



AB104. 52. An audit of paediatric weight estimation tools for surgical patients in UHL

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Background: Paediatric weight information is vital in paediatric anaesthesia. The gold standard is weight measured less than 24 hrs prior to induction of anaesthesia. There are a number of validated tools for paediatric weight estimation based on age. We have audited two of the most popular weight estimation tools to assess their accuracy in the paediatric population of University Hospital Limerick.

Methods: Data collection was conducted in UHL, where perioperative paediatric records were reviewed. N=61 Data points collected were Age, Gender, Kg. This information was used to estimate weight as per Best Guess and Advanced Paediatric Life Support (APLS) estimation tools. The results

were then compared to actual weight and analyzed for accuracy.

Results: Of the 61 cases, 100% had a documented weight measure in kilograms in the 24 hrs prior to induction of anaesthesia. APLS on average underestimated patient weight by 12.28%. Best Guess on average underestimated patient weight by 1%. Patients weighed more than the APLS estimate for their age 69% of the time. Patients weighed more than Best Guess estimate for their age 42% of the time.

Conclusions: This Audit shows that 100% of paediatric patients were weighed in UHL within 24 hours of surgery. Of the age based weight estimation tools—BEST GUESS was more accurate in the Mid-West population than APLS.

Keywords: Weight; determination; paediatric; surgery

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