

App	MEDICATION SUBSTITUTION	App
Last Modified: 2021	Academy of Medicine of Cincinnati Prehospital Care Clinical Practice Guidelines	2025
<b>MEDIC</b>	<p><b>I.</b> For any protocols under the Academy of Medicine protocols that use the following medications equivalent dosages can be substituted as noted below:</p> <ul style="list-style-type: none"> <li>A. Dextrose 50% (50 ml) ----Dextrose 10% in 250ml (give 250ml wide open)</li> <li>B. Dextrose 50% (50ml) --- Dextrose 25% (100ml)</li> <li>C. Epinephrine 0.1 mg/ml (10 ml) --- Epinephrine 1mg/1ml (take 1 ml and dilute in 9 ml of saline and then give IV push).</li> <li>D. Fentanyl 25-100 micrograms --- Morphine 2.5-10 mg</li> <li>E. Midazolam 2mg --- Lorazepam 1 mg IV</li> <li>F. Midazolam 2mg (short acting) --- Diazepam 8mg (long acting) IV</li> <li>G. Ondansetron 4mg IV/IM – Phenergan 25mg IM (should not be used IV)</li> <li>H. Ondansetron 4mg IV/IM – Ondansetron 4mg ODT PO (Melts under tongue)</li> <li>I. Normal Saline (NS) IV – Lactated Ringer’s (LR) IV* <small>See Note B</small></li> <li>J. Calcium Gluconate 3g – Calcium Chloride 1g</li> <li>K. Refer to the Hamilton County Fire Chief’s website for any emergency substitutions.</li> </ul> <p><b>NOTES:</b></p> <ul style="list-style-type: none"> <li>A. Certain drugs cannot be pushed with certain fluids. If you are using an alternative fluid to Normal saline, check compatibility.</li> <li>B. Lactated ringers should be used with great care (if at all) in patients with hyperkalemia, severe renal failure, and in conditions in which potassium retention is present. LR should be used with great care in patients with metabolic or respiratory alkalosis.</li> </ul>	