

Pediatric Actual Weights in Kgs

Women & Children's Institute – Date: 5/29/24



Background:

- 1:3 of pediatric patients (0d - <18yr) in ED lack a documented current weight using a measured weight method appropriate to the age of the patient.

Situation:

- Accurate and current weight documentation for all pediatric patients is critical for accurate weight-based calculations of medications and fluid orders. Ensuring that all members of the ED care team are aware of this nonnegotiable step is critical to quality care.
- Providers & Pharmacy may be unaware that an inappropriate method was used to document the patient's weight.
- Inaccurate or missing actual weights cross into surgical and inpatient encounters, and outpatient pharmacy prescriptions, amplifying the risk for significant errors.



Assessment / Actions Taken:

- Inventoried existing equipment, policies, procedures, education, etc. system wide
- Reviewed literature & clinical expert outcomes/evidence
 - Relying solely on changing human behaviors to obtain actual weights in kilograms for pediatric patients presenting for care remains insufficient to reduce the risk of medication and/or fluid resuscitation errors. Additional safety measures are needed to ensure this basic, but critical aspect of care, is routinely accomplished.
- Validated data
 - Data shows only 3 Providence EDs are above 85% compliant at taking and recording pediatric weights in kgs, via an appropriate method. Some facilities have as low as 39% compliance in their EDs
 - The compliance rate changes very little when looking at the data from birth-5yrs vs. birth-18yrs
- Solicited feedback from frontline caregivers
- Formed best practice recommendations around:



Clinical Practice Definition:

"All patients under 18 years of age have a weight obtained and documented in kilograms using an acceptable method upon arrival for all outpatient, inpatient, or emergency department encounters. Exclusions include non-LIP encounters, critically ill/injured patients where obtaining a weight can pose significant harm to the patient, and ambulatory encounters where medication orders or administration do not occur. "

Note: Consider minimal clothing and a dry diaper for patients under 1 year old and/or consider naked weights for patients under 6 months (specifically for those under 10 Kgs).

Acceptable methods = standing, infant/bed/chair scales

Unacceptable methods = stated, estimated, or historical weight

Critically ill/injured patients = Broselow tape with a weight obtained as soon as clinically stable

Newborn and NICU patients = weight taken in grams



Acceptable Equipment

- Standing scale locked in kg
- Infant scale locked in kg
- Bed scale locked in kg
- Chair scale locked in kg (if available)
- *Broselow tape to estimate size of patient while lying in supine position for critically ill/injured patients

NOTE: Not mandating facilities to purchase equipment listed here, this is simply the list of recommended equipment to help achieve best practice



Education / Guidelines

- Recommending each facility includes education in onboarding for RNs and clinical support staff in all care areas
- Recommending each facility ensure agency staff have this in their onboarding
- Recommending each facility defined expectations in policies, procedures, or clinical guidelines

NOTE: Each facility to implement as they see fit; the above recommendations are considered best practices based on clinical expert outcomes and evidence.



Recommendation:

- System wide re-education regarding Pediatric Actual Weights. Education module created in partnership with the Women & Children's Institute and the Nursing Clinical Education & Leadership Council.
- Create new ED Storyboard Best Practice Advisory (BPA) within Epic.



Education

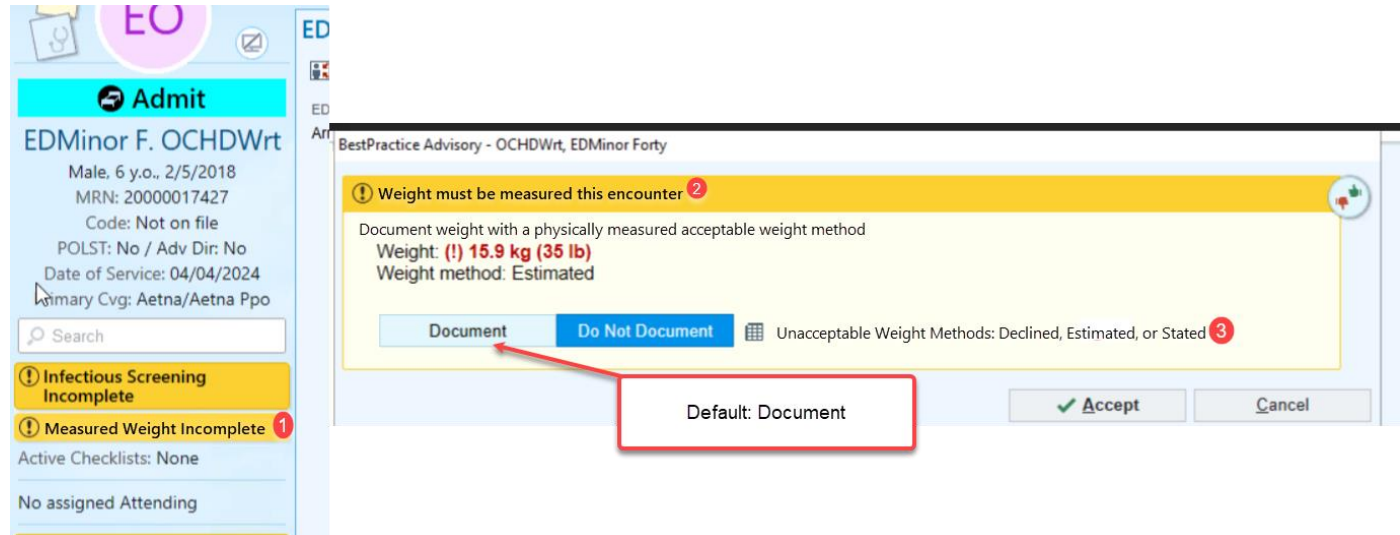
PROV: Obtaining an Actual Weight in Kilograms to Reduce the Risk of Weight-Based Medication Errors Occurring in the ED [[LINK](#)]

- **Course Details:** 15 minutes | complete HealthStream training on demand (use link), or via unit assignment
- **Target Audience:** All applicable caregivers caring for Pediatric Patients within the ED
- **Description:** This course provides you with an understanding of why obtaining and documenting current and accurate pediatric weights in kilograms is critical to quality care. The processes of obtaining accurate and current weights are aimed at reducing the risk of dose-related errors in the emergency department and beyond.
- **Learning Objectives:** Upon completion, participants will:
 - Understand safe clinical practices for weighing pediatric patients in kilograms

- Know what are acceptable methods and equipment standards to obtain pediatric weights
- Understand error prevention strategies such as peer checks, visual cues, and implementation of the STAR tool (these tools will be reviewed with the opportunity to practice within the module)

Epic Solution

- New ED Storyboard BPA for Patients birth - <18yr
- Alert All ED Caregivers if weight Method is missing or an inappropriate weight method was used
- Will check across encounters for a weight method documented within the last 24hr
- Will not be interruptive
- Critical Patients will be addressed as able



- Estimated EPIC go-live is: 9/17/24 (currently running in the background)

Communication & Governance Groups

- The Women & Children's Institute - Pediatric Clinical Specialty Committee (CSC)
 - Pediatric Actual Weight in kg Workgroup
- Pediatric CDT – March 2024
- ED ERT – March 2024
- ED CDT – March & May 2024
- Nursing Clinical Education & Leadership Council – March 2024

Please forward this communication as you see fit.



Working together we can make our ED a safer place for our pediatric patients.

Questions? Contact Rishele.Carlin@providence.org