

ICPS statement on pediatric patient weights in Kilograms

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Dosing complexities unique to pediatrics put children at high risk for serious consequences related to medication errors. Pediatric medication doses are usually weight-based and based specifically upon the patient's weight in **kilograms (kg)**. Weighing and documenting pediatric weights only in kilograms has been strongly recommended and supported in the literature as a strategy to decrease medication errors throughout the patient encounter. All ICPS Health-systems that treat pediatric patients have policies requiring weights in kg.

Despite these measures, there have been recent errors or near misses within ICPS Health-systems due to weights incorrectly obtained or documented. Examples include:

- Weight for drug dose calculation used from prior admission (1.5 kg difference)—med orders needed to be changed to reflect correct weight
- Documented weight was estimated significantly less than actual weight
- Documented weight taken as pounds and recorded as kg—two fold weight error
- Estimated weight documented as 46.6kg (mom had stated patient weighs 46-48 pounds)
- Figures transposed (ex 2.53 documented as 5.23 kg)
- Decimal point error (weight off by factor of 10) (62 kg instead of 6.2 kg)

Errors in documented weight can lead to errors in: medication dosing, nutritional orders and supplementation, and assessment of overall clinical condition

Recommendations:

- Polices should define the way in which a patient's weight is recorded, interpreted and utilized in all clinical systems.
- Weight must always be obtained, entered and displayed in clinical systems in metric units (KG or GM) only.
- Ensure scales measure in metric units and default to metric display only (KG or GM).
- Consider optimal conditions for weighing a patient:
 - o same time of day
 - patients should be weighed minimally clothed
- Except in emergency situations, require that patient weight is documented before ordering or dispensing medications.
- Require pharmacists to independently double-check weight-based dosing calculations.
- Weight based doses should not exceed maximum dosing. Pharmacy to confirm.
- Educate staff about weight-based dosing errors and strategies to prevent them

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