

Illinois EMS for Children Quality Improvement and Indicator Monitoring Report

Title of Project: **Pediatric Seizures**
 Date of Report: May 2, 2006
 EMSC Region: Region 9
 Facility: All Participating Facilities in the Regional CQI Effort

1. Opportunity / Issue / Problem Identification (PLAN)

- Opportunity: Pediatric seizure management in both the prehospital and ED settings
- Problem: ED Neurologic Assessment
 - Level of Consciousness (LOC) documented by the Glasgow Coma Score (GCS) or the AVPU scale on all children
- Desired Outcome: 100% for the indicator

2. Most Likely Causes

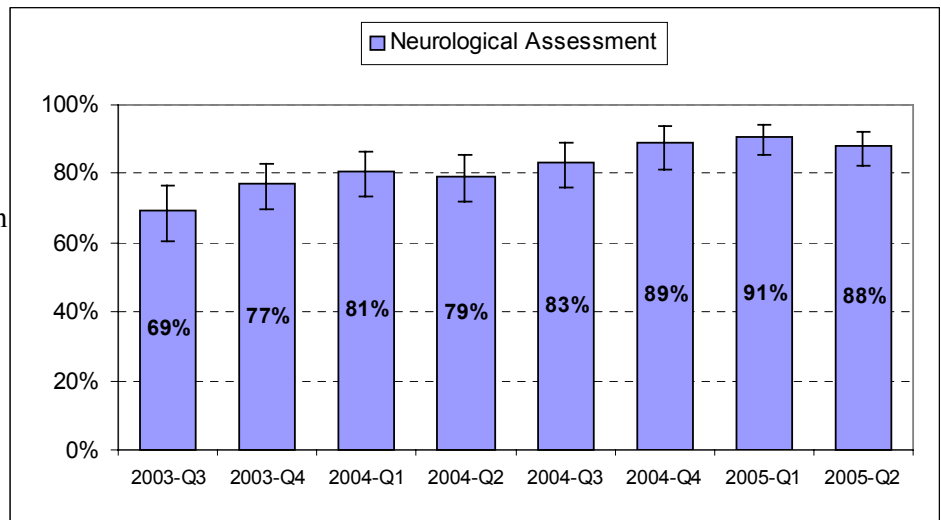
- Lack of knowledge
- Lack of staff awareness of expectations
- Lack of written guidelines, protocols

Region 9 EMSC CQI – Pediatric Seizure Indicator
Regional Totals for 2003-2005

Note: Error bars represent 95% confidence intervals.

3. Solution(s) Implemented (DO)

- Data report reviews
- Collection tool process revision
- Continuing education
- Dissemination of regionwide statement used for re-education
- Sharing of resources
- Physician Involvement
- ED & EMS leadership team buy-in
- Protocol development



4. Data Elements Collected for Evaluation

Evaluation

- Prehospital interventions
 - Oxygen administration
 - Glucose determination
- ED neurological assessment
- ED interventions
 - Oxygen administration
 - Glucose determination
 - IV access
 - Serum electrolytes

5. Results and Data Analysis (STUDY)

- Level of consciousness documented: 19% improvement

Year and Quarter	Records Reviewed by Region				% With Assessment
	Y	N	NA	Total	
2003-Q3	94	42	6	142	69%
2003-Q4	134	40	7	181	77%
2004-Q1	129	31	3	163	81%
2004-Q2	123	32	6	161	79%
2004-Q3	116	23	1	140	83%
2004-Q4	98	12	5	115	89%
2005-Q1	159	16	0	175	91%
2005-Q2	149	20	0	169	88%

Note: % With Assessment excludes NA records.

6. Conclusions and Recommendations (ACT)

- Conclusion: The emergency departments in Illinois EMSC Region 9 have shown progress toward meeting the desired outcome of 100% neurological assessment for pediatric seizure patients. This improvement follows specific educational efforts at individual and regional levels.
- Recommendations: Continue on-going efforts to maintain and promote awareness of appropriate pediatric seizure management. Attempt to further identify barriers to assessment. On-going data analysis.