

Situation

East Tennessee's regional pediatric population is underrepresented in regards to bed capacity. Just 137 pediatric & 121 NICU beds are available with a regional pediatric population of approximately 250,000.

Pediatric surge capacity consistently ranks high on the coalition's Hazard Vulnerability Assessment (HVA).



Intervention

Train

Training is a priority for both pre and in-hospital providers. Subject matter experts presented on a variety of pediatric specific topics and conducted hands-on trainings. A high-fidelity pediatric simulator was purchased to facilitate simulations.

Equip

- Pediatric evacuation supplies for neonatal units
- Pediatric trauma supply carts to treat a surge of 440 pediatric patients across 21 hospitals in both metro and rural counties
- 332 Pedi-Sleeve pediatric dosing systems (one for every ambulance in our region)
- 1200 Pediatric tourniquets (four for every ambulance in our region)
- 21 Broselow carts (1 for each hospital in our region)

Exercise/Evaluate

A community-wide tabletop exercise (130 participants) focused on the community's ability to manage a surge of pediatric patients without the option of transfer to a pediatric hospital or trauma center. Lessons learned were incorporated into a follow-up full scale exercise with 100% coalition hospital participation. During the exercise, the region simulated a surge of approximately 330 pediatric "victims", with 80% under the age of 8.



Impact

86% of affiliate hospitals and 100% of regional 911 ambulances received critical pediatric surge supplies. Additional areas for pediatric supply and surge improvement were identified and continue to be addressed through KET Coalition initiatives, including a recent project that provided 8 blood control kits to every school in the region.

Simulation training continues for both pre and in-hospital providers with excellent feedback from participants. Specific planning considerations to meet pediatric needs have improved as a result of this project, which has been shared at national and state conferences as a best practice initiative.

