

Fiscal Year 2005



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Program Highlights

Introduction

For 20 years, the Health Resources and Services Administration's (HRSA) Emergency Medical Services for Children (EMSC) Program has remained at the forefront of national efforts to ensure appropriate emergency medical care is provided to children in emergencies. The mission of the EMSC Program continues its aim to ensure state-of-the-art emergency medical care for the ill or injured child and adolescent; to ensure that pediatric services are well integrated into an emergency medical services system backed by optimal resources; and to ensure that the entire spectrum of emergency services – including primary prevention of illness and injury, acute care, and rehabilitation – is provided to children and adolescents as well as adults.

This overview of activities during the fiscal year 2005 highlights the EMSC's continued impact to pediatric emergency care and dedication to its mission.



EMSC Grantee

Development Grants

EMSC Development Grants are intended to improve, refine, and institutionalize EMSC in a State or U.S. Territory using existing models of service delivery and system development. In fiscal year (FY) 2005, American Samoa was awarded an EMSC Development Grant for a fourth-year extension with funds.

Partnership Grants

EMSC Partnership Grants provide support to solidify the integration of a pediatric focus within a State's EMS system. In FY 2005, 53 Partnership Grants were awarded: nine States received continuation funding for a second year; 36 States, the District of Columbia, and three territories received continuation funding for a third year; and four States received a fourth-year extension with funds.

Targeted Issue Grants

Targeted Issue Grants address specific EMSC-related needs or concerns that transcend State boundaries. Typically, the project results in a new product or resource. They may also demonstrate the effectiveness of a model system component or service of value to the nation. In FY 2005:

Nine new Targeted Issue Grants were awarded:

1. Evidence-based Secondary Prevention of Traumatic Stress: Practical Tools to Help Parents Help Their Children. PENNSYLVANIA - Children's Hospital of Philadelphia. Principal Investigator: Flora Winston, MD, PhD

2. Implementing Adolescent Depression Screening (ADS) in the Emergency Department. PENNSYLVANIA – Children's Hospital of Philadelphia. Principal Investigator: Joel Fein, MD
3. Enhancement of Pediatric Emergency Curricula in Physician Assistant (PA) Education. SOUTH CAROLINA - Medical University of South Carolina. Principal Investigator: Paul Jacques, EdM, PA
4. Michigan's First Simulation, Training, & Evaluation of Paramedics in Pediatrics. MICHIGAN - Michigan State University. Principal Investigator: William Fales, MD, FACEP
5. Development and Validation of a Simulator-based Pediatric Emergency Medicine Curriculum for Emergency Care Providers. ILLINOIS – Northwestern University, Children's Memorial Hospital Department of Pediatrics. Mark Adler, MD
6. Improving the Care of Acutely Ill and Injured Children in Rural Emergency Departments with Telemedicine. CALIFORNIA - The Regents of the University of California. Principal Investigator: James Marcin, MD, MPH
7. Evaluation of the Emergency Severity Index for Pediatric Triage. NORTH CAROLINA - University of North Carolina Chapel Hill. Principal Investigator: Anna Waller, ScD
8. Predicting Cervical Spine Injury (CSI) in Children. MISSOURI - Washington University in St. Louis School of Medicine. Principal Investigator: David Jaffe, MD
9. Preparing for the NTRC: Ensuring Quality Data. WISCONSIN - Medical College of Wisconsin. Principal Investigator: Karen Guice, MD, MPP

Seven Targeted Issue Grants received third-year continuation funding:

1. Web-based Quality Improvement in Emergency Medical Services for Children. ILLINOIS - Loyola University of Chicago. Principal Investigators: Beatrice Probst; Evelyn Lyons, RN, MPH; and Leslee Stein-Spencer
2. Emergency Preparedness for Children with Special Health Care Needs Using Minnesota

EMSC Information System. MINNESOTA - Regents of the University of Minnesota, Department of Pediatrics. Principal Investigator: Lee Pyles, MD

3. Pediatric Emergency Medicine Fellows Conference: Creating A Future in EMSC. MISSOURI – Washington University, School of Medicine. Principal Investigator: David Jaffe, MD
4. The School Nurse and EMS Interactive Online Learning Project. NEW MEXICO – University of New Mexico, Health Sciences Center. Principal Investigator: Robert Sapien, MD
5. Creating A Diagnosis Grouping System for Child Emergency Department Visits. PENNSYLVANIA – The Children’s Hospital of Philadelphia. Principal Investigator: Evaline Alessandrini, MD, MSCE
6. Improving the Injury Prevention Capacity of Child Fatality Review Teams. WASHINGTON - University of Washington, Harbor View Medical Center. Principal Investigator: Brian Johnston, MD, MPH
7. Impact of An Educational Module on Prehospital Pain Management in Children. WISCONSIN - Medical College of Wisconsin. Principal Investigator: Halim Hennes, MD, MS

Four Targeted Issue Grants were completed:

1. Model Training for Safe Transportation of Children with Special Health Care Needs (CSHCN). CONNECTICUT - Children’s Medical Center. Principal Investigator: Eileen Henzy-Blake, MPH

The Connecticut Children’s Medical Center utilized multimedia on-line training to educate rehabilitation therapists on safe transportation of CSHCN that included pre- and post- testing to evaluate knowledge gained. The training is based on the current 16-hour training for certified child passenger safety technicians. Concepts of the curriculum were modified to assist providers in selection and use of restraint systems for CSHCN.

2. Beyond the Barriers: Project EQUIP. IOWA - University of Iowa. Principal Investigator: Dianne Atkins, MD

The University of Iowa developed a quality

improvement system of data collection, analysis and feedback to promote effective resuscitation of pediatric cardiac arrest victims. The system included a population-based database that helped to analyze achievement of goals for pediatric resuscitation and provided a mechanism to supply information to the Bureau of EMS and EMS services to improve their performance.

3. Pediatric Continuous Quality Improvement Model Project. MICHIGAN - Michigan State University. Principal Investigator: William Fales, MD

Michigan State University created a pediatric-focused Continuous Quality Improvement (CQI) model and evaluated its impact on protocol compliance. The University developed and pilot-tested the pediatric-focused CQI program (PCQI); implemented the PCQI in randomized agencies throughout Michigan; and measured protocol compliance before and after the implementation of PCQI.

4. Basic Emergency Lifesaving Skills in Schools (BELSS) – A Model for Replication in Wisconsin, Minnesota, North Dakota, and South Dakota. WISCONSIN - Wisconsin Department of Health. Principal Investigator: J. Leslie Oganowski, PhD

The Wisconsin Department of Health worked with the EMS for Children leadership in each State to conduct a series of BELSS educator training workshops using models of implementation most efficient in each State, including Native American schools. Participants chose from tracks that enabled them to train in skills most appropriate for their setting, grade level, and personal skills. All participants received AED certification and emergency preparedness training.

Two Targeted Issue Grants were provided no-cost extensions and will be completed by February 2006:

1. Model Pediatric Component for State Disaster Plans. NEW YORK - Trustees of Columbia University. Principal Investigator: David Markenson, MD, FAAP, EMT-P
2. Screening & Secondary Prevention for Psychological Sequelae of Pediatric Injury. PENNSYLVANIA - University of Pennsylvania, School of Medicine. Principal Investigator: Flaura Winston, MD, PhD



Special Funding Initiatives

Network Development Demonstration Projects

Four Network Development Demonstration Projects (NDDP) were awarded in FY 2005: Children's National Medical Center in Washington, DC; Columbia University in New York City, NY; University of California-Davis in Sacramento, CA; and the University of Michigan in Ann Arbor, MI. These four cooperative agreements collectively form the Pediatric Emergency Care Applied Research Network (PECARN), which was initially funded in 2001.

Central Data Management Coordinating Center

The University of Utah, Intermountain Injury Control Research Center received an extension for a fourth year of funding through a cooperative agreement to operate the Central Data Management Coordinating Center (CDMCC). The Center provides PECARN with critical data management services including: electronic data collection; cleaning, storage, and analysis; site monitoring and training in standardized informed consent procedures; research methodology and protocol development; and assistance with Institutional Review Board (IRB) issues.

National Trauma Registry for Children

The National Trauma Registry for Children Project, two separate but parallel initiatives jointly coordinated by Karen Guice, MD, from the Medical College University of Wisconsin and Laura Cassidy, PhD, from the University of Pittsburgh received a no-cost extension in 2005 for their projects. Complete reports, a national comparison of State trauma registries, identification of a core set of essential data elements to be collected on injured children, development of a national injury surveillance data schema for children, and identification of potential pediatric outcome measures will be available in 2006.

Clinical Practice Guidelines and Enhancing Pediatric Patient Safety

In response to the release of the Institute of Medicine (IOM) reports *Medical Errors and Crossing the Quality Chasm*, the EMSC Program has sought proposals for special projects to enhance quality and safety in pediatric emergency care. In 2004, Washington University in St. Louis, MO, was awarded a no-cost extension for its initiative addressing clinical practice guidelines, a study focusing on re-hydration of children with moderate dehydration due to acute gastroenteritis. The principal investigator, Dee Hodge, MD, has modified a guideline developed by the American Academy of Pediatrics (AAP) for oral rehydration of children with moderate dehydration. A full report on this project will be available in 2006.

The Utah Department of Health (Ron Furnival, MD, principal investigator), one of the recipients of the Enhancing Pediatric Patient Safety Grants, was also awarded a no-cost extension in 2004 for an initiative that focuses on the orientation/education of health care providers in the utilization of a color-coded system in the administration of pediatric care and reduction of medical errors. A full report on this project also is anticipated in 2006.

EMSC Resource Centers

In FY 2005, the Maternal and Child Health Bureau (MCHB) continued to support two resource centers: the National EMSC Data Analysis Resource Center (NEDARC) in Salt Lake City, UT, and the EMSC National Resource Center (NRC) in Washington, DC.

NEDARC was awarded new funding via a cooperative agreement to help EMSC projects and State EMS offices develop their capabilities to collect, analyze, and utilize EMS data. NEDARC continues to provide technical assistance to all EMSC grantees, State EMS departments, and other EMS personnel on data-related issues, such as: EMS data system development; data collection, analysis, utilization; grant writing; and research. In FY 2005, NEDARC conducted seven Data System Development and Improvement Planning site visits. At these visits, NEDARC staff led discussions and group activities with key stakeholders aimed at generating goals, objectives, and action steps for improving EMS data collection activities in the State. NEDARC also completely redesigned and added new content to the NEDARC web site at www.nedarc.org, scheduled for release by the end of 2005.

The NRC received continuation funding to support and assist EMSC grantees in implementing and evaluating grant-funded initiatives. In FY 2005, the NRC provid-

ed technical assistance to 75 EMSC grantees on a variety of project and grant management issues. The NRC also helped to finalize new performance measures for the EMSC Program that include conducting three test-site visits and coordinating the development of a comprehensive implementation manual for State Partnership grantees. The NRC continued to operate the EMSC Clearinghouse, EMSC Listserv, and the EMSC web site.

Regional Symposiums

In FY 2005, the EMSC Program awarded six Regional Symposium Supplemental Grants.

- The Intermountain Regional EMSC Coordinating Council, comprised of eight member States (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) and the Commonwealth of the Northern Mariana Islands, conducted its regional meeting in Big Sky, MT, on August 11 and 12.
- The Heartland EMS for Children Council membership includes six States (Iowa, Kansas, Minnesota, Nebraska, North Dakota, and South Dakota) and American Samoa. This region held its meeting in Kansas City, KS, from September 25 to 28.
- The Mid-Atlantic EMSC Region, consisting of seven member States (Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, and West Virginia) and the District of Columbia, had its regional symposium in Carlisle, PA, November 2-4.
- The Pacific Regional EMSC Partners, which is comprised of five States (Alaska, California, Hawaii, Oregon, and Washington) and Guam, conducted its regional meeting in San Francisco, CA, on December 1 and 2.
- The Southeast EMS Regional for Children (SERC) Region has eight member States (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee) plus the Virgin Islands and Puerto Rico. The SERC Regional Symposium was postponed due to Hurricane Katrina.
- The Center of America Regional EMSC Region, which consists of six States (Illinois, Indiana, Michigan, Missouri, Ohio, and Wisconsin), will host its symposium in early 2006.



Special Meetings & Conferences

2005 Annual EMSC Grantee Meeting and EMSC 20-Year Celebration

On April 11, 2005, the American College of Emergency Physicians (ACEP) hosted the special 20-year celebration “Taking Action, Saving Lives” for the EMSC Program. The event was held at ACEP’s First Annual Advanced Pediatric Emergency Medicine Assembly in Washington, DC. More than 400 individuals, including EMSC grantees and national partners, attended the event that included lectures by Arthur Cooper, MD; Michael Dean, MD; Nathan Kuppermann, MD; and Sharon Mace, MD.

The 2005 Annual EMSC Grantee Meeting was convened on April 12-13 in Bethesda, MD. More than 230 EMSC project coordinators, principal investigators, and family representatives attended the meeting to learn more about EMSC Program priorities. The program included an introduction of the new EMSC performance measures, a session on developing effective partnerships, and EMSC Program updates by Dan Kavanaugh, MSW, LCSW-C, and Tina Turgel, BSN, RN. Other meeting highlights included presentations by the National Highway Traffic Safety Administration (NHTSA), AAP, ACEP, the National Association of EMSC Physicians, the American College of Surgeons, and the National Association of State EMS Directors (NASEMSD).

2005 National Heroes Award Winners Honored

The EMSC National Heroes Awards recognize those individuals, State programs, and organizations that inspire thousands with their effective and innovative products and programs, special events, and research in pediatric emergency medical care.

During the Annual EMSC Grantee Meeting held in April, five individuals, one organization, and one research team were recognized for their outstanding efforts to improve pediatric emergency care.

Nominations were solicited from throughout the country and were divided into seven categories:

- EMSC Project Coordinator of Distinction Award - Sue Hohenhaus – Duke University – Durham, NC

This award honors a person that has a comprehensive understanding of his or her State's EMSC-related issues, and has successfully integrated EMSC into State EMS programs for the long term.

- EMSC Family Member Volunteer of the Year - Beth MacDonald – Family Voices – Dover, DE

This award is given to a family member who has provided exemplary service that has made a significant positive impact on addressing the emergency medical needs of children in his or her community.

- EMSC Provider Leadership Award - Nels Sanddal – Rural EMS and Trauma Technical Assistance Center – Bozeman, MT

This award recognizes a clinically-based health professional who has dedicated his or her time, talent, and energy to achieve the highest level of care for children in the community. This individual has helped assure the best possible care for sick and injured kids, and provides leadership in addressing priority EMSC issues.

- State EMSC Policymaker of Distinction Award – Leslee Stein-Spenser – Illinois

This award honors an individual who has been a State public official within the past 5 years; has advanced State legislation promoting EMSC programs or related measures; and has a Statewide, regional, or national reputation for safeguarding the health and well-being of children.

- EMSC Community Partnership Award – Nebraska/Iowa Kiwanis Foundation – Bellevue, NE

This award recognizes an organization that has taken a leadership role in and made significant contribution to improving emergency care for children and their families. In addition, the recipient of this award must demonstrate an ability to work collaboratively with a State EMSC program to improve pediatric emergency care in one or more States.

- Outstanding EMSC Research Project Award – Partners for Child Passenger Safety Research Team – Children's Hospital of Philadelphia and the State Farm Insurance Company – Philadelphia, PA

This award highlights an individual who has completed a significant EMSC-related research study that confirms current practice or has the potential to impact the provision of pediatric emergency care at a national or international level. The project's research findings must have been published within the past 15 months.

- EMSC Lifetime Achievement Award – Robert Wiebe, MD, of the Southwestern Medical Center at Dallas – Dallas, TX

This award is given to an individual who is a national advocate for EMSC, and who has devoted a significant part of his or her life to promoting and advancing pediatric emergency care. This individual must have worked to change the manner in which we care for children throughout the entire continuum of care; be on numerous committees and boards at the State and national levels; and have EMSC-related works published in journals, textbooks, and/or other publications.

EMSC Continues Web-casts

On July 26, 2005, the EMSC Program presented "EMSC Performance Measures, Introduction of the Implementation Manual" through the Center for the Advancement of Distance Education (CADE) at the University of Illinois in Chicago. Three individuals from The Lewin Group served as faculty for this broadcast – Sharrie McIntosh, Jennifer Kuo, and Amy Berlin. The web-cast targeted State EMSC coordinators.

The EMSC Program presented a second web-cast on September 28 regarding the National EMS Information System (NEMSIS). The web-cast included presentations from NHTSA's Susan McHenry, as well as from Greg Mears, MD; Clay Mann, PhD, MS; and Rick Alcorta, MD. Both web-casts are archived and accessible at www.mchcom.com.

NEDARC Workshops

In FY 2005, NEDARC conducted the following four special EMSC workshops:

- Analyzing and Presenting EMS Data, Scottsdale, AZ, January 26-28.

- Effective Grant Writing for EMSC Coordinators, Salt Lake City, UT, August 18-19 (planned and conducted jointly with the NRC).
- Effective Grant Writing for EMSC Coordinators, Silver Spring, MD, August 30-31 (planned and conducted jointly with the NRC).
- Scientific Grant Writing, Chicago, IL, August 24-26.



National Partners

EMSC Partnership for Children Stakeholder Group

In FY 2005, the EMSC Program re-formed the EMSC Partnership for Children (PFC) Stakeholder Group for the July 2005 to June 2007 biennium. The 29-member EMSC PFC Stakeholder Group is comprised of 19 of the largest and most prestigious national organizations involved in pediatric and/or emergency care in the United States, seven EMSC grantees, and three Federal agencies. The stakeholder group works to improve the emergency medical care of children through the exchange of knowledge, development of partnerships, and provision of input and counsel to the EMSC Program. The NRC coordinates the activities of the group. The current members of the group are:

- Ambulatory Pediatric Association
- American Academy of Family Physicians
- American Academy of Pediatrics
- American College of Emergency Physicians
- American College of Osteopathic Emergency Physicians
- American College of Surgeons
- American Pediatric Surgical Association
- American Trauma Society
- America's Health Insurance Plans
- Emergency Nurses Association

- Family Voices
- National Association of Children's Hospitals and Related Institutions
- National Association of EMS Physicians
- National Association of Emergency Medical Technicians
- National Association of School Nurses
- National Association of Social Workers
- National Association of State EMS Directors
- National Council of State EMS Training Coordinators
- National SAFE KIDS Campaign
- National EMSC Data Analysis Resource Center
- Pediatric Emergency Care Applied Research Network
- State Partnership Grant – Minnesota
- State Partnership Grant – Virginia
- State Partnership Grant – Washington
- Targeted Issue Grant – Missouri
- Targeted Issues Grant – Pennsylvania
- Indian Health Service
- National Highway Traffic Safety Administration
- Trauma-EMS Systems Program

EMSC Partnership for Children Stakeholder Group Meetings

The first of two FY 2005 stakeholder group meetings took place April 11-13, in Bethesda, MD, in conjunction with the 2005 Annual EMSC Grantee Meeting. Breakout sessions for stakeholder group representatives were integrated into the grantee meeting agenda, including several presentations as well as preparations for the revision and extension of the EMSC Five-year Plan. In addition, stakeholder group representatives were recognized during the 2005 EMSC Heroes Awards ceremony.

The second meeting of the stakeholder group took place from May 12-13, in Silver Spring, MD. The meeting was dedicated to the revision and extension of the current EMSC Five-year Plan. Stakeholder group representatives were divided into topical workgroups and asked to identify needed modifications to the current plan that will allow it to remain effective through the end of 2007.

In the previous fiscal year, the stakeholder group recommended that the current plan be extended to bridge the gap until the release of the IOM report, *The Future of Emergency Care in the United States Health System*. The report is expected to be published in the spring of 2006.

National Organization Projects

Through a contract or a Partnership for Information and Communication cooperative agreement, several organizations are performing projects addressing specific objectives of the EMSC Program's Five-year Plan. A brief summary of each project is provided below.

- American Academy of Pediatrics: In collaboration with ACEP, the AAP is evaluating the impact of their jointly published policy Statement titled, "Care of Children in the Emergency Department: Guidelines for Preparedness," as well as the reasons some hospitals may not wish to implement the guidelines.
- Ambulatory Pediatric Association: This group is developing a CD-ROM educational module on family presence during pediatric invasive procedures and cardiopulmonary resuscitation for emergency department health care providers and professionals
- American College of Emergency Physicians: In conjunction with the Nakamoto Group, ACEP is developing clinical guidelines on adjunctive agents and critical issues in the administration of sedation in pediatric patients in emergency departments.
- National Association of EMS Physicians: This organization is implementing the Pediatric Emergency Care Research Workshop in conjunction with the organization's annual meeting and evaluate knowledge acquisition of participants in the previous year's workshop.

Federal Collaborations

HRSA-CDC-IHS-NHTSA Collaborative Planning

Federal staff of the EMSC Program met regularly with representatives from NHTSA's EMS Division, CDC's National Center for Injury Prevention and Control and HRSA's Healthcare Systems Bureau. The purpose of these collaborative meetings was to share information about issues of interest and collaborative projects and to increase awareness of emerging issues important to emergency and injury care.

- National EMS Scope of Practice Model. With EMSC program support, an AAP representative served as a member of the National EMS Scope

of Practice Model committee. The EMSC program assisted in the dissemination of the drafts of the model for public review and comment.

- EMS: Ready, Responsible, Reliable. The EMSC Program worked with NHTSA and other national organizations on the development and distribution of the 2005 EMS Week campaign kit. The kit showcased the EMSC Program's 20 years of service to the nation's youngest patients.
- Interfacility Transfer Guide. The EMSC Program participated on the NHTSA task force that had responsibility for developing guidelines for important issues regarding interfacility transfer and transport, such as medical direction, provider education, cost reimbursement, and legislation and regulations. The draft guidelines were finalized and circulated to national organizations for review.
- National EMS Information System (NEMSIS). The EMSC Program collaborated in the ongoing development of the Uniform Prehospital EMS Dataset, NEMSIS Data Dictionary, and initiation of the NEMSIS Technical Assistance Center at the University of Utah School of Medicine's Department of Pediatrics. The Version 2.2 Uniform Prehospital EMS Dataset and XML Standards are available at www.nemsis.org. As of September 2005, 50 States and territories had signed a Memorandum of Understanding. NHTSA will house the National EMS Database within its National Center for Statistics and Analysis.
- Field Triage 2005: A Meeting of Experts. Sponsored by the CDC with collaboration by NHTSA, HRSA, and EMSC, this meeting focused on a review of the American College of Surgeon's trauma triage protocol. Issues addressed during the meeting included the need to modify current guidelines related to the mechanisms of injury and comorbidities. Children younger than 5 years are included in the co-morbidities trauma triage criteria.
- Trauma-EMS Systems Program. With EMSC Program support, consultation was provided to the Delaware State trauma system program, the State's trauma center, and the children's hospital to identify strategies for improving children's access to trauma care. Dan Kavanaugh also served as a member of the Trauma-EMS Systems Program Stakeholder Group.

- Revising the Guidelines for the Prehospital Management of Traumatic Brain Injury. The EMSC Program was able to send a representative to this meeting jointly sponsored by the Brain Trauma Foundation and NHTSA. Discussion focused on the planned update of the 1990 evidence-based guidelines for prehospital management of traumatic brain injury. Airway management, hypertonic saline, mannitol and other pharmaceutical therapies, EMS/Trauma systems, patient restraint, and mild hypothermia were the clinical topics discussed.
- PECARN's CDMCC Principal Investigator – J. Michael Dean, MD
- CDC/National Center for Injury Prevention and Control – Richard Sattin, MD
- NIH/National Center for Child Health and Human Development (NICHD)/National Center for Medical Rehabilitation Research – Carol Nicholson, MD
- Walter Reed Army Medical Institute – Frederick Pearce, MD
- NIH/National Institute on Biomedical Imaging and Bio-engineering – Brenda Korte, MD

Indian Health Services

Through EMSC State Partnership grantee support, the IHS Ride Safe Program, which is an evidenced-based initiative, was expanded to include tribes living on reservations in the IHS Bemidji Area.

“In addition, Pediatric Emergency Prehospital Provider (PEPP) Training was conducted in the IHS Portland Area with Tribal EMS organizations and an IHS panel presentation was included on the agenda at the Pacific Region EMSC Conference. The panel included representatives from IHS EMSC, Hoopa Valley CA Tribal EMS, California Rural Indian Health Board, California IHS Injury Prevention and an Elder from the Wailaki Tribe of California.”

Additionally, the Mountain Plains Health Consortium provided pediatric prehospital training to tribes through an interagency agreement between the EMSC Program and IHS.

The interagency agreement also continues to fund a position within IHS responsible for ensuring that EMSC resources are made available to Alaska Native and American Indian populations.

Research-related Initiatives

Interagency Committee on EMSC Research

This Federal committee hosted by the EMSC Program held four meetings during the fiscal year: October 2004, February 2005, May 2005, and September 2005. The Interagency Committee on EMSC Research (ICER) provides a collegial environment where Federal representatives share information and strategies to increase the quality and feasibility of EMSC-related research and increase funding opportunities available from member agencies.

Members of ICER include representatives from the Departments of Defense, Education, Health and Human Services, and Transportation. During FY 2005, ICER meeting presenters included the following:

EMSC Program Announcement

After almost 2 years of revisions, the new program announcement (PA) Research on Emergency Medical Services for Children (PA-05-081) was published in the NIH Guide to Grants and Contracts at the end of March 2005. Similar to the original PA from 2001, this multi-agency research announcement described each agency's EMSC-related research programs, as well as eligibility and funding information.

The new PA does not expire until the summer of 2008. The agencies participating with HRSA/MCHB/MCH on PA-05-081 include: the Agency for Healthcare Research and Quality, CDC/NIOSH, the National Institute of Alcohol Abuse and Alcoholism, the National Institute of Biomedical Imaging and Bioengineering, the National Institute for Child Health and Human Development, the National Institute for Mental Health, and the National Institute of Nursing Research.

Pediatric Emergency Care Applied Research Network

During FY 2005, PECARN held three Steering Committee and Subcommittee meetings. The first was held in San Francisco, CA, during January. The second was held in Philadelphia, PA, during May, and the last was held in Chicago, IL, in September. The participants reviewed new research initiatives, voted on bylaw revisions, developed “report cards” to measure quality of Hospital Emergency Department Affiliates (HEDAs) and Nodes, updated the committee on current projects, and received training in good clinical practices and related topics to enhance the quality of the PECARN research enterprise. Two of the meetings included guest speakers from the National Association of EMS Physicians and the CDC/NCIPC.

During FY 2005, PECARN continued or initiated the following nine studies. Funding program and/or agency is noted in parentheses.

- PECARN Core Data Project (EMSC-NDDP)
- Childhood Head Trauma: A Neuroimaging Decision Rule (MCHB Research Program)
- Bioterrorism Surveillance Using the PECARN Network (AHRQ)
- Creating A Diagnosis Grouping System for Child Emergency Department Visits (EMSC Targeted Issue)
- Hypothermia for Pediatric Cardiac Arrest (NICHD)
- Pediatric Off-patent Drug Study – Lorazepam for Status Epilepticus (NICHD)
- Randomized Trial of Oral Dexamethasone in Acute Bronchiolitis (MCHB Research Program)
- Predicting Cervical Spine Injury in Children (EMSC Targeted Issue)
- Referral Patterns and Resource Utilization for PED Patients Presenting with a Psychiatric or Mental Health Problem: The PECARN Psych/Mental Health Working Group Pilot Study (EMSC-NDDP)

A third of these studies are due to be completed in FY 2006.

National Center for Health Statistics

The Emergency Pediatric Services and Equipment Supplement (EPSSES) project was completed with three years of data collection. The purpose of this study was to characterize the pediatric preparedness of U.S. hospitals to provide pediatric emergency services and determine if there are explanatory variables associated with preparedness.

Preliminary results of the EPSSES indicate that in terms of pediatric preparedness, U.S. emergency departments vary in preparedness to treat pediatric cases as measured by the 2001 AAP/ACEP guidelines. The 2002-2003 data showed 30 million pediatric visits to emergency departments. Half of emergency departments admitted pediatric patients without having a separate pediatric ward. Only 5.5 percent had all recommended pediatric supplies, but half had more than 86 percent of these supplies. However, most hospitals without pediatric trauma service or pediatric intensive care units did transfer critically ill pediatric patients.

HRSA signed an agreement making it possible for the CDC to repeat the EPSSES survey in 2006 and add 25 children hospitals to the sample.



EMSC Activities of Interest

EMSC Five-year Plan Extended to 2007

The EMSC Program worked with its stakeholders to identify activities to extend the EMSC Five-year Plan: 2001-2005 for two additional years. This extension will enable the EMSC Program to use the recommendations of the soon-to-be released IOM report, titled *The Future of Emergency Care in the United States Health System*, in the development of its next strategic plan. The revised EMSC plan will be released at the end of 2005.

Institute of Medicine “The Future of Emergency Care”

In FY 2005, the EMSC Program offered to provide information upon request about pediatric emergency care issues to the members of the IOM study on the Future of Emergency Care. Information on landmark EMS research, pediatric emergency research, and the National Pediatric Trauma Registry project was compiled and provided to requestors.

Pediatric Disaster Preparedness

In FY 2005, the EMSC Program continued to support improved pediatric disaster preparedness. Information on new programs, scientific literature, and resources was distributed to EMSC grantees through the EMSC Listserv.

Additionally, the EMSC grantees provided the Bioterrorism Hospital Preparedness Program grantees in their States with a list of recommendations for improving bioterrorism preparedness for pediatric populations. Several State Partnership grantees conducted the Pediatric Disaster Life Support (PDLs) training program in their States.

Basic Life Support (BLS) TRIPP

A revision of the popular EMSC product, BLS TRIPP (Teaching Resource for Instructors in Prehospital Pediatrics) was initiated by the Center for Pediatric Emergency Medicine of New York University School of Medicine in collaboration with the EMSC National Resource Center.

The revision will include updates to existing chapters, revised teaching scenarios and task analyses, incorporation of the new CPR guidelines, and three new chapters (cultural considerations, disasters and multiple casualty incidents, and family-centered care). The revised EMSC product will be completed in September 2006.

Family Advisory Network

The Family Advisory Network (FAN) is an alliance of family representatives from States, Territories, and the District of Columbia. Family representatives are invited by State EMSC coordinators to support State and national EMSC program initiatives by sharing their expertise and life experiences as consumers of the EMS system. By the end of FY 2005, FAN included 41 members representing 66 percent (37) of the 56 EMSC jurisdictions. New Jersey, North Carolina, Montana, and Guam have two family representatives. Compared to FY 2004, there was a 9 percent increase of EMSC grantees with family representatives.

Resource Center Consortium

This past year, the NRC participated in and facilitated the development of a Resource Center Consortium. The group of representatives from various technical assistance centers meets every other month via conference calls. To date, 11 resource centers (funded by MCHB and the Substance Abuse and Mental Health Services Administration) are participating in the calls.

The consortium has served as a forum for sharing information regarding programs and the provision of technical assistance to grantees. A brochure describing each of the centers and their missions has been developed and is made available at individual grantee and professional meetings. A listserv to facilitate communication with members and share announcements has also been developed.

The NRC director continues to serve on the advisory committee of the Rural EMS and Trauma Technical Assistance Center, participating in conference calls and sharing appropriate information.



EMSC Publications and

During this past fiscal year, the EMSC Clearinghouse shipped 4,352 items, and visitors to the EMSC web site downloaded 49,243 documents for a total distribution of 53,595 documents.

The five most popular documents downloaded during FY 2005 are:

- How to Prevent & Handle Childhood Emergencies: A Handbook for Parents and People Who Care for Children.
- Office Preparedness for Pediatric Emergencies: Instructor's Manual
- After the Emergency Is Over: Post-Traumatic Stress Disorder in Children and Youth.
- Checklist for Pediatric Equipment and Supplies for Emergency Departments
- EMSC Cultural Competence

New EMSC Grantee Products released this year include:

S.C.O.P.E.: Special Children's Outreach and Prehospital Education (Grantee: Children's National Medical Center. Authors: Terry Adirim, MD, MPH and Betsy Smith, RN; Tasmeen Singh, MPH, contributor)

This product is an educational guide, created to introduce first responders, EMTs, and other prehospital healthcare workers to children with special health care needs. The

authors provide detailed situations and circumstances; protocols and other guidance; and drawings of what to do and when, all of which will help prehospital personnel attain the knowledge and skills they will need to properly respond to children in emergency situations.

Safe Transport for Children with Special Health Care Needs Training Program (Grantee and authors: Connecticut EMSC project)

The Connecticut EMSC project assembled a multimedia training course for rehabilitation therapists so they become better equipped to safely transport children with special health care needs.

Practical Considerations for Providing Pediatric Care in a Mass Casualty Incident* (Grantee and author: Susan McDaniel Hohenhaus, RN, MA)

Most information available to healthcare professionals about responding to a Mass Casualty Incident (MCI) concentrates on guidance and protocols for treating adults. Children's health needs in MCI situations are often very different from adults' needs, so this document speaks to the probable healthcare needs of children when disaster strikes.

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