

## Questions You May Want to Ask.

### Does your current approach...

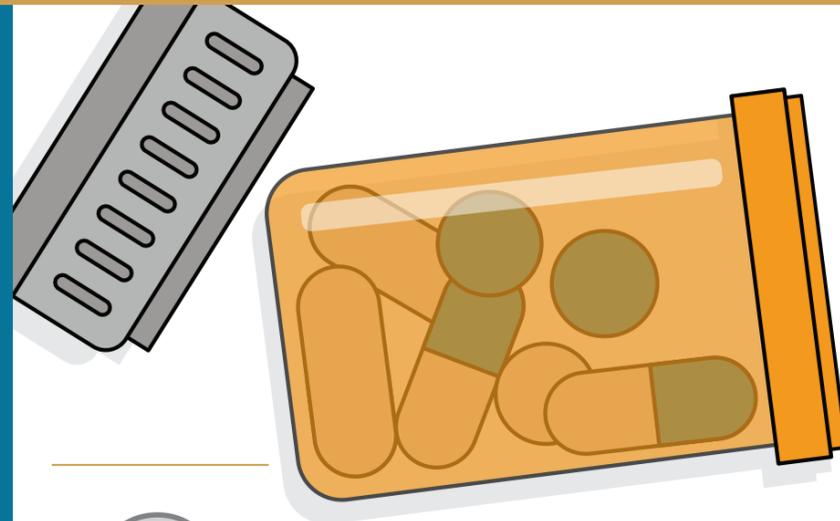
Allow learners to deliberately practice preparing and administering medications?

Encourage active engagement?

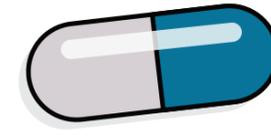
Strengthen critical thinking and decision-making skills?

Promote an authentic learning experience, complete with realistic physiological reactions?

Give learners an opportunity to exercise effective team communication behaviors?



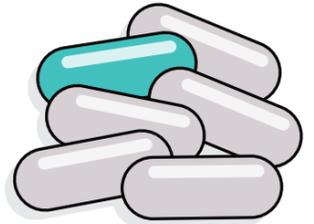
Nearly 1/4 of emergency department visits involve children.<sup>1</sup>



The most commonly reported error in pediatrics is incorrect dosing.<sup>2</sup>



Medication errors affect 1.3 million people annually in the U.S.<sup>3</sup>



In pediatrics, medication errors can be as high as 1 in every 6 orders.<sup>4</sup>



## Mastering the Rx Math

**14%** of doses are converted incorrectly and the maximum dose deviation can reach

**400%**<sup>5</sup>

### Common Pediatric Errors That Can Be Avoided (and how):

**Impaired calculations under stress.** Simulating a realistic environment can help to improve accuracy under pressure.

**Inaccurate weight estimate.** Treating a simulated patient leads to more accurate estimates on real patients.

**Unaided calculations.** Use printed aids (PALS Algorithm Cards and dosage cards) during simulations to prepare for real-life situations.

**Going solo.** Highlight the importance of teamwork, communication, and double-checking calculations during simulations.

## Simulation is Preventative Medicine

96% of students demonstrated correct medication administration, following a complex pediatric simulation (up from 22% before the training).<sup>6</sup>

*Practicing calculations and preparing medications can also increase self-confidence and critical thinking skills.*



The American Academy of Pediatrics (AAP) recommends including the following in pediatric patient safety programs:<sup>7</sup>

- Weight calculations
- Emotional and biological developmental issues
- Patient and family involvement

**9 MILLION** children under 5 die annually worldwide due to disease<sup>8</sup>

**70%**

*of these deaths can be prevented if diagnosed and treated correctly.<sup>9</sup>*

You and your learners can help change this with simulation training.



To learn how to better prepare for pediatric emergencies, visit [Laerdal.com/SimBaby](http://Laerdal.com/SimBaby)

References:

1. Wier, L.M., Yu, H., Owens, P.L., & Washington, R. (2013). Overview of children in the emergency department, 2010. Agency for Healthcare Research and Quality. 2. American Academy of Pediatrics. (2003). Prevention of medication errors in the pediatric inpatient setting. American Academy of Pediatrics, 112(2). 3. World Health Organization. (2017). WHO launches global effort to halve medication related errors in 5 years. Retrieved from <http://www.who.int/mediacentre/news/releases/2017/medication-related-errors/en/> 4. American Academy of Pediatrics. (2003). See reference #2. 5. Morgan, N., Luo, X., Fortner, C., & Frush, K. (2006). Opportunities for performance improvement in relation to medication administration during pediatric stabilization. Quality and Safety in Health Care, 15(3), 179-183. 6. Zahara-Such, R.M. (2012). Improving the accuracy of pediatric medication administration utilizing simulated scenarios with bsn nursing students. Valparaiso University. 7. American Academy of Pediatrics. (2003). See reference #2. 8. The Partnership for Maternal, Newborn, & Child Health. (2011). Child mortality. Retrieved from [http://www.who.int/pmnch/media/press\\_materials/fs/fs\\_mdg4\\_childmortality/en/](http://www.who.int/pmnch/media/press_materials/fs/fs_mdg4_childmortality/en/) 9. Ibid.