Addressing the Transportation Needs of Infants and Children with Special Needs

Hospital Discharge
Special Planning for Special Needs

Lifesavers 2015

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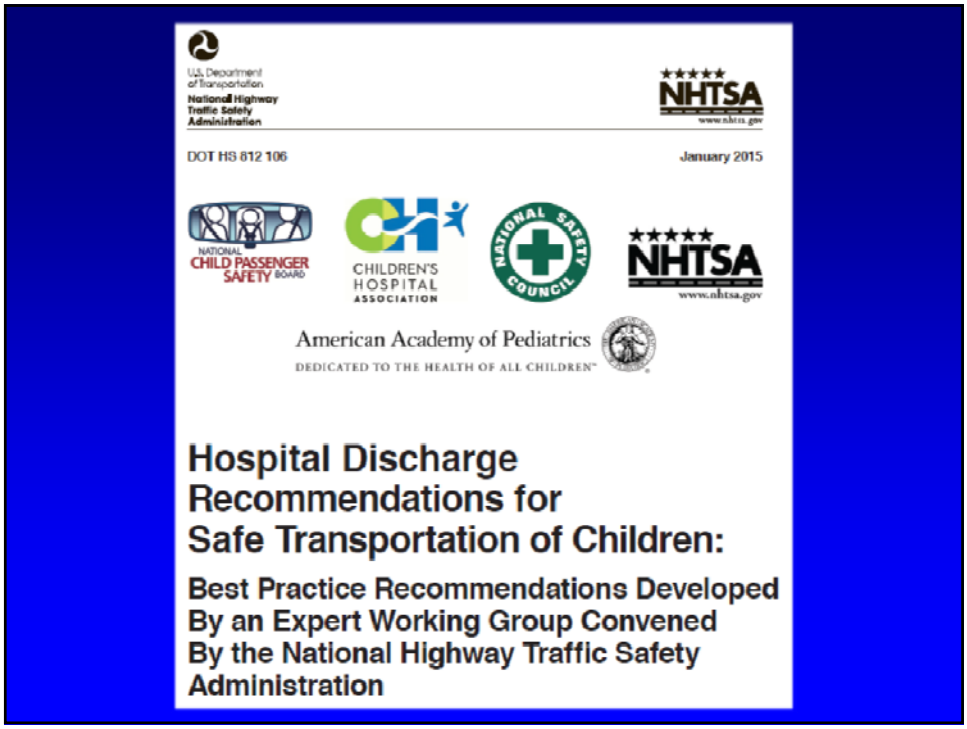
Faculty Disclosure Information

In the past 12 months, I have had no relevant financial relationships with the manufacturer of any commercial product or any provider of commercial services discussed in this CME activity

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation



Case 1: Situation

- 11 year old, 5'7", 110 #
- Sustained TBI playing youth football
- Multiple areas of brain damage and bleeding
- Gastrostomy tube
- Seizures
- Ventriculoperitoneal shunt

Case 1: Problem

- Residual physical findings at discharge
  - Fair head control
  - Poor trunk control/sitting balance
  - Right sided weakness
  - Nonverbal

Case 1: Resolution

- Consultation with OT/CPST
- Trial and selection of Churchill adaptive restraint with head cap
  - Accommodates for growth to higher weight (175 pounds)
  - Short seat base for ease of transfer into seat
  - EZ-Up headrest and head cap for head control if needed
  - Easy transfer from vehicle to vehicle

Case 1: Resolution

- Hospital loaned restraint pending arrival of patient's own Churchill
- Provided family written instructions and training on use before discharge
- Loan seat replaced with personal restraint when available
- Documented plan and training

Case 2: Situation

- 1 month old full term infant
- Diagnosis – Achondroplasia
  - Pulmonary hypertension
  - Congenital heart disease – mild
  - Short arms and legs
  - Narrowed foramen magnum
  - Weight 4.705 kg (10 # 5 oz.)
  - Relative macrocephaly (large head)
- Oxygen by nasal cannula

Case 2: Problem

- Assessment of seat provided by family
- Determination of respiratory stability
- Determine fit in conventional seat

Case 2: Resolution

- Seat and fit approved by CPST-I
- Infant maintained cardiorespiratory stability in car seat test
- Parent was provided written materials and trained in use of seat and securement of oxygen
- Plan and training were documented

Case 3: Situation

- 21 year old boy with cerebral palsy, growth retardation and chronic renal failure
- Transported by medical transport (ambulance) from home for dialysis
- Restrained flat on cot with belts in crisscrossed configuration
- Ambulance hit black ice, rolled 3-4 times

Case 3: Situation

- Patient submarined under cot straps and landed partially off cot hanging by straps
- Cot remained intact and restrained to vehicle
- EMS attendant in Captain chair restrained with 3-point belt and vehicle driver treated and released
- Equipment stored in cabinets flew everywhere

Case 3: Situation

- Patient transported to Riley Hospital for treatment
- C-1 spine and multiple rib fractures

Case 3: Problem

- Patient requires frequent ambulance transport for dialysis
- Clinical positioning considerations
  - Multiple severe contractures
  - Weight: 21.5 kg (47 pounds, 5 ounces)
  - Cervical positioning collar
  - Gastrostomy tube

Case 3: Resolution

- CPST-I, experienced in Special Needs and Ambulance, consulted
- Clearance of positioning by neurosurgeon
- IU Health EMS loaned SafeGuard Transport for hospital discharge and temporary use
- Care Ambulance purchased two SafeGuard Transport devices
- Plan and training were documented.

Hospital Discharge Recommendations

- Have a policy on CPS (include preterm and low birth weight infants and children with special healthcare needs)
- Have trained staff or know where to refer
- Provide written materials (reviewed by CPST)
- Review policies and procedures regularly
- Ensure appropriate documentation

Resources

- NHTSA.gov
  - Hospital Discharge Recommendations
- cert.safekids.org
  - National Child Passenger Safety Certification
- preventinjury.org/Special-Needs-Transportation/Training
  - “Safe Travel for All Children: Transporting Children with Special Health Care Needs”
  - "Improving Occupant Protection for Non-Critical Pediatric Patients in Ambulances: A Training Curriculum for EMS Personnel"

It Takes Teamwork