

Illinois EMSC

Sample Pediatric Emergency Department Quality Improvement Markers/Indicators

Purpose: *This document identifies key quality improvement areas of focus that hospitals may consider adding to their pediatric quality improvement dashboard. Specific options are outlined within each area of focus, and can certainly be expanded upon.*

Asthma

- Prior ICU admission
- Onset of wheezing, prior treatments
- O₂ sat, BP, HR and RR documented
- Reassessment/documentation identifying progress
- Evaluate criteria for referral to a pulmonologist

Bronchiolitis

- Assess if suctioning done (bulb, deep suctioning)
- Reassessment after suctioning
- Documentation after suctioning to monitor progress

Child Maltreatment

- Screening mechanisms
- Social work evaluation/referral
- DCFS reporting documentation

Diabetic Ketoacidosis (DKA)

- Time to VBG and BS
- IV Fluid bolus appropriate
- K⁺, Na⁺, Ca and Phos documented
- DO NOT administer insulin bolus
- DO NOT administer HCO₃
- Mental status documented
- Serial examinations documented
- Hourly glucose documented
- Documentation of total fluids administered on the child transferred out
- Reassessment/documentation identifying progress

Hematology/Oncology

- Time to antibiotic administration (fever/neutropenia)
- Reassessment/documentation identifying progress

Head Trauma

- Timely and appropriate airway management when GCS < 8
- Child maltreatment assessment completed
- Reassessment/documentation identifying progress
- Documentation of indicator if CT head obtained.

Length of Stay in the ED

- Reassessment/documentation identifying progress
- Workup conducted prior to decision to transfer is reasonable
- Delays after decision to transfer patient

Mock Codes

- Evaluate dosing calculations and procedures
- Evaluate review of appropriate monitoring including end tidal CO₂, if resources are available
- Reassessment/documentation identifying progress
- Evaluate team dynamics (leadership, communication, access to equipment/supplies, use of resources, mutual support)

Moderate Sedation

- Reassessment/documentation identifying progress
- Appropriate monitoring including end tidal CO₂, if resources are available

Neonatal Fever

- Time to antibiotics
- Lumbar puncture
- Reassessment/documentation identifying progress

Pain Management

- Door to first pain medication
- Documentation of relief
- Pulse oximetry
- Reassessment/documentation identifying progress

Patient Safety/Monitoring

- Obtaining accurate weight (in kg only)
- Weight obtained upon ED admission or was verbal weight conveyed by parent
- Vital signs routinely documented on kids, i.e. temperature
- Recognition of abnormal vital signs
- Reassessment/documentation identifying progress
- Monitoring medication error rates
- Process to assure compliance with PCCC/EDAP/SEDP equipment guidelines

Pneumonia

- Complete vital signs documented: Temperature, BP, HR, RR and Pulse Oximetry
- Time to first antibiotic
- Reassessment/documentation identifying progress

Rapid Response Team

- Assess pediatric preparedness (PALS/ENPC/APLS and Pediatric CE completion by team members)
- Reassessment/documentation identifying progress

Sepsis

- Working definition of sepsis
- Identified trigger(s) in sepsis recognition (Vital Signs: Temperature, HR, RR; underlying medical condition(s); mental status; assessment changes)
- Use of order sets
- Compliance and use of sepsis screening protocols
- IV access less than 15 minutes after recognition
- Meet fluid administration of 20 mL/kg in first 20 minutes
- Time to antibiotics within 1st hour (or defined timeframe per institution)
- Contact PICU or tertiary care center as soon as possible for medical direction/guidance

Seizures

- Airway management
- Medication delivery
- Reassessment/documentation identifying progress
- Current medications documented

Sickle Cell fever

- Similar to Neonatal Fever section
- Complete vital signs documented: Temperature, BP, HR, RR and Pulse Oximetry
- Reassessment/documentation identifying progress

Transfers

- Feedback on transfers provided
- Improvements at referring facility driven by transfer feedback

Trauma

- Complete vital signs documented: Temperature, BP, HR, RR and Pulse Oximetry
- Adequate volume resuscitation in patients presenting in shock condition
- Transfer goal within 2 hours after arrival in the emergency department

VP shunt complaints

- Complete vital signs documented: Temperature, BP, HR, RR and Pulse Oximetry
- CT/MRI Head or Ventricles
- Fundoscopic exam
- Shunt series
- Time to neurosurgeon consultation
- Reassessment/documentation identifying progress