



STARS

Patricia Casey, EMT-P
STARS Founder, Outreach Educator, Cardinal Glennon Children's Hospital

Scott Gilmore, MD, EMT-P
Medical Director, St. Louis Fire Department

CONSIDERATIONS FOR CHILDREN WITH SPECIAL HEALTHCARE NEEDS

1. Track Children with Special Healthcare Needs in your service community, and become familiar with both the child and his/her anticipated emergency care needs.
2. Refer to the child's emergency care plan formulated by his/her medical providers, if available. Understanding the child's baseline will assist in determining the significance of altered physical findings. Parents/caregivers are the best source of information on: medications, baseline vitals, functional level/normal mentation, likely medical complications, equipment operation and troubleshooting, emergency procedures.

Special needs Tracking and Awareness Response System



What *is* STARS?

- **STARS is a hospital based program that creates individualized written care plans for medically complex pediatric patients to be used in emergency situations.**
- **STARS plans live with first responders and are also formally housed in 911 dispatch centers. Each child has a unique number that matches his or her emergency plan.**
- **STARS provides focused training to area hospitals and EMS providers to help them better care for challenging cases and technology dependent children.**

Why?

- **Because pediatric patients with complex medical needs are the fastest growing subset of patients in the United States.**
- **Fragile children are sent home with medical equipment and challenges that EMS providers and emergency departments are not prepared for.**
- **Because the parents of special needs children are instructed to call 911 if their child becomes unstable which has resulted in poor outcomes.**
- **Because we *can* do better and because we *care*.**

In an anonymous poll, 62% area paramedics reported *never* having formal training on tracheostomies prior to our class.

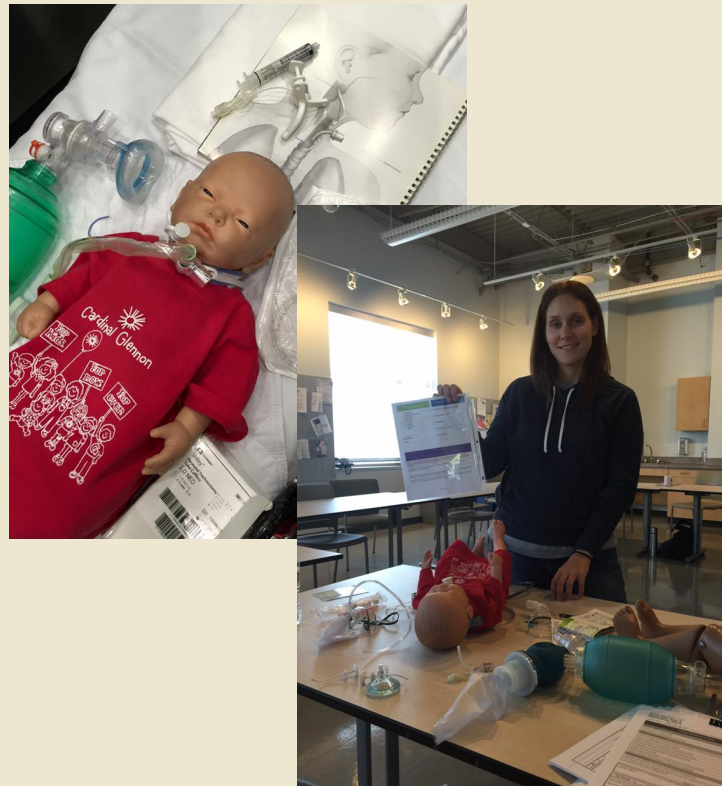


#OneKidCounts

*Identify



* Educate



*Prepare



Who's a STAR?

- * Significant developmental delay or medical complexity
- * Severe neurological disorders
- * Cardiac History
- * Tracheostomy and ventilator dependence
- * Children on home hospice or with specific end of life plans





Special Needs Tracking and Awareness Response System

Language Barrier- Arabic speaking family



Name:

DOB: 05 / 24 / 2014

Address: XXX Grand Avenue

St. Louis, MO 63118

Parent/ Guardian:

Preferred Hospital: **Cardinal Glennon**

Specialist: ***Pt is followed by the Complex Medical Care Program @ SSM Health Cardinal Glennon Children's Hospital**

Transport Team: 888-229-2424

EMS Line: 314-577-5377

Pt. MRN: *****

Diagnosis/ Past Procedures

1. Down Syndrome
2. Unilateral Vocal Cord Paralysis
3. Tracheostomy Dependent
(Size 4.5 Bivona, 56mm/ cuffed with 2ml sterile H2O)
4. Ventilator Dependent
5. Seizures
6. Chronic Resp. Failure
7. Cardiac
(Complete AV Canal Repair)
8. GERD
9. G-Tube in place
(14 fr., 1.7 cm)

CAUTION:

- Do not transport without working suction and emergency trach supplies at the bedside.
- Trach cuff must not be inflated while Passy Muir (green valve) is in line on vent.

Anticipated Emergencies

(Please include any known specific findings or effective management)

Respiratory Distress

- Check for trach patency
- If green passy muir valve is in line, it must be removed.
- If trach is obstructed, an emergency trach change must be performed
- Suction and provide O2/supportive care
- Manually assist ventilations as necessary with PEEP of 6

Seizures

- Treat per protocol

Medications

1. Neurontin
2. Albuterol
3. Symbicort
4. Atrovent
5. Keppra
6. Flonase
7. Carnitor
8. Nexium
9. Aldactazide

ALLERGIES:

1. NKDA

Baseline Vital Signs

Heart Rate: 98

Blood Pressure: 98/48

Respirations: 46

Vent Settings: LTV Pressure Support

O2 Bleed in 1L

PS 8

PEEP 6

Pulse Oximetry: > 90%

Temp: 97.6

Baseline Neurological Status/ Baseline Physical Findings

What is your child's baseline neurological status? If your child has any developmental delays or behavioral issues, please explain them. Please list any other information about your child that you feel would help paramedics assess your child.

XXX is alert and active when awake. He does not sign or use verbal communication but he hears, understands and is very expressive.

Does your child have any physical findings such as muscle weakness, tremor, tic, wheezing or lung congestion that is considered a normal finding for him or her? If so, please explain below.

XXX moves all extremities well. Skin is warm and pink. Resp. are even and unlabored with no accessory muscle use, LS may sound coarse due to mild, chronic secretions.

Date: 5/2017

The STARS electronic database is currently being deployed

- Accurate tracking of STARS 911 activations
- Allows for state wide access to emergency care plans for EMS, air medical and community hospitals.
- Version control
- Combined EMS Medical Director and Pediatric specialty oversight
- Attachments for specialty letters and hospital IHP's



Accessing for an Emergency?

Yes

No

Fran-1

M 12 y

Attachments ▾



HR

90-120

BP

100/60

R

16-20

SpO2

95-100%

TEMP

Normal

MEDICATIONS

- 1 Pazopanib
Oral Chemotherapy
- 2 Coumadin
- 3 Senna

ALLERGY

- 1 Vancomycin

ANTICIPATED EMERGENCIES

- 1 Sepsis/ General Illness
Treat with IV fluids to avoid hypovolemia
- 2 VAD Notes
EMS- Transport with all spare batteries, charging unit and control unit
- 3 VAD notes
The display on the controller will provide alarm information
- 4 Cardiac Considerations
Follow ACLS Protocol INCLUDING treatment for arrhythmia and CPR if needed

CAUTIONARY PROCEDURES

- 1 Right Arm Caution
No BP's, IV attempts or lifting with the right arm
- 2 Platelet Administration
Must premedicate with Benadryl, Pepcid, Zyrtec, APAP, Hydrocortisone and have IM Epi at the bedside! *Hx of anaphylaxis
- 3 VAD Caution
If the control unit reads "Electrical Fault", do not change controller out
- 4 VAD Caution
are well trained on troubleshooting the VAD device. Please keep them at the bedside if they are available



Current Standings

- 547 children registered in Missouri
- 96 children registered in Illinois
- Over 400 Educational programs have been provided to EMS and community EDs



- STARS is not simply a registry
- System
 - Awareness
 - Training
 - Advanced notification
 - Public education
 - Public relations

Implementation Challenges

- What is a STAR for your department
- Business agreement
 - Get legal involved early
- Training
- Dispatch involvement
- Internet access
 - Paper alternative
 - HIPAA compliant

**“Unless
someone like
you cares a
whole lot,
nothing is going
to get better, it’s
not.”- The Lorax**

