National Pediatric Readiness Assessment in the Country of Georgia

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Introduction

Pediatric preparedness in emergency departments (EDs) in the country of Georgia has not been previously described or systematically assessed. In most hospitals in Georgia, pediatric emergencies are attended by a general pediatrician, while more severe cases are referred to adult intensivists, surgeons, or anesthesiologists. The purpose of this study is to:

- **Measure pediatric emergency preparedness in Georgia** using in situ simulations and surveys of general emergency departments, and
- **Improve preparedness** through gap analysis and action plans.

Materials and Methods

Survey

Assess Preparedness

- ✓ QI
- ✓ Policies
- ✓ Safety
- ✓ Staffing
- ✓ Equipment
- ✓ Coordination

Simulation

Assess Performance

- ✓ 4 standardized patients
- ✓ Debriefing
- ✓ Performance checklists
- ✓ Teamwork/communication

Report Out

Assessment Summary

- ✓ Gap analysis
- ✓ Action plans for improvement

Results

5 EDs visited in Georgia

Total patient volume:
10,000 (1,000 - 16,000)

Pediatric Patient Volume per year

Low (<1,800) – 40%
Medium (1,800 – 3,999) – 0%
Med-High (4,000 – 9,999) – 20%
High (>10,000) – 40%

Pediatric Readiness Survey

Simulated Scenarios

Foreign Body Aspiration

10-month old female, presents with the chief complaint of **stridor/drooling**

Partial obstruction

Complete obstruction

Vitals improve when foreign body removed

Sepsis

10-month old female, presents with **vomiting/fever/lethargy**

Capillary refill 4 sec
normotensive
tachycardia, crying

Stops crying
hypotensive
more tachycardic

Fluids and vasopressors improve blood pressure and heart rate

Seizure

10-month old female, presents with **seizure** after vomiting for days

Generalized seizure,
no response to benzodiazepines,
perioral cyanosis

Glucose 40,
seizure stops with dextrose

Cardiac Arrest

12-month old male, found in bathtub by parent, is **pulseless/apneic**

Pulseless Electrical Activity
requires 2 dose of Epi

Ventricular fibrillation
converts to sinus after defibrillation

Case Performance

Performance Summary

Conclusion

Our results to date suggest that pediatric preparedness in Georgia is consistently low across six hospitals visited to date. Further visits in other areas of the country and the simulation-based assessment will help further characterize this finding, and these assessments form the basis for future improvement efforts in the country.

100KM

Future Work

- Finish evaluating the EDs in the capital - Tbilisi (Goal: 15 EDs)
- Evaluate the EDs nationwide in Georgia (Goal: 5-7 Eds)
- Data Analysis
- Recommendations
 - Nationwide
 - Individual Hospitals