**Weight in Kilograms QI Initiative**

**April 1, 2021 - March 31, 2022**

**Structural Measure**: Hospital has a policy that outlines standards for weighing pediatric patients in kilograms.

**Process Measure**: Percentage of pediatric patients presenting to the emergency department that are exclusively weighed in kilograms, and whose weight is exclusively documented in the medical records in kilograms.

**Outcome Measure**: Percentage of medication dosing errors identified during the reporting period.

**Key Drivers**:

1. Policy statement: Weight taken and recorded in kilograms at every encounter. Actual weight obtained unless clinically contraindicated. Age and weight used for all resuscitations. Medication administration is based on per kilogram dosing.
2. Infrastructure changes: Scales locked to kilograms only. Scales readily available. Use weight and age-based tapes. Use single formulation for each medication. Could use bed scales but will not be accurate for infants and toddlers.
3. Electronic Medical Record optimization: Alert or hard stop when weight not recorded. Alert when weight does not match patient’s height and age. Weight entry required for resuscitations. Automatic medication dosing calculations. Emergency medication sheets visible in EMR and printable.
4. Education: Care team education (online, in-person meetings, huddles and peer-to-peer) that includes proper use of weight and age-based tapes, necessity of weight measurement for resuscitations, safety issues (e.g., number of reported medication errors), case review, methods of measuring weight, growth charts, clinical pathways, family engagement, and hospital policies.
5. Knowledge reinforcement: Posters in triage and treatment areas. Feedback to care team following chart audits, such as through monthly reports or 1:1 peer counseling.
6. Prescribing patterns and medication administration: Process to track medication dosing and administration in the absence of actual weight in kilograms. Process to track common prescribing or medication administration errors for high-risk conditions. Consider independent verification and/or cross-check process for high-risk patients and medications. Consider defined chart audit. Reference tool for medication dosing. Consider notification system if prescribed medication is not standard practice.
7. Patient and family engagement: Family-centered care elements including use of weight conversion documents during triage with families. Consider process where family advised of medication and/or modification of dose prior to administration. Address language and literacy needs of the family. Consider providing common medication administration guidelines (e.g. acetaminophen and ibuprofen).

**Resources:**

* A3 Roadmap Tool (Providence)
* AAP Endorsement of ENA Position Statement (AAP)
* [A Best Practice in Kilograms (TJC)](https://www.jointcommission.org/resources/news-and-multimedia/blogs/dateline-tjc/2020/06/17/a-best-practice-in-kilograms/)
* Aim Statement Driver Diagram (Providence)
* Ibuprofen-Acetaminophen Dosing Patient Handout - English (Legacy)
* Ibuprofen-Acetaminophen Dosing Patient Handout - Spanish (Legacy)
* [Model for Improvement (EIIC)](https://emscimprovement.center/collaboratives/quality-improvement-science/model-improvement/)
* QI Essentials Toolkit (IHI)
* [QI Tools (EIIC)](https://emscimprovement.center/collaboratives/quality-improvement-science/qi-tools/)
* Targeted Medication Safety Best Practices (ISMP)
* Weighing All Patients in Kilograms (ENA)
* Weight Conversion for Parents (EMSC)
* Weight Conversion for Providers (EMSC)
* Weight in Kilograms SAMPLE Performance Improvement Report (Providence)
* Weight in Kilograms SAMPLE QI Initiatives Reporting Schedule (Providence)

See [PRP website](https://www.oregon.gov/oha/PH/PROVIDERPARTNERRESOURCES/EMSTRAUMASYSTEMS/EMSFORCHILDREN/Pages/PRP-Quality-Improvement.aspx) for non-linked resources.