

Keeping kids safe during resuscitation

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Resuscitation of critically ill children is a rare (and stressful) event.

There is the potential for drug errors during paediatric resuscitation. They may result from problems with weight estimation, dosing, calculation, dosing, prescribing, communication, and administration errors. Stress and fatigue (eg night shift) also pose significant risks.

“Traditional” teaching regarding paediatric resuscitation is provided by courses such as APLS, which requires candidates to perform calculations on a whiteboard prior to commencing scenarios.

Emergency clinical practice does not always provide an opportunity to “do the maths” before a patient arrives. Attempting calculations of medications during a stressful paediatric resuscitation may lead to significant errors.

This presentations describes the development and preliminary evaluation of a weight-based paediatric emergency medication book. The book was developed by a working group of clinical staff from paediatric wards, emergency departments, anaesthetics and ICU, and provides a weight-based guide to:

- clinical instability/MET call criteria
- medication doses in resuscitation settings (such as cardiac arrest, intubation)
- endotracheal tube size and positioning
- emergency management of seizures, anaphylaxis, asthma, and electrolyte abnormalities.

In rural and remote health care settings, experienced paediatric assistance is often provided by retrieval services, which may be delayed by a number of hours. The provision of this resource has the potential to improve patient safety in this setting.