#	Measure	Numerator	Denominator	IOM Quality Domain	Donabedian Framework	Diagnosis Category	Measure Level*	Required Data Elements	Notes /Reference
							* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure		
Initial Care for Every Emergency Department Patient									
1.1	Measuring weight in kilograms for patients <18 years of age	Number of visits by patients <18 years of age with a weight in kilograms documented during the current visit	Number of visits by patients <18 years of age	Effective, Safe	Process	General	A, B	Unique visit identifier Weight	This measure will use the operational definition from the American Academy of Pediatrics-sponsored National Quality Forum measure. The NQF measure allows for weight-based estimation (e.g. Broselow tape) for children who are too ill to use a scale. No other estimations permitted due to inaccuracy.
1.5	Presence of a method to identify age based abnormal pediatric vital signs	Presence of a method to identify age based abnormal pediatric vital signs (Y/N)	N/A	Effective, Safe	Structure	General	B		

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							* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure		
Emergency Department Infrastructure and Personnel									
2.3	Pediatric equipment in the ED	Presence of all necessary equipment for the care of pediatric patients as defined by AAP/ACEP (100% of all recommended equipment); report as Yes or No	N/A	Effective, Safe	Structure	General	B		-Drawn from "Policy Statement—Guidelines for Care of Children in the Emergency Department"; Annals of Emergency Medicine and Pediatrics, October 2009: APPENDIX 2:
2.8	Presence of on-site pediatric coordinator(s)	a. Presence of a physician pediatric coordinator b. Presence of a nurse pediatric coordinator c. Presence of both a physician and a nurse pediatric coordinator	N/A	Effective, Safe, Patient-Centered	Structure	General	B		-Definitions of coordinators drawn from "Policy Statement—Guidelines for Care of Children in the Emergency Department": Annals of EM and Pediatrics, October 2009:

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Patient-Centered Emergency Department Care									
3.1	Parent/caregiver understanding of discharge instructions	a. Number of parents/caregivers reporting "not at all" difficult to understand what they have to do to take care of their child's medical problem after discharge b. Number of parents/caregivers reporting "not at all" difficult to understand which symptoms or changes should cause them to return with their child. c. Number of parent/caregivers reporting "not at all" difficult to both questions	Number of parents/caregivers surveyed	Effective, Safe, Patient-Centered	Process	General	A, B	Unique visit identifier Patient disposition Patients/ families surveyed	Use the following questions: a. How difficult was it for you to understand what you have to do to take care of your child's medical problem? b. How difficult was it for you to understand which symptoms or changes should cause your child to return to the emergency department? Scale- not at all difficult; a little difficult; moderately difficult; quite a bit difficult; extremely difficult -Discharge instructions include all verbal and written communications -Off-site survey - phone, mail, email all acceptable -Time frame – 48 hours to 6 weeks after the ED visit; can be administered with other satisfaction questions

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							* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure			
Emergency Department Flow									
4.1	Door to Provider	Time interval between patient presentation and the first time the patient is seen by a provider, excluding triage personnel, who can initiate a diagnostic evaluation or therapeutic plan for all patients <18 years of age (from NQF definition)	Include all visits by patients <18 years of age; Exclusion: Left Without Being Seen patients	Timely, Patient-Centered	Outcome	General	B, C	Unique visit identifier Patient arrival time Provider evaluation time Triage status	-This measure has the same operational definition as the National Quality Forum Measure "Door to Provider" -Report as median time in minutes -Patient presentation is the first arrival time stamp recorded -Definition of provider who can initiate a diagnostic evaluation or therapeutic plan includes attending, fellow, resident or advanced practice nurse -NQF also stratifies measure by Facility Evaluation and Management Code -Measure may be stratified by validated triage score (e.g. ESI)
4.2	Total Length of Stay	Time from arrival to departure for all patients <18 years of age	Include all visits by patients <18 years of age; Exclusions: Left Without Being Seen, Left Without Treatment and Left Against Medical Advice	Effective, Timely, Efficient, Patient-Centered	Outcome	General	A, B, C	Unique visit identifier Patient arrival time Patient left ED time Patient disposition	-This measure has the same operational definition as the National Quality Forum Measure "Time from ED Arrival to ED Departure" -Report as median time in minutes -Patient presentation is the first arrival time stamp recorded -Departure time is defined as the time the patient leaves the ED and not the time a discharge order was written. -Stratify by admitted, discharged and transferred

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						* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure				
Pain and Sedation									
5.5	Reducing pain in children with acute fractures	Number of patients < 18 years of age with pain assessed and reassessed using the same age-appropriate pain scale who show documented improvement in pain score within 90minutes of arrival	Number of patients < 18 years of age with acute long-bone fractures	Effective, Timely, Patient-Centered	Process	Cross-cutting (pain), fractures	A, B	Unique visit identifier ICD-9 code Pain score Pain score assessed time	-Examples of age appropriate pain scores include; NPASS, FLACC, Bieri faces pain scale and verbal analogue scale (VAS).

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						* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure				
Trauma									
7.1	Children with minor head trauma receiving a head CT scan	Number of patients <18 years of age receiving a head CT	Number of children <18yrs of age with head trauma and a Glasgow Coma Score of 14 or 15, obtained using an age-appropriate scale at the time of the ED visit.	Safe, Efficient	Process	Head Trauma	A, B	Unique visit identifier Head CT complete time ICD-9 code Glasgow coma scale score	-Target is a lower rate of CT.
7.3	Protocol for suspected child abuse in place	Presence of a protocol for suspected child abuse that addresses sexual abuse, physical abuse and child neglect (Y/N)	N/A	Effective, Safe	Structure	Child Abuse	B		

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						* (A)Individual Clinician or Group of Clinicians (e.g. nurses, residents, attendings, fellows); (B) Facility (ED); (C) System-Wide Measure				
Respiratory Diseases									
8.1	Systemic corticosteroids in asthma patients with acute exacerbation	Number of asthma patients <18yrs of age receiving systemic corticosteroid during visit	Number of patients with a diagnosis of asthma (493.xx,) treated with >1 inhaled B-agonist, age >=2yrs and < 18 years of age	Effective	Process	Asthma	A, B	Unique visit identifier Patient arrival time Patient left ED time Medication name ICD-9 code Medication receipt time	-Inhaled B-agonist includes albuterol and levalbuterol.
8.4	Evidence based guideline for bronchiolitis	Presence of an evidence based guideline for bronchiolitis treatment (Y/N)	N/A	Effective, Efficient	Structure	Bronchiolitis	B		Reference at:: http://www.pediatrics.org/cgi/content/full/118/4/1774

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Childhood Infections										
10.4	Reducing antibiotic use in children with viral illnesses	Number of eligible patients given antibiotics or discharged with an antibiotic prescription	Number of patients <18yrs of age with an ICD-9 discharge diagnosis of URI, viral illness, viral syndrome, or fever	Effective, Efficient	Process	Viral Illness, URI	A, B	Unique visit identifier ICD-9 code Medication name Medication receipt time Discharge prescription(s)	-Exclude patients with a concomitant bacterial infection diagnosis that requires antibiotics (ICD-9 codes to be provided) -Exclude immunocompromised patients -Goal is for this measure to be low

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Quality and Safe Care for All Patients										
11.3	Return Visits within 48 hours resulting in admission	Number of patients < 18 years of age returning within 48 hours of a prior visit whose return visit results in hospital admission	Total number of visits by patients < 18 years of age	Effective, Safe	Outcome	General	A, B	Unique visit identifier Patient arrival time Patient left ED time	
11.4	Medication error rates	Counts of each of the following types of errors • Medication given but not ordered • Medication ordered but not given • Wrong drug given from what was ordered • Wrong dosage • Wrong or inappropriate drug for • condition • Wrong administration technique • Wrong route • Wrong dosage form	Number of patients < 18 years of age with a medication ordered	Safe	Outcome	Cross-cutting (medications)	A, B		-Report rate of each type of error individually as well as total medication error rate Reference: Marcin JP et al. (2007). Medication errors among acutely ill and injured children treated in rural emergency departments. Ann Emerg Med. 50:361-7