EMS for Children

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EMS-C Disclosure

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The mission of Emergency Medical Services for Children (EMSC) is to **reduce child and youth mortality and morbidity resulting from severe illness or trauma.**
EMS-C?

- Emergency Medical Services for Children
- From birth through age 18
- 26% of Maine’s population – Approximately 335,000 age 18 and under
Early History

- 1984 – Congress enacted legislation to use federal funds for EMS-C
  - Preventive Health Amendments of 1984 (PL 98-555)
- 1985 – Grant process announced
- 1986 – First grants awarded (AL, CA, NY, OR)
- 1987 – Maine receives EMS-C grant
- 2010 – Maine elects to not renew EMS-C grant
- 2017 – Maine applies and is awarded EMS-C grant

Dr. Calvin C.J. Sia
▪ 11 Offices and 6 Bureaus
▪ $1.3 billion budget
▪ 2,000 employees
▪ Award Grants
▪ Receive regular reports
▪ Sponsor webinars and technical advisory programs
National EMSC Data Analysis Center

- Provides technical assistance to EMSC grantees
- Located at the University of Utah School of Medicine
- Established in 1995 to
  - Assist in the collection of EMSC data
  - Help provide define and foster adoption of common EMS definitions
  - Enhance data collection analysis
What does EMS-C do?

Integrate pediatric care across the emergency medical system.
Overall Strategy

Improve Quality of Care & Outcomes for Children
The EMS-C program performance measures are a set of standards that were developed to measure long-term progress at both state and national levels of the EMS-C program in key areas of pediatric emergency care.
Maine EMS has received a 4-year grant for 9 performance goals

**State Resources**
- Develop EMS-C Advisory Committee
- Integrate into state statutes
- Assist EMS & Hospital systems

**EMS Systems**
- Submit NEMSIS data
- Pediatric Emergency Care Coordinator
- Pediatric Equipment Competency

**Hospital Systems**
- Recognize Pediatric Trauma Capabilities
- Recognize Pediatric Medical Emergency Capabilities
- Assist with Pediatric Transfer Guidelines & Agreements
Maine EMS has received a 4-year grant for 9 performance goals

• **Develop EMS-C Advisory Committee**
  - Advise on pediatric protocols and care
  - Help with education and best practices

• **Integrate into state statues**
  - Make sure EMS-C is important through the future

• **Assist EMS & Hospital systems**
  - Transports and agreements, insight into EMS care
Maine EMS has received a 4-year grant for 9 performance goals

- Submit NEMSIS data
  - From EMS PCR
  - Data helps guide future care
- Pediatric Care Coordinator
  - One per service or can be shared between services
  - A resource for CEH and purchases
- Pediatric Equipment Competency
  - Personnel knowing how to use service specific pediatric equipment
Maine EMS has received a 4-year grant for 9 performance goals

- Recognize Pediatric Trauma Capabilities
- Recognize Pediatric Medical Emergency Capabilities
  - What are individual hospital thresholds. We will not define them, but encourage hospitals to have a definition of them
- Assist with Pediatric Transfer Guidelines & Agreements
  - Once a pediatric patient reaches (or better, approaches) this threshold:
    - Have a plan as to moving the patient
    - Have agreements for facilities to receive these patients
Where are we now?
Maine Pediatric Data

July 1, 2017 – June 30, 2018
272 EMS Agencies in Maine evaluated 11,720 pediatric patients between July 1, 2017 and June 30, 2018

- Data does not include:
  - Lifeflight
  - Portland Fire Department/Medcu (started reporting 8/1/18)
  - United Ambulance (started 8/1/18)

- Data for North East Mobile Health Services starts in March 2018.
Pediatric Responses by Hour of Day - Maine
July 1, 2017 - June 30, 2018
Pediatric Responses By County - Maine
July 1, 2017 - June 30, 2018

- ANDROSCOGGIN: 656
- AROOSTOOK: 608
- CUMBERLAND: 376
- FRANKLIN: 424
- HANCOCK: 1383
- KENNEBEC: 1814
- KNOX: 248
- LINCOLN: 280
- NH: 18
- OXFORD: 692
- PENOBSCOT: 1807
- PISCATAQUIS: 156
- SAGADAHOC: 326
- SOMERSET: 540
- WALDO: 344
- WASHINGTON: 303
- YORK: 1745
Average Age Pediatric Response – Maine
July 1, 2017 - June 30, 2018
PEDIATRIC COMPLAINTS - MAINE
JULY 1, 2017 - JUNE 30, 2018
Pediatric Response Results - Maine
July 1, 2017 - June 30, 2018

- Transported: 73%
- Not Transported: 26%
- Assist another unit with Transport: 1%
Where are we going?

▪ Producing education from identified pediatric responses

▪ Meeting with regional and state groups to better communicate

▪ Legislation submitted for pediatric representation on State EMS Board

▪ Collaboration with national partners
Pediatric Coma
(Decreased Level of Consciousness)

NEVER ADMINISTER NALOXONE TO A NEONATE

EMT
1. Immobilize spine if indicated
2. Manage airway as appropriate per Blue 5
3. Request ALS if available
4. If shock present, refer to Medical Shock protocol, Pink 14
5. Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 60 mg/dL, refer to Pink 13
6. If respirations less than 12 per minute AND narcotic overdose suspected, refer to Antibiotics for Specific Infections protocol, Yellow 5

ADVANCED EMT/PARAMEDIC
7. IV en route
8. Cardiac monitor
Pediatric Coma
(Decreased Level of Consciousness)

NEVER ADMINISTER NALOXONE TO A NEONATE

EMT
1. Immobilize spine if indicated
2. Manage airway as appropriate per Blue 5
3. Request ALS if available
4. If shock present, refer to Medical Shock protocol, Pink 14
5. Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 80 mg/dL, refer to Pink 15
6. If respirations less than 12 per minute AND narcotic overdose suspected, refer to Algorithms for Specific Toxins: Opiates protocol, Yellow 3

ADVANCED EMT/PARAMEDIC
7. IV en route
8. Cardiac monitor

Adult Coma
(Decreased Level of Consciousness)

Assess for trauma, drugs, diabetes, breath odor, needle tracks, medical alert tags, suspected seizure. Refer to appropriate protocol for specific suspected conditions.

EMT
1. Immobilize spine if indicated
2. Manage airway as appropriate per Blue 3 & Blue 5
3. Request ALS if available
4. If shock present, refer to Medical Shock protocol, Gold 12 & Pink 14
5. Perform finger stick to measure blood glucose, if so trained. If blood glucose is less than 80 mg/dL, refer to Gold 6 & Pink 15
6. If respirations less than 12 per minute AND narcotic overdose suspected, refer to Algorithms for Specific Toxins: Opiates protocol, Yellow 3

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Additional Opportunities

- Dedicated Website
- School Emergency Guidelines
- Concussion Programs
- Water Safety Programs
- Child Safety Seat Programs
- Mannikin Loaners
Years 2 and beyond

- Revise
- Revise
- Revise
Summary / Reflection

Convince – “cause someone to believe firmly in the truth of something”
  ▪ Latin convincere meaning “to overcome decisively”

  versus

Educate – “to develop the faculties and powers of someone”
  ▪ Latin ducere, meaning “to lead”
Last thoughts

Maine EMS-C is here to help educate, improve and NOT dictate

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