GUIDELINE FOR MEDICATION SAFETY

The Guideline for Medication Safety has been approved by the AORN Guidelines Advisory Board. It was presented as a proposed guideline for comments by members and others. The guideline is effective September 1, 2017. The recommendations in the guideline are intended to be achievable and represent what is believed to be an optimal level of practice. Policies and procedures will reflect variations in practice settings and/or clinical situations that determine the degree to which the guideline can be implemented. AORN recognizes the many diverse settings in which perioperative nurses practice; therefore, this guideline is adaptable to all areas where operative or other invasive procedures may be performed.

Purpose

This document provides guidance to perioperative team members for developing, implementing, and evaluating safety precautions that may assist with decreasing medication errors throughout the six phases of the medication use process. The medication use process includes procuring medication, prescribing medication, transcribing medication orders, dispensing medication, administering medication, and monitoring patient outcomes. The dispensing of medications from the pharmacy to the caregiver or patient is considered to be outside the role of the perioperative RN and is not covered in this document.

Medication errors can occur at any point in the medication use process and may or may not be detected before administration of the medication. Errors detected before administration are commonly referred to as near miss errors.[1] Reports of medication errors show that errors can be influenced by many factors and may be connected to any person who is involved in the process. Results of medication errors can include substantial threats to patients, increased health care costs, and compromised patient confidence in the health care system.[2]

While the phases of the medication use process are the same in all practice settings where medications are administered, there are unique considerations specific to the perioperative setting, including the following:

- The transcription and documentation phase may be omitted or modified.
- Medication is removed from the original manufacturer's packaging for aseptic delivery to the sterile field.
- An intermediary (eg, scrub person) in sterile attire receives and transfers dispensed medications to the proceduralist or assistant who is in sterile attire.
- Medications dispensed to the sterile field may be handled by multiple individuals before administration.
- Medications may be ordered and administered by multiple health care providers.
- Medications may be labeled one way on the sterile field and a different way off the sterile field.
- Sensory distractions are intrinsic to the environment.[3]

The following topics are outside the scope of this document:

- adverse drug reactions,
- drug-drug interactions,
- dosing recommendations,
- drug diversion prevention,
- medication-specific recommendations for prescribing,
- recommendations for manufacturers (eg, labeling),
- recommendations for specific components of a computerized order entry system,
- interventions that apply to the pharmacy,
- situations involving products contaminated at the manufacturer or compounder,
- regulations and recommendations based on laws that do not apply in the United States,
- antibiotic and anticoagulant stewardship programs,
- situations involving prescription of potentially inappropriate medications,
- dispensing errors,
- management of drug shortages,
- selection and administration of anesthetic agents and medication,
- medication-specific disposal methods,
- the effect of culture on reporting of medication errors,
- off-label use of medications, and
- recommendations for implementation of bar coding.

Evidence Review

A medical librarian conducted a systematic search of the databases Ovid MEDLINE®, EBSCO CINAHL®, Scopus®, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from 2011 through 2016. The lead author requested additional articles that either did not fit the original search criteria or were discovered during the evidence appraisal process. The lead author and the medical librarian also identified relevant guidelines from government agencies, professional organizations, and standards-setting bodies.

Search terms included subject headings such as *operating rooms, drug storage, adverse drug event, medication systems, drug labeling, medication errors, medical waste disposal, compounding,* and *drug administration*. Additional keywords and phrases included *drug diversion, name differentiation, verbal*