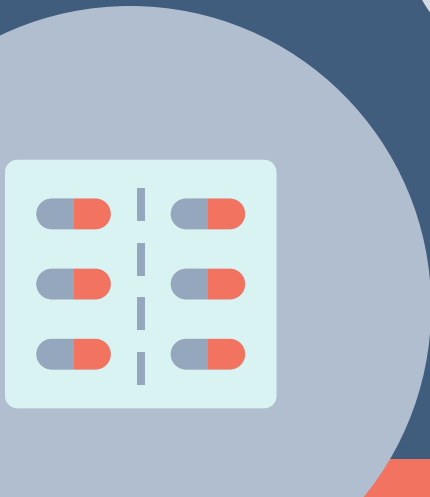




Getting to Zero ADEs:

# TOP 10 REASONS

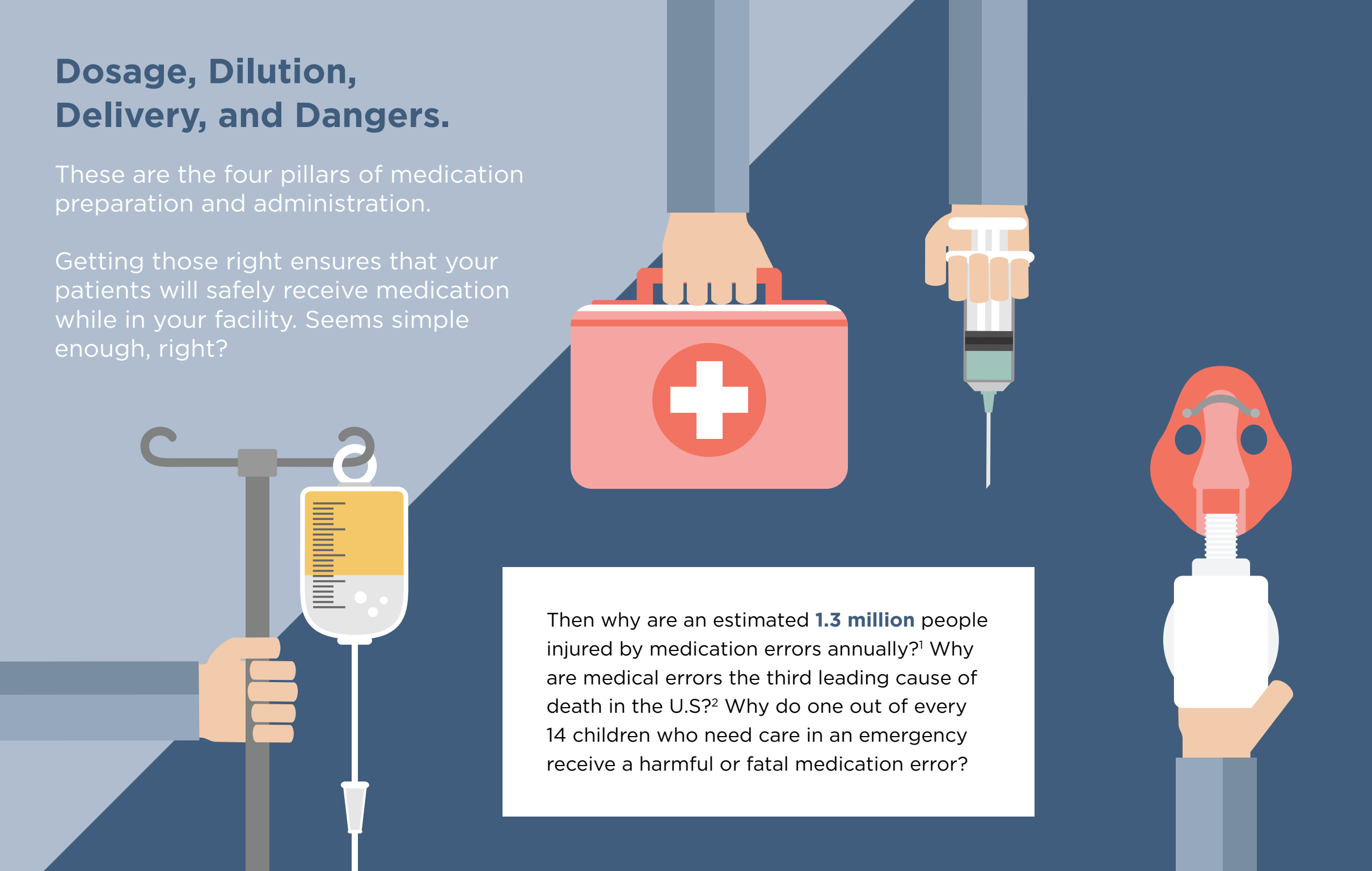
You Need SafeDose<sup>®</sup> in  
Your Organization



## Dosage, Dilution, Delivery, and Dangers.

These are the four pillars of medication preparation and administration.

Getting those right ensures that your patients will safely receive medication while in your facility. Seems simple enough, right?



Then why are an estimated **1.3 million** people injured by medication errors annually?<sup>1</sup> Why are medical errors the third leading cause of death in the U.S?<sup>2</sup> Why do one out of every 14 children who need care in an emergency receive a harmful or fatal medication error?

## Why? Because medication preparation and administration is not so simple after all.

How can these abominable statistics be acceptable in healthcare today? They shouldn't be. A single medication error is one too many which is why you should be striving to Get to Zero adverse drug events (ADEs) in your organization. Yes, it's hard to be perfect, but with patients' lives at stake, it's even harder not to be.

But there is a way to simplify the preparation and administration of medication and begin Getting to Zero. It's called SafeDose® - a web-based, mobile enabled digital dosing and medication administration software reference tool which pre-calculates doses for pediatric, neonatal, and adult patients.

Here are the Top 10 reasons SafeDose should be an integral part of your "Get to Zero" medication administration safety initiative.

<sup>1</sup> WHO launches global effort to halve medication-related errors in 5 years. World Health Organization. 2017

<sup>2</sup> Medical error - the third leading cause of death in the U.S., by M. A Makary, & M. Daniel, M. BMJ, 2016

- 4 Takes the Math out of Medicine
- 5 Increases Confidence When Treating Pediatric Patients
- 5 Accelerates Learning Curve
- 6 Reduces Costs
- 6 Drives Productivity
- 7 Minimizes CMS Scrutiny
- 8 Maintain Joint Commission Accreditation
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## 1. TAKES THE MATH OUT OF MEDICINE

Acute drug administration still involves performing manual math calculations, and having encyclopedic medical reference knowledge that is simply not practical during medical emergencies. According to studies, under normal circumstances the average human math error rate is three percent. That jumps to 25 percent in stressful situations like those found in the average ED. Nurses in these emergency settings are incredibly competent, but it is impossible for them to be 100 percent accurate when making the required calculations in split seconds under extreme duress. SafeDose eliminates that issue allowing nurses to focus on the other critical elements of care during these emergency situations.

THE  
AVERAGE HUMAN  
MATH ERROR RATE IS  
**3%**

THE  
AVERAGE HUMAN  
MATH ERROR RATE  
UNDER STRESS IS  
**25%**



## 2. INCREASES CONFIDENCE WHEN TREATING PEDIATRIC PATIENTS

Because of the lack of experience with pediatric emergencies, many nurses are tentative and need assistance when administering medication to a child. SafeDose solves that problem by providing a tool that tells the nurse exactly what to do and how to do it. This lets them quickly treat the patient without interrupting colleagues or calling pharmacy for guidance. Being able to handle the situation in an organized, calm, controlled way provides a level of confidence for the nurse knowing he or she is administering the correct dosages quickly and efficiently.

## 3. ACCELERATES LEARNING CURVE

One of the challenges in the emergency department is that the demand to get new nurses on the floor quickly has cut back on the time available to conduct a proper orientation. The intuitive functionality of SafeDose helps these staff members get up to speed quickly to effectively handle medication dosing under sometimes chaotic circumstances. This means more nurses on the floor and more time spent with patients.



FINANCIAL  
IMPACT FOR EACH  
ADE INCIDENT:  
**\$5,700**

**214**  
ADEs PER  
**10,000**  
STAYS

EXTRA COST TO  
THE ORGANIZATION:  
**\$1.2 MILLION**

## 4. REDUCES COSTS

In addition to safety considerations, there are also significant adverse financial consequences to in-patient ADEs. According to a study by the Agency for Healthcare Research and Quality (AHRQ), the financial impact to a hospital for each ADE incident is just over \$5,700.<sup>3</sup> Another AHRQ study found there were an average of 214 ADEs per 10,000 stays originating in the hospital. That's almost \$1.2 million in extra costs to your organization directly related to ADEs that will likely not be reimbursed by the CMS or other insurance carriers.<sup>4</sup> Reducing the number of ADEs will more than pay for the cost of implementing SafeDose.

## 5. DRIVES PRODUCTIVITY

With most hospitals struggling with shrinking top and bottom lines, maintaining the same level of services with fewer resources becomes a challenge. SafeDose improves productivity by putting critical medication administration information – dosing, dilution, delivery, and dangers – in the palm of the clinician's hand. Being able to access the information that is needed quickly eliminates the need to run back and forth to a workstation to check for information online or pore through voluminous physical reference material. With SafeDose all the information a clinician needs is readily available, allowing him or her to save nearly one hour per shift. This is an important way to optimize the limited resources of your nursing team.

<sup>3</sup> Reducing Hospital-Acquired Conditions, Agency for Healthcare Research and Quality, U. S. Department of Health & Human Services website.

<sup>4</sup> Statistical Brief #234, Adverse Drug Events in U. S. Hospitals, 2010 Versus 2014, by Audrey J. Wiess, Ph.D, William Freeman, M.P.H, Kevin C. Heslin, Ph.D., and Marguerite L. Barrett, M. S., Healthcare Cost and Utilization Project, Agency for Health Research and Quality, January 2018.



## 6. MINIMIZES CMS SCRUTINY

As the number of ADEs in your organization rises, so does the chances of increased attention from the Centers for Medicare and Medicaid Services (CMS). Surveys from the CMS to address your ADE issues could expand to other areas of your organization which could result in significant reimbursement reduction. Getting to Zero ADEs will keep CMS and other third-party auditors at bay, greatly reducing the possibility of extra regulatory audits. If the non-compliance events are severe enough, the CMS could terminate your participation in Medicare and Medicaid.

## 7. MAINTAIN JOINT COMMISSION ACCREDITATION

If your organization is accredited by The Joint Commission, you can expect an unannounced visit by surveyors at any time over a 39-month period. During the visit, surveyors will select patients randomly to track their experience. Their main focus is on patient safety and quality of care of which medication safety and administration is a key component. Instances of ADEs will certainly raise red flags that could not only jeopardize your accreditation but could also spur additional audits from the CMS.

## 8. BOOSTS HCAHPS SCORES

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is a crucial component of the Hospital Value-Based Purchasing Program that can impact your Medicare reimbursement levels. The survey is designed to collect patient feedback on the care they receive in the hospital. Five questions on the patient survey focus on nurses and physicians describing the rationale for medications, side effects, and treatment in a manner that can be easily understood by patients. SafeDose provides a convenient resource for nurses to educate the patient on the medication being administered to them. Quickly and confidently providing this information to patients will keep your HCAHPS scores high and minimize the chances of having your reimbursement reduced from the CMS.



## 9. IMPROVES COLLABORATION

Implementing SafeDose put nurses, pharmacists, and physicians on the same page when it comes to drug reference material. Everyone using the same app on their smartphones ties them into the same hospital formulary and guidelines as opposed to physicians looking at one reference document on a desktop, the pharmacists looking at a different source in a book, and the nurses referring to still a third reference all for the same medication. Coordinating with a single reference source eliminates confusion and streamlines the process since SafeDose is configured to show only the drugs that are available at your hospital.

## 10. ENHANCES REPUTATION

As the healthcare industry continues its shift to value-based care, patients are being encouraged to take more responsibility for their own healthcare needs. This commercialization means you are in competition with other hospitals for patients. In addition to providing patient safety, Getting to Zero ADEs can become a powerful marketing tool in a competitive environment. Developing a reputation as an institution that has a high safety record when it comes to medication administration safety can make you an attractive option for patients.



## **ABOUT SafeDose® Tools**

SafeDose is an evidence-based clinical support tool for acute medication preparation and administration developed by James Broselow, MD, recipient of the ISMP lifetime achievement award, and creator of the Broselow Tape. The SafeDose System covers both pediatric and adult patients and ensures that the intention of the drug order is realized through proper delivery and administration.

SafeDose Enterprise is available as a web-based application that allows you to scan vials for clinical knowledge, exports a time stamped log to the EMR, displays clinical/medication information at a glance and provides a vital double-check for accuracy. SafeDose Mobile puts the features, functionality, and capability of SafeDose Enterprise into the palm of your hand on any device that is iOS or Android based. SafeDose is currently in use at more than 300 hospitals in the US and our mobile application has more than 200,000 downloads worldwide.

## **ABOUT SafeDose**

SafeDose is dedicated to developing an international standard that ensures simple, safe, and effective acute drug administration. SafeDose® products and services are used by hundreds of thousands of clinicians daily furthering the company's mission to provide needed critical information to those administering acute care and to help them improve treatment, save lives, and simplify their jobs. For more information, visit [www.safedoseinc.com](http://www.safedoseinc.com).

