

Illinois EMS for Children Quality Improvement and Indicator Monitoring Report

Title of Project: **Pediatric Pain Management**
 Date of Report: November 10, 2004
 EMSC Region: Region 8
 Facility: All Participating Facilities in the Regional CQI Effort

1. Opportunity / Issue / Problem Identification (PLAN)

- Opportunity: Pediatric pain management in the ED
- Problem: Less than optimal initial assessment (73%), non-pharmacological intervention (46%), and pain reduction (54%)
- Goal: 100% assessment, intervention, and pain reduction

2. Most Likely Causes

- Lack of staff awareness/compliance
- Lack of written guidelines/protocols
- Documentation issues

3. Solution(s) Implemented (DO)

- Inservice training implemented
- Reminder materials provided
- Guidelines/protocol developed
- Full ED staff involvement in quality assurance
- Age-appropriate pain scales provided
- Documentation computerized

4. Data Elements Collected for Evaluation

Each hospital evaluates 20 charts per quarter of patients age 0-15 with an extremity fracture or extremity sprain/strain/dislocation. Data elements include

- Age, Gender, Diagnosis
- Initial assessment documented
- Interventions documented
- Reassessment documented
- Use of pain scales documented
- Pain improvement after intervention

5. Results and Data Analysis (STUDY)

After 18 months of study, results indicate:

- Initial Assessment: 18% improvement
- Non-Pharmacological Interventions: 26% improvement
- Pain Improved After Intervention: 37% improvement

6. Conclusions and Recommendations (ACT)

- Conclusion: The emergency departments in Illinois EMSC Region 8 have shown progress toward meeting the goals of 100% assessment, intervention, and reduction in pain for children presenting in the ED with with extremity fracture or sprain/strain. This improvement follows a multidisciplinary systems approach and targeted educational efforts.
- Recommendations: Continue on-going efforts to maintain and promote awareness of pediatric pain management. Attempt to further identify barriers to interventions. Continue on-going data analysis.

Region 8 EMSC CQI – Pain Management Indicator
Regional Totals for 2002-2004

Note: Error bars represent 95% confidence intervals.

