediatric Teams Affect Outcomes of Injured Children Requiring Inter-hospital Transport?** *Prehosp Emerg Care.* 2017; 21(2): 192-200.
- Cicero MX et al. **Pediatric Disaster Triage: Multiple Simulation Curriculum Improves Prehospital Care Providers' Assessment Skills**. *Prehosp Emerg Care.* 2017; 21(2): 201-208.
- Guise JM et al. **Emergency medical services responders' perceptions of the effect of stress and anxiety on patient safety in the out-of-hospital emergency care of children: a qualitative study.** BMJ Open. 2017;7(2):e014057.
- Hoyle JD et al. **Pediatric Prehospital Medication Dosing Errors: A National Survey of Paramedics.** *Prehosp Emerg Care.* 2017; 21(2): 185-191.
- Lerner EB et al. **Ability of the Physiologic Criteria of the Field Triage Guidelines to Identify Children Who Need the Resources of a Trauma Center.** *Prehosp Emerg Care.* 2017; 21(2): 180-184.
- Remick K et al. **Prehospital Glucose Testing for Children with Seizures: A Proposed Change in Management.** *Prehosp Emerg Care.* 2017; 21(2): 216-221.
- Rice A et al. **The Impact of a Pediatric Emergency Department Facility Verification System on Pediatric Mortality Rates in Arizona**. J Emerg Med. 2017. Epub ahead of press.

INSPIRE-ing EMSC through Simulation

Are you and/or your colleagues using simulation for education and research? We invite EMSC stakeholders to get engaged in the International Network for Simulation-based Pediatric Innovation, Research, and Education (INSPIRE). There are amazing efforts in EMSC simulation initiatives and we hope that INSPIRE can help to foster collaboration across projects/programs and the sharing of resources.

INSPIRE aims to improve the delivery of medical care to acutely ill and injured children by bringing together individuals engaged in pediatric simulation to ask and answer important questions pertaining to resuscitation, technical skills, behavioral skills, debriefing and simulation-based education. INSPIRE is a grassroots organization that has formed a "community of practice" with members who interact in formal and informal settings, share knowledge, and collaborate to create new knowledge.

INSPIRE members have established two themes of scholarship to provide clear goals and a roadmap for the future of simulation in pediatrics:

1) studying simulation as a modality for training and assessment (debriefing, IPE, teamwork, communication, procedural skills)
2) leveraging simulation as an investigative approach to evaluate healthcare innovations (technology, human factors, patient safety).

Since 2011 INSPIRE has facilitated the publication of over 100 peer-reviewed manuscripts and grown to involve over 700 collaborators across the globe (250 institutions across 40 countries). There are variety of ongoing projects that

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directly relate to EMSC programs/ initiatives including disaster triage, EMS training, CPR, sepsis, and pediatric readiness. A project being led by CT EMSC involves the use of mobile in-situ simulation to measure, compare and improve pediatric readiness in community emergency departments (for information contact mailto:marc.auerbach@yale.edu).

Additionally, INSPIRE recently published Reporting Guidelines for Healthcare Simulation Research. INSPIRE provides a structure and process of mentorship to junior investigators and resources including an online database of ongoing studies and investigators, online data sharing infrastructure (video, survey, database management) and a manuscript oversight committee for pre-publication review. Some members are investigators who recruit for multicenter studies, while others contribute as context experts (eg. statistical support, medical expertise), video reviewers, mentors, committee members or project reviewers. Others may choose to participate by attending INSPIRE meetings and providing feedback on INSPIRE projects. We have maintained an "open" membership policy, choosing not to charge membership fees, but rather seeking to engage everyone interested in collaborative research. INSPIRE network members are from various professions (eg. EMTs, educators, administrators, doctors, PA, NP, nurses, respiratory therapists, psychologists, PhD researchers, epidemiologists, etc) and specialties (eg. pediatrics, neonatology, emergency medicine, intensive care, surgery, internal medicine etc), creating a rich community of practice for those engaged in simulation-based research.

The INSPIRE team hopes that through collaboration with the EMSC community of practice they can continue to enhance the work of the EMSC community. GET INVOLVED by joining, getting involved in ongoing projects, or sharing new project ideas at http://inspiresim.com/what-is-inspire/how-do-i-join/

ONC Report Outlines Benefits and Challenges of Incorporating EMS in Health Information Exchange

"Our partners at ONC have shown that integrating EMS into health information exchanges is already making a difference for patients and communities and opening the door for new delivery models, like community paramedicine and mobile integrated healthcare," said Jon Krohmer, MD, Director of the NHTSA Office of EMS. "These efforts are possible because of the EMS community's commitment to the development and use of a standardized, interoperable EMS information system and the adoption of NEMSIS Version 3."

The report outlines the "SAFR model," developed by the California EMS Authority to help provide a framework for EMS health information exchange. It also provides guidance to EMS systems looking to improve health information exchange as well as profiles of five regions currently involving EMS in HIE projects.

Find the report and other resources here.

Performance Measures Data Collection

Surveying for the first two cohorts for the new EMSC Performance Measures is underway and we are already close to 1,000 responses! In fact, **three states/territories have reached 100% response**! Thanks to all state managers for their hard work to collect this new data! The survey has been formatted to be scalable to any mobile device, and NEDARC will be working with all state managers according to the cohort schedule to prepare for survey launch and provide resources to help with outreach and response. Updated response rate information can be viewed anytime at www.emscsurveys.org.

PedsReady

Over 1,000 hospitals have reassessed their pediatric readiness since the portal reopened in November 2015. The assessment can be taken on any mobile device, and a new GAP report has recently been developed that allows hospitals to view their current score against their previous score with visual indicators of areas for improvement. See http://www.pedsready.org to view current participation rates.