

Nationwide Children's Hospital ESETT Simulations

ESETT Investigator Meeting
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NATIONWIDE CHILDREN'S

When your child needs a hospital, everything matters.SM

Simulation Framework

- Run “in situ” in collaboration with ED Nurse Education Leadership
 - Scheduled to engage each shift
 - RN Education “credit”
- When the ED is at low volume
 - Initiated by calling a “Mock Seizure Alert”
 - “Vocera” call to all staff on-duty (physicians, nurses, medics, pharmacists and others) to a specific room in the ED

Simulation Framework

- We work in real time, using the trauma clock as a marker:
 - High fidelity mannequin
 - Brief, real-life, varied scenarios
 - Synergy with clinical training and SE QI
- Interactive Q&A / debriefing
- Follow-up summary and thank you email

Simulation Numbers

- 11 simulations (10/12/2015 – Present)
- 82 attendees, including:
 - 31 RNs
 - 15 Researcher Team Members
 - 12 Physicians
 - 11 Other*
 - 10 Pharmacists
 - 3 Respiratory Therapists

*Includes medics, patient transportation, unit clerks, etc.



Simulation Clip



Impact

- Increases research visibility in the ED
- Reviews knowledge of ESETT inclusion/exclusion as well as best practices
- Allows for questions to be answered in real time
 - This has helped us tailor our training and processes
- Provider awareness of the ESETT study
 - Those attending simulations are more likely to call the research team if a seizing patient presents in the ED

Lesson Learned

- Outstanding team building
- Excellent synergy
- Sims feel like “geologic time” ~awkward?
- Not all that time consuming
- Thus far, not traction for seizure alerts...
- Metrics may be useful

Amazing Team

- Melanie Martin, RN, MS
- ED Trauma Nurse Leaders
- EM Attendings/Fellows
- Jill Blind, PharmD , RPh
- Nicole McLeod, PharmD, RPh
- Matthew Sapko, PharmD, MS
- Andrew McClain, RPh
- Kim Shipp, PharmD, BCPS, BCPPS
- Jenny Mason, PharmD, BCPPS
- EM Research Team
- Cindy Lin, BS
- Patricia Capone, BS
- Amber Kihm, BS
- Kelsey Ryan, BS
- Jessica Saunders, BA, MACPR
- Erin Fisher Kenny, BFA

ESETT Nurse Checklist

- Start timer on the wall as soon as actively-seizing patient arrives to the room
- Verify that patient is between 2 and 17 years
- Check for an opt-out bracelet. Verify opt-out in 'ESETT box' or in chart on Epic:
 - [Snapshot](#) → [Specialty Comments](#)
- Call pharmacy to the room: Ask pharmacist to bring the 'ESETT box' for a seizing patient
 - **If pharmacist is not present**, get the 'ESETT box' from the Green Med Room refrigerator.
- Verify Inclusion/Exclusion criteria
- Med administration:
 - Confirm the study drug number printed on the label of the vial
 - **If pharmacist is not present**, calculate weight-based infusion rate from dose administration chart
 - Give medication via syringe using a med infusion pump over 10 minutes. Depending on the size of the dose, drug may be split equally between 2 syringes and **both must be given**. The infusion pump will need to be self-programmed: Program for volume over time
 - **If pharmacist is not present**, start ESETT iPod as soon as medication is administered
 - Document 'study med' in the MAR
 - After the 10 minutes of infusion, discontinue drug
 - Monitor patient for 10 more minutes prior to using alternate therapy
- Chart in Epic

ESETT Patient/Questions: Please [Vocera](#) "ED Research Coordinator" or call a site investigator.

ESETT HOTLINE: 1-855-ESETT-PI (373-8874) for un-blinding emergencies (if iPod is unavailable/malfunctions)

ESETT Note

“.ID” who was enrolled in ESETT for established status epilepticus. Adequate benzodiazepines were given. The patient did not have an opt-out bracelet and was not on the opt-out lists. The patient met inclusion/exclusion criteria.

At 20 minutes post start of study drug:

- (1) There <<were/were not>> any clinically apparent seizures.
- (2) The patient <<was/was not>> responsive to verbal or noxious stimuli

At 60 minutes post start of study drug:

- (1) There <<were/were not>> any clinically apparent seizures.
- (2) The patient <<was/was not>> responsive to verbal or noxious stimuli

Richmond Agitation-Sedation Scale at 60 minutes: <<X>>

RASS: <<+4, +3, +2, +1, 0, -1 -2, -3, -4, -5>>. (See below for scale)

ESETT Study Medication:

Estimated .weight at time of infusion: << >> kgs

Start Time of ESETT Medication: ***

End Time of ESETT Medication: ***

The total infusion volume was << >> mLs.

The study drug infusion rate was << >> mL/hr.

Additional anti-epileptic drugs <<were/were not>> received before study completion at 60 minutes. See MAR for further details.

Safety Monitoring:

Intubation required during enrollment: {Y/N 17494}

Anaphylaxis experienced during enrollment: {Y/N 17494}

Hypotension experienced during enrollment: {Y/N 17494}

RASS Scale:

RICHMOND AGITATION SEDATION SCALE (circle score)



Score	Term	Description
+4	Combative	Overtly combative, violent, immediate danger to staff
+3	Very agitated	Pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated	Frequent non-purposeful movement, fights ventilator
+1	Restless	Anxious but movements not aggressive vigorous
0	Alert and calm	
-1	Drowsy	Not fully alert, but has sustained awakening (eye-opening/eye contact) to voice (>10 seconds)
-2	Light sedation	Briefly awakens with eye contact to voice (<10 seconds)
-3	Moderate sedation	Movement or eye opening to voice (but no eye contact)
-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation
-5	Unarousable	No response to voice or physical stimulation

Hyperspace - 1000006 - DAN COHEN - EMERGENCY DEPARTMENT - PLAYGROUND

Epic Change Dept Patient Care

Buckeye, Woody 2275515 T: 100 °F (37.8 °C) SpO2: 94, Aerosol Mask Weight: 22 kg

6 yrs, Male, 03/27/2009 CSN: 23648 HR: 98 RR: 28 BP: 98/62

CC: Wheezing

Room: None

Problem List
Asthma exacerbation
Asthma
Abdominal pain

Allergies
Codeine
Ibuprofen
Penicillins

Ins: See Facesheet
PCP: PRIMARY CARE CENTER, NOR...
ED Consent: none
MyChart: Inactive

Code St: Inactive

PLAYGROUND Search

Click 1

Click 2

SNAPSHOT

Encounter Snapshot Labs/Results Imaging Referrals Procedures Cardiology Other Orders Medications Episodes Letters Notes OP Reports Misc Reports Media

Chart Review Results Review

Report: SNAPSHOT

Currently admitted as of 8/9/2015

Patient
Woody Buckeye
6 year old male
122 W. 5th
COLUMBUS OH 43211
614-266-7452 (H)
Comm Pref: None

Recent Visits
6/30/2015 Office Visit
6/30/2015
6/27/2015 Office Visit
1/29/2014 Telephone

Problem List Hospitalization Problem
Asthma exacerbation
Asthma
Abdominal pain

Medical History
Asthma

Surgical History
HX ADENOIDECTOMY
HX TONSILLECTOMY
HX TYMPANOSTOMY

Social History
Smoking Status: Never Assessed
Smokeless Tobacco Status: Unknown
Alcohol Use: Not Asked
Drug Use: Not Asked
Sexually Active: Not Asked

Implants
No implants to display

Care Team and Communications

Reminders and Results
None

Health Maintenance
Topic Due Last Communication
HEPATITIS A VACCINES (1 of 2 - Standard Series) 3/27/2010
HEPATITIS B VACCINES (3 of 3 - Primary Series) 12/24/2010
YEARLY WELL CHECK 5/4/2014
INFLUENZA VACCINE 9/1/2015
DTaP/Tdap/Td VACCINES (6 - Tdap) 3/27/2020
MENINGOCOCCAL VACCINE (1 of 2) 3/27/2020
IPV VACCINES Completed
MMR VACCINES Completed
VARICELLA VACCINES Completed

Specialty Comments
No ESETT (POLG Mutation)

Family Comments
None

Preferred Pharmacies
None

Medications
Hospital Medications (0) Outpatient Medications (4) Clinic-Administered Medications (0)
None

Allergies
CODEINE Hives
IBUPROFEN Hives, Rash
PENICILLINS Hives, Shortness of Breath, Rash
Mark as Reviewed Reviewed by RN on 8/9/2015

Report Links
Patient Overview Results
Inbound & Overview Orders MD
Orders RN Disposition
Signouts Order Sets & SmartLinks

Chief Complaint
Wheezing

Most Recent Vital Signs PTA
Most Recent Value
Weight 22 kg (48 lb 8 oz)

Problem List Comment
Problem List as of 8/10/2015 Reviewed: 6/30/2015
Abdominal pain
Asthma
Asthma flare

Medical History
Past Medical Date Comments
History
Asthma

Surgical History
Past Surgical Laterality Last Occurrence
History
HX ADENOIDECTOMY
HX TONSILLECTOMY
HX TYMPANOSTOMY

Home Medications
Last Dose Start Date
albuterol HFA today 04/29/14

DAN COHEN 1:42 PM