



Department of Nursing  
Policy #035

### Medication Administration by Students

<b>Status:</b>	Approved 12.14.17, Revised 12.6.2019
<b>Effective:</b>	12.6.2019
<b>Initiated by:</b>	Bylaws and Policy Committee
<b>Relevant WAC:</b>	WAC 246-840-519

#### Purpose

Medication administration is a common nursing activity that involves risks to patient safety. “Adverse drug events [ADEs] are one of the most common preventable adverse events in all settings of care... Each year, ADEs account for nearly 700,000 emergency department visits and 100,000 hospitalizations. Nearly 5% of hospitalized patients experience an ADE, making them one of the most common types of inpatient errors” (AHRQ, 2019, para. 3).

A review of the literature revealed that four factors including math anxiety were identified as having an influence on a student's drug dosage calculation abilities (Williams and Davis, 2016). These findings indicate that it is imperative for students to remediate when they lack the math skills necessary for safe practice. It is equally as important that students learn medication safety skills in an environment that fosters trust and minimizes stress. Therefore in an effort to ensure safety for patients and students, the Department of Nursing has adopted a policy that promotes the progressive skills acquisition necessary for safe medication administration in a safe environment.

#### Plan

BSN students will be provided with orientation and practice experiences that include demonstration of competency of skills prior to:

1. administering medication.
2. utilizing medication distribution systems.

BSN students will demonstrate competency in accessing and administration of medications as well as medication calculation.

#### Policies and Procedures

1. The nursing student will follow safe medication practices, use good communication skills with patients, peers, trainers, pharmacists and physicians to ensure the patient is receiving optimal care regarding medications.
2. The clinical faculty supervisor is ultimately responsible for the nursing student's safe medication administration and can and should make assessments to allowable practices of the nursing student while they supervise their clinical learning activities.
3. All sophomore students will retrieve, prepare and administer “allowable and permitted” medications under the direct supervision of their clinical faculty supervisor.
4. Junior students will retrieve, prepare and administer “allowable and permitted” medications under the direct supervision of their clinical faculty supervisor until it is determined that they can

safely administer medications by all routes. Once competency has been established, students may give medications with the clinical faculty supervisor or preceptor.

5. During the senior intensive practicum, the designated preceptor is responsible for the nursing student's safe medication administration. Administration of intermittent IV medications by piggyback setup, a volume-control administration set or a mini-infusion pump must be administered with direct supervision of the clinical instructor or delegated preceptor until competency has been documented. Once competency has been established, students may administer oral, intradermal (ID), intramuscular (IM), subcutaneous (SC), continuous and intermittent intravenous (IV) medications independently after double checking the eight rights with the clinical instructor or preceptor.
6. Students may administer blood and blood products only under the direct supervision of a clinical faculty member or designated preceptor as allowed by specific agency policy.

### **Clinical Skills Preparation and Medication Calculation**

Students must be able to perform the designated skills and competencies and pass medication calculation testing for the intended route of drug administration, before administering medication by that route in their clinical experiences. Students are notified in advance of the specific skills and competencies check-offs they are required to perform. Assistance and practice opportunities will be available.

### **Medication Administration Procedure**

1. Each semester students will be evaluated by HU clinical faculty supervisor for medication administration safety. Once the student has been supervised during medication administration by the HU faculty (for each route), the faculty will determine if supervision can be provided by a staff RN/preceptor. The student will be notified when they may be safely supervised by a staff RN/preceptor for medication administration.
2. Students will verbalize the eight rights of medication administration to faculty and/or preceptor before entering the patient room to administer medication.
3. Students will verbalize and demonstrate a safe level of knowledge and skill of every medication to be administered including purpose of the medication, route, dosage, indications, incompatibilities, and side effects.
4. Students will not administer medications to patients until they have verified all medications with the HU clinical faculty supervisor or staff RN/preceptor, and medications are checked against the patient's medication record. Any calculations will be verified by clinical faculty supervisor or staff RN/preceptor.
5. Students will not:
  - a. Administer parenteral cytotoxic drugs
  - b. Set up or manipulate PCA/Epidural pumps
  - c. Access a central line to initiate IV medication drip or collect a blood sample
  - d. Pull cardiac sheaths
  - e. Manage IV infusion of heparin, vasoactive drugs, antidysrhythmic drugs, or insulin
  - f. Alter IV rates on controllers or IV pumps unless clinical faculty are present or staff RN/Preceptor are present and under direct supervision
  - g. Titrate any IV medications

### **Medication Distribution Systems Including Automated Drug Distribution Devices (ADDDs)**

Students are expected to be able to safely utilize medication distribution systems including ADDDs. Students will be able to access electronic programs used to support medication administration, including ADDDs and the electronic medication administration record after the student completes required training approved by Heritage University and the clinical facility. This

training includes a learning module on use of ADDDs and demonstrated use of an ADDD in the nursing laboratory.

### **Medication Calculation**

Students are expected to be able to accurately calculate medication dosages for patients across the lifespan. Sophomores will begin taking the SafeMedicate modules at the start of their Spring term. Students must successfully pass all the SafeMedicate modules including tablets & capsules, liquid medicines, injections and IV infusion prior to administering medications via each route. At the conclusion of NURS 300AL the students must pass the HESI Dosage Calculations Exam with a minimum score of 900. Failure to do so will result in the student not being permitted to begin clinical courses the following semester. See Policy # 19 - Standardized Testing for grading and remediation of HESI exams.

### **Skills Competencies Check-offs**

Students are required to pass skills and competency check-offs prior to administering medications in the clinical area. These include but are not limited to administration of oral, intradermal (ID), intramuscular (IM), subcutaneous (SC), continuous and intermittent intravenous (IV) medications. The skills and competency check-offs begin in the sophomore year. Students are provided preparation materials, as well as practice time in the clinical learning center. At the conclusion of NURS 300AL the students must demonstrate medication administration competency via laboratory simulation.

Prior to administering medications in NURS 209L and 215L, students must demonstrate medication administration competency via laboratory simulation.

Students who miss more than one scheduled semester of clinical nursing coursework for any reason will need to be re-evaluated to determine competency in medication administration. Students might be required to retake courses to ensure competency.

Note: Clinical faculty supervisors reserve the right to give a practice medication safety exam in semesters that do not have a formal exam to assess students' areas of weakness and aid remediation.

### **Reporting Errors and Near Misses**

Student and faculty responsibilities after an incident vary slightly depending upon whether the incident was a near-miss or an error. See Policy #031 - Reporting of Errors and Near Misses.

1. The primary responsibility of the student and instructor is to take care of the patient's immediate medical needs, and notify the patient's primary RN and physician.
2. After the patient's needs have been met, the student and instructor will report the incident to the necessary individuals and complete the facility's required internal incident documentation.
3. The student and instructor will follow Policy #031 - Reporting of Errors and Near Misses

### **Policy Reviewers**

Proposed revisions of this policy should be reviewed by:

1. Nursing Faculty Assembly
2. Policy & Bylaws Committee
3. Curriculum Committee

### **Forms**

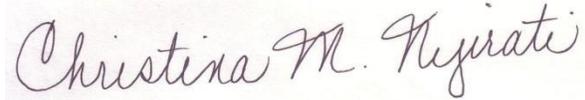
1. Skill check lists for administration of medications
2. Certificate of Completion for ADDD Medication Station Training
3. Heritage University Evaluation of Student Performance in Medication Administration Form

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– see attached

**References**

- AHRQ. (2019). *Medication errors and adverse drug events*. Accessed at <https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events>
- Williams, B. & Davis, S. (2016). Maths anxiety and medication dosage calculation errors: A scoping review. *Nurse Education in Practice*, 20, 139-146.

A handwritten signature in black ink on a light-colored background. The signature reads "Christina M. Kyjraty" in a cursive script.

Signature: \_\_\_\_\_

## Heritage University Evaluation of Student Performance in Medication Administration

Student Name \_\_\_\_\_ Faculty \_\_\_\_\_ Date \_\_\_\_\_

**+ Performs Correctly (PC)**

**- Performs Incorrectly (PI)**

**O Omits Procedure (O)**



Behaviors Evaluated		PC (+)	PI (-)	OP (O)	Comments
<b>Start Time:</b>	<b>Finish Time:</b>	<b>Elapsed Time:</b>			
Performs pre-administration assessment.	Under supervision of clinical faculty supervisor, independently selects correct indices for pre-administration assessment; and correctly performs appropriate pre-administration assessment.				
Practices personal knowing in preparation and administration of medication.	Is mindful and focused during medication preparation & administration; and during pre- and post-administration assessment.				
Practices aesthetic knowing in preparation and administration of medication.	Demonstrates awareness of body mechanics				
	Deliberative in movement that is thought out and planned.				
Implements the eight rights of medication administration.	Selects the <i>right patient</i> <ul style="list-style-type: none"> <li>- Checks the name on the order and the patient.</li> <li>- Use 2 identifiers.</li> <li>- Asks patient to identify himself/herself.</li> </ul>				
	Selects <i>right medication</i> <ul style="list-style-type: none"> <li>- Checks the medication label.</li> <li>- Checks the order.</li> </ul>				
	Selects <i>right dose</i> <ul style="list-style-type: none"> <li>- Checks the order.</li> <li>- Confirms appropriateness of the dose using current evidence.</li> <li>- If necessary, calculates the dose and has another nurse calculate the dose as well.</li> </ul>				
	Selects <i>right route</i> <ul style="list-style-type: none"> <li>- Checks the order and appropriateness of the route ordered.</li> <li>- Confirms that the patient can take or receive the medication by the ordered route.</li> </ul>				
	Administers medication at the <i>right time</i> <ul style="list-style-type: none"> <li>- Checks the frequency of the ordered medication.</li> <li>- Double-checks that you are giving the ordered dose at the correct time.</li> <li>- Confirms when the last dose was given.</li> </ul>				

## Heritage University Evaluation of Student Performance in Medication Administration

Behaviors Evaluated		PC (+)	PI (-)	OP (O)	Comments
Implements the eight rights of medication administration, <u>continued</u> .	Performs the <i>right documentation</i> <ul style="list-style-type: none"> <li>- Documents administration AFTER giving the ordered medication.</li> <li>- Charts the time, route, and any other specific information as necessary.</li> </ul>				
	Administers medication for the <i>right reason</i> <ul style="list-style-type: none"> <li>- Confirms the rationale for the ordered medication. What is the patient's history? Why is he/she taking this medication?</li> </ul>				
	Monitors patient for <i>right response</i> <ul style="list-style-type: none"> <li>- Makes sure that the drug led to the desired effect.</li> </ul>				
Accesses medication from the automated medication dispensing system.	Accurately and safely accesses medications from the automated medication dispensing system				
Correctly performs calculations and measurements related to medication administration.	Correctly reads and measures dosages on a syringe.				
	Uses the appropriate syringe to administer the parenteral dosages based on the dosage calculation.				
	Determines whether a dosage is safe.				
Performs post-administration assessment.	Discusses appropriate timing for post-administration assessment.				
	Under supervision of clinical faculty supervisor, discusses correct indices for post-administration assessment.				