

Illinois EMS for Children Quality Improvement and Indicator Monitoring Report

Title of Project: **Pediatric Asthma, Respiratory Distress, or RSV**
 Date of Report: February 14, 2006
 EMSC Region: Region 2
 Facility: All Participating Facilities in the Regional CQI Effort

1. Opportunity / Issue / Problem Identification (PLAN)

- Opportunity: Pediatric asthma, respiratory distress, and RSV management in the ED
- Problem: Tracking indications of improvement in respiratory status prior to discharge
 - Pulse oximetry documented on discharge for all children
- Goal: improvement in measuring and recording of discharge SaO₂

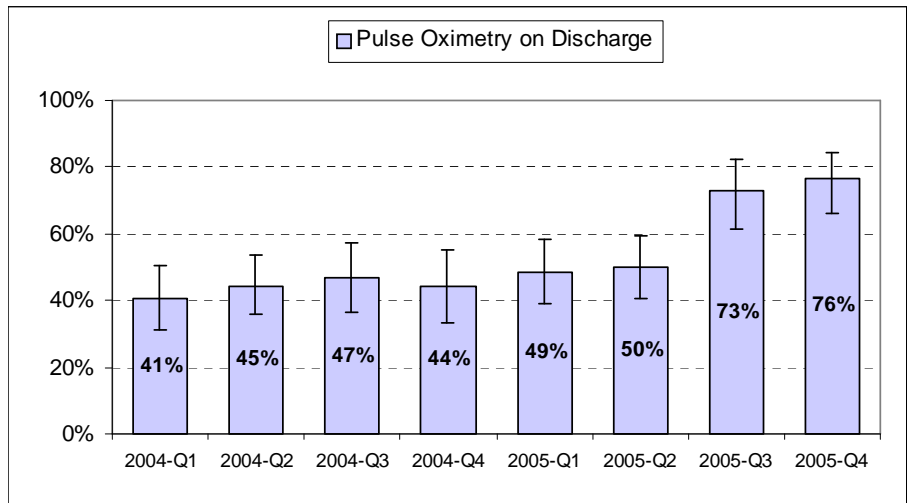
2. Most Likely Causes

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

Region 2 EMSC CQI – Asthma, Respiratory Distress, and RSV Indicator

Regional Totals for 2004-2005

Note: Error bars represent 95% confidence intervals.



3. Solution(s) Implemented (DO)

- Data report reviews
- Collection tool process revision
- Continuing education
- Sharing of resources
- Physician Involvement
- Modifications in electronic medical record
- Protocol development

4. Data Elements Collected for Evaluation

Evaluation

- Compliance at home to medications/treatments
- ED interventions
 - Steroids
 - Nebulizer treatment
- Indications of improvement
 - Lung sounds
 - Pulse oximetry
 - Respiratory effort
 - Peak flow
- Discharge instructions

Year and Quarter	Y	N	NA	Total	% With Pulse Ox on Discharge
2004-Q1	43	63	31	137	41%
2004-Q2	57	71	3	131	45%
2004-Q3	45	51	6	102	47%
2004-Q4	37	47	6	90	44%
2005-Q1	52	55	49	156	49%
2005-Q2	56	56	29	141	50%
2005-Q3	57	21	53	131	73%
2005-Q4	71	22	31	124	76%

Note: % With Pulse Ox excludes NA records.

5. Results and Data Analysis (STUDY)

- Pulse oximetry on discharge: 35% improvement

6. Conclusions and Recommendations (ACT)

- Conclusion: The emergency departments in Illinois EMSC Region 2 have shown progress toward meeting the desired goal of improving the documentation of SaO₂ values on discharge as a measure of respiratory status for asthma, respiratory distress, and RSV patients. This improvement follows specific educational efforts and system modifications.
- Recommendations: Continue on-going efforts to maintain and promote awareness of appropriate pediatric respiratory care. Attempt to further identify barriers to improvement. On-going data analysis.