Limited Lay Administration of Medications (LLAM)

Delaware Board of Nursing

2019

The purpose of the LLAM Training Course is to provide approved organizations with a curriculum for LLAM that will assist with public protection. It also provides uniformity in the education of LLAM in various settings. This training course can and should be augmented by the policies and procedures of individual organizations.

Training Course Manual for Instructors

Revised: 05/09/13, 05/29/13, 06/04/13, 06/26/13, 08/28/13, 09/04/13, 11/15/13, 12/11/13, 12/13/13, 12/19/13, 2/25/14, 10/29/14, 10/16, 5/29/19

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Medication Training Course

Historical Overview

Beginning in 1978, the media announced that a nursing shortage in hospitals and nursing homes plagued the country. Three major consequences of the shortage were identified: a decline in the diversity and availability of health services, erosion in the quality of care client's received leading to concerns over client safety, and an increase in healthcare cost.[i] The identified nursing shortage did not develop as a result of a decline or leveling off of the supply of nurses but from the increased demand for nursing services in hospitals and nursing homes in the 1970s.[ii]

To meet the increased need for client care services, the Delaware Board of Nursing received a proposal from the then Delaware Nursing Home Association (DNHA) at its December 1981 meeting. The proposal outlined the collaboration between the DNHA and Delaware Technical and Community College (DTCC). In the proposal, nurses' aides who were currently employed in a nursing home would be offered a course in pharmacology and after successful completion would be able to pass medications. After holding public hearings on the proposal to allow unlicensed personnel to administer medications, the Board declined the proposal.

Prior to 1983, registered nurses were hired to administer medications in Residential Treatment Centers (RTCs) that were licensed by Child Care Licensing for the State of Delaware. A cost cutting decision was made to eliminate RTC nursing positions and have lay staff administer medications. This triggered a strong reaction from the Board of Nursing who maintained that only licensed nurses could safely administer medications. Coincidentally there was spill over into the child day care system where historically, day care providers administered the children's medications. The legislative response came May 10, 1983 by the revision of Chapter 19, Title 24 of the Delaware Code.

A public meeting was held following this amendment where the President of the Board of Nursing (BON) and several board members were asked how to obtain a "board approved medication training program." The President responded that the providers would have to find someone to write the program and then submit the proposed program to the board. This frustrated and even angered some of the individuals present. It was eventually proposed by the Board of Nursing that a committee be formed to develop a core course to meet the needs of residential child care. A committee was formed to develop a program to "assist" clients in taking medications for use by all authorized facilities educating non-licensed people. The program was named Assistance With Self Administration of Medications (AWSAM).

Over the years, the AWSAM program evolved and expanded beyond residential child care and is used in various settings such as group homes, schools and assisted living facilities. In 2011, the Board of Nursing re-convened the AWSAM committee and discovered that the AWSAM program diverged from assisting with self-administration to administration of medications. This identified action prompted the committee to move forward with a new initiative replacing AWSAM. The current program is Limited Lay Administration of Medication (LLAM).

The information that follows provides an overview for LLAM as well as the curriculum for the LLAM program.

LLAM Overview

Under Title 24, Chapter 19, medication administration is the responsibility of licensed registered nurses (RNs) and licensed practical nurses (LPNs). In the case of LLAM, medication administration is not a delegated duty by a RN or a LPN. All individuals acting under the LLAM program are the responsibility of the employer. Completing a LLAM course does not authorize an unlicensed individual to act beyond the scope of the LLAM training.

The purpose of this Medication Training Course is to provide approved organizations with a curriculum for LLAM that will assist with public protection. It also provides uniformity in the education of LLAM in various settings. This course can and should be augmented with the policy and procedures of individual organizations.

It is the mission of Delaware's Board of Nursing to protect the public. In meeting that mission, the Board of Nursing developed this curriculum to ensure that unlicensed individuals meet the minimum educational and skill requirements for safely administering medications. LLAM individuals must be at least 18 years old. Qualifications for a LLAM trained UAP include successful completion of a Board approved LLAM training program conducted in a manner that assures that clients receive safe and competent care, the ability to read, speak and write English; and demonstration of basic math skills. Continued competency by the LLAM individual is essential to ensure public safety and to meet the continued changes being made in the pharmacological management of clients.

This curriculum requires a minimum of 8 hours of didactic training, which will include work in a demonstration of skills in a supervised clinical practicum. The elements of this standardized curriculum include the essential content, demonstration of skills and a competency examination. Content areas in the curriculum include: legal and ethical issues, medication fundamentals, safety, communication and documentation, medication administration, and a practicum. Successful completion of a final comprehensive examination including content and performance of medication administration skills is required for passing the training course.

Authorized Organizations

It is the responsibility of parties interested in using the LLAM program to verify eligibility under 24 Del.C. Ch.19 §1932.

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LLAM Program Definitions

Core Curriculum: An educational course of study developed and approved by the Board of Nursing.

Eligible Programs: Programs specified under 24 Del.C. c.19 §1921 are eligible to use the LLAM program.

Limited Lay Administration of Medications (LLAM): a process by which LLAM trained unlicensed assistive personnel (UAP) help clients take and/or receive medication as ordered for the client by a licensed healthcare practitioner authorized to prescribe.

LLAM Trained UAP: unlicensed assistive personnel (UAP) trained in a Board of Nursing approved Limited Lay Administration of Medications (LLAM) course.

Medication: a substance intended for use in the diagnosis, cure, mitigation, treatment, or prevention of any illness, condition, or disease in humans.

Medication Administration: the safe physical application of the medication into or onto the body, according to practitioner's instructions, by licensed nursing personnel, LLAM trained unlicensed assistive personnel (UAP), or others as allowed by local and state laws and program regulations.

Medication Container: Refers to the container closure system and labeling, associated components (e.g., dosing cups, droppers), and external packaging (e.g., cartons or shrink wrap). Only the pharmacy container or manufacturer's container for over-the-counter (OTC) medications with an original label and specific directions may be used.

Medication Error: Any preventable event that may cause or lead to inappropriate medication use or client harm while the medication is in the control of the UAP. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labeling, packaging and nomenclature, compounding, dispensing, distribution, administration, education, monitoring and use.

Medication Administration Record (MAR): is the written record that lists the client's name; date of birth; allergies; names of all current, ordered medications; reason the medication is given, as appropriate; prescribing or primary practitioner; special instructions; and the dosage, route(s) and time(s) of administration for all medications. The MAR is signed/initialed after each client has taken and/or received the appropriate medication.

Module: A Board of Nursing approved educational training unit that is eligible program specific and used in addition to the core curriculum.

Unlicensed Assistive Personnel (UAP): Individuals who help clients with physical disabilities, mental impairments, and other health care needs. They provide care for healthcare consumers in need of their services in a variety of approved settings. UAPs do not hold a license or other mandatory professional requirements for practice though many hold various certifications.

Legal and Ethical

Objective	Content Outline	Evaluation Criteria
The Learner will: Describe the rights of the client.	Rights of Individuals • Maintaining confidentiality • Respecting client's rights • Respecting client's privacy • Respecting client's individuality and autonomy • Communicating respectfully • Respecting the client's wishes whenever possible • Right to refuse medication • Right to be informed about medications and medical care	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations, or other appropriate measure for achieving outcomes. Before direct client contact, skills lab exercises and evaluations are recommended for safely administering a medication.
The Learner will: Identify when medications are not be administered. Recognize when and how to report errors. Recognize what should be reported to the supervisor/designated person per facility policy.	Medication Administration Policies The LLAM trained UAP shall report to the supervisor/designated person: • Signs or symptoms that appear life-threatening • Events that appear health-threatening Medications that produce no results or undesirable effects as reported by the client	
The Learner will: Discuss boundaries between the LLAM trained UAP and the client.	Setting appropriate personal and professional boundaries.	

Health support and care for individuals in facilities outlined in Chapter 19, Title 24 often come from unlicensed individuals. A LLAM trained UAP has the legal and ethical obligation to care for clients in a manner that is respectful, caring and supportive and does not violate the client rights.

Summary of Client Rights

The right to give or withhold authorization of disclosures

The client generally has the right to control who has access to confidential information except as otherwise provided by law. The client needs to give specific authorization or permission to allow a third party to have access to confidential information.

The right to privacy

Only persons directly involved in the care of the client's health problem should have access to private information. LLAM trained UAPs should protect information revealed during the administration of medication and the care of clients. The right to privacy and confidentiality includes but is not limited to written and/or electronic records. The LLAM trained UAP should follow the policies and procedures of the employer with regard to protecting client confidentiality.

The right to autonomy

Autonomy is the right of a client to determine what will be done with his or her body, personal belongings, and personal information; this concept applies to any adult person who is mentally competent.

The right to be informed

The client has a right to information about his or her medical diagnosis, treatment regimen, and progress. This allows the client to make appropriate, informed decisions about his or her health care. This is outside the scope of the UAP completing LLAM training. The LLAM trained UAP should defer to the policy and procedures of the employer regarding any questions or concerns the client may have regarding their medical condition, treatment and progress.

The right to due process

When interacting with clients, the LLAM trained UAP should always follow the employers policies and procedures. Due process is an established course for procedures designed to safeguard the legal rights of the individual. It is extremely important that an established course be followed so that all clients are treated equally and receive attention for their individual needs.

The LLAM trained UAP should follow the policies and procedures of the employer with regard to providing information to clients and in protecting the confidentiality of clients.

The use of standard protocols and forms can help ensure that important tasks are not omitted. Documentation is also a crucial part of due process. LLAM trained UAPs should follow employer policy and procedures for documenting:

- client requests for information;
- concerns about autonomy; and
- decisions about disclosure of client information.

The legal obligation of the LLAM trained UAP is to stay within the defined role of the LLAM UAP in the delivery of medication and to follow the policy and procedures of the employing facility. The following acts may not be completed by a LLAM trained UAP:

- convert or calculate medication dosage

- administer medication via parenteral routes and through nasogastric, gastrostomy or jejunostomy routes (i.e. tubes)
- assess a client for the need for or response to a medication
- use nursing judgment regarding the administration of PRN ("as needed") medications
- administer medication to a client who is unstable or has changing needs

Ethical Responsibilities

The ethical responsibilities of the LLAM trained UAP are to respect the rights of the client and acknowledge that the client has a right to say no. Medication delivery should never be forced, as a replacement of care or out of frustration with a client. LLAM trained UAPs are obligated to report any request to participate in practices outside of the legally defined role, any suspicion of abuse or neglect of the client, and any medication errors.

In all cases, it is the obligation of the LLAM trained Unlicensed Assistive Personal to do no harm.

Maintaining Boundaries

Care to a client can be compromised because objectivity diminishes to the same degree that feelings– both positive and negative – develop between a client and a LLAM trained UAP. LLAM trained UAPs must take care to develop a relationship with clients that is respectful and caring, while maintaining professional boundaries.

In understanding boundaries, it is important to differentiate a boundary crossing from a violation. A boundary crossing can be a simple gift as a box of cookies to show gratitude for care provided. This type of boundary crossing is usually quite benign but the LLAM trained UAP should be aware that a simple act, such as a box of cookies, is a crossing and has the possibility of leading to boundary violations.

Boundary violations are those crossings which violate the professional relationship between the client and the LLAM trained UAP. A relationship between a client and a LLAM trained UAP should be friendly, caring and professional while remaining within the bounds established by the purpose of the relationship.

Examples of Possible Boundary Crossings

- Attend/frequent same places
- Sharing mutual friends or people in common
- Self-disclosure
- Establishing dual relationships (professional/social relationships)
- Hugs/touching

Examples of Boundary Violations

- Giving or receiving inappropriate gifts
- Ignoring established conventions by making exceptions for certain clients
- Assuming a client's values are the same as your own
- Excessive self-disclosure or self-disclosure that is not for the purpose of helping the client
- Intruding verbally on your client's personal space. This may include breaching client confidentiality, making value judgments about your client's body or lifestyle, probing for

inappropriate personal information, using intimate words (such as dear or darling) or allowing their use by your client
- Inappropriate touching

If a LLAM trained UAP feels uncomfortable with the client's behavior, gift giving or any other boundary violations, it should be brought to the attention of the designated person and documented per the facilities policies.

Medication Fundamentals

<table>
<tr><th>Objectives</th><th colspan="2">Content Outline</th><th>Evaluation</th></tr>
<tr><td>The Learner will:

Describe the different documents on which medications can be ordered and recorded.

Identify components of a medication order.

Discuss the various tasks to be performed for medications to be safely stored.

Identify conditions necessitating disposal of medication.</td><td colspan="2">Medication documentation system

• Documentation of orders onto agency's medication document
• Medication administration record (MAR)
• Controlled substance record

Medication Storage

• Storage area
• Medication room
• Medication cart

Disposal of outdated, contaminated or unused medication</td><td rowspan="3">Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations or other appropriate measure of achieving outcomes.

Before actual client contact, skills lab exercises and evaluations include:

• comparing the MAR with the medication container
• differentiating between the systems of measurement to demonstrate the difference between household spoons and accurate units of measurement in both the apothecary and metric systems
• observing the different forms of medications</td></tr>
<tr><td>The Learner will:

Describe systems of measurement.

Demonstrate basic math skills.</td><td colspan="2">LLAM does not allow for conversion of medication dosages by the LLAM trained UAP.

• Apothecary's system
• Metric system
• Addition
• Subtraction</td></tr>
<tr><td>The Learner will:

Identify different forms of medication.</td><td>Liquid

• Aerosol
• Inhalant
• Drops
• Elixir
• Spray
• Solution
• Suspension (needs mixing/shaking)</td><td>Solid and Semi-Solid

• Capsules
• Tablet (dissolve)
• Caplets
• Time-released or covered with a special coating (not to be crushed or opened)</td></tr>
</table>

	• Syrup	• Lozenges (dissolve) • Ointment • Paste • Powder • Cream/Lotion • Suppository • Transdermal patch	

Medication Documentation

The practice of administering medication involves providing the client with a substance prescribed and intended for the diagnosis, treatment, or prevention of a medical illness or condition. Documentation of medication administration is an important responsibility. The medication administration record tells the story of what substances the client has received and when. Like other health care records, it is also a legal document.

NOTE: If it is not documented, it was not done!

A medication administration record (MAR) may be pre-printed by the pharmacy or generated by the facility. The MAR documents:

- Each medication prescribed to the client
- Instructions from the prescription container label
- Date and time the client received the medication
- Any additional information required by facility policies

The initials of the administering LLAM trained UAP or healthcare practitioner should be documented on the record next to the appropriate order.

Other information may need to be documented such as:

- location and severity of pain when administering a pain medicine (analgesic)
- any unusual behaviors or change in physical appearance of the client
- client refusal of medication
- medication errors including omissions (medications that are missed/not given for some reason). Omissions of medications are considered errors and need to be documented.

The LLAM trained UAP should follow the policy of the facility when reporting any type of medication errors.

New Medications (or changes in instructions for administering current medications)

LLAM trained UAPs should follow the policy of the facility when a new order is prescribed or current medication administration instructions are changed. The new medication or changed medication instructions are promptly added to the medication administration record (MAR). An order may cover changes in:

- Medication
- Dosage
- Time medication is given
- Frequency (number of times medication is given)
- Route of administration

A medication may be discontinued which means it will no longer be given to the client. A medication should be taken out of service, disposed of per facility policy, and the MAR should be clearly marked to indicate the medication is no longer to be given.

Documentation of the date of discontinuation of medication and start date of any other changes to medications should be documented on the MAR.

If orders are illegible, ambiguous, or confusing, the prescribing practitioner should be promptly contacted to clarify the order before any medication administration occurs. Facilities have specific policies and procedures for checking medication orders and ensuring proper transcription from label to MAR. Facilities should also have policies/procedures for renewing or discontinuing medications. Poor penmanship, misunderstanding of penmanship, and errors in transcription often contribute to medication errors.

Controlled Substances

A controlled substance is generally a drug or chemical whose manufacture, possession, or use is regulated by federal and state governments. Prescribed controlled substances are subject to legislative control but may be dispensed by a licensed healthcare practitioner with prescriptive authority.

Administration of controlled substances to the client and the inventory of the controlled medication is documented on the controlled substance record (CSR) which is a legal document. The CSR documents the:

- Name of client
- Prescription number
- Name of medication
- Strength of medication
- Beginning quantity
- Quantity used
- End quantity

The initials of the LLAM trained UAP or other health care practitioner administering medication should be documented on the record next to the appropriate order. The count remaining after administration should also be documented on the record.

The amount of the controlled substance(s) should be verified at the beginning of each shift. Any discrepancies must be reported to facility administration, documented and reconciled. The LLAM trained UAP should follow the policy and procedure of the facility for correcting or reporting any discrepancies in the controlled substance medication record.

Medication Storage

Proper storage is essential to prevent contamination and deterioration of medications. In addition, securely stored medication denies access to those not authorized to

access medications. Employers are responsible for providing proper storage and security. LLAM trained UAPs need to understand the importance of storage requirements. The proper environmental control (i.e., proper temperature, light, and humidity, conditions of sanitation, ventilation, and segregation) should be maintained wherever medications and supplies are stored.

All medications must be stored in their original container. Medication containers are designed to protect the medication from breakdown and damage, and should be stored in accordance with the directions on the medication label or package insert.

- Keep the container well closed to protect the medication from changes in the atmosphere, moisture, heat and light.
- Medications should be stored in air tight container to protect from moisture.
- Protect from light because medications may deteriorate when exposed to light or heat.
- To maintain efficacy, some medications are required to be stored at a certain temperature.
  - Medications must be stored at room temperature (59-86 F) unless otherwise indicated by the labeling.
  - Medications requiring refrigeration should be stored between (36-46F) unless otherwise indicated by the labeling.

The proper environmental control (i.e., proper temperature, light, and humidity, conditions of sanitation, ventilation, and segregation) should be maintained wherever medications and supplies are stored. Products for internal use must be stored separately from products for external use.

Some medications have additional precaution labels on the container. These labels warn of potential client interactions with the environment and/or foods when taking certain medications. For example, a precaution label may read “Do not take with grapefruit juice and avoid direct sunlight.”

Medications bearing an expiration date should not be dispensed or distributed beyond the expiration date. Expired, discolored, damaged, or inappropriately labeled medications should be documented on the MAR and/or controlled substance medication record per the policy and procedure of the facility.

For over-the-counter (OTC) medications, the information concerning how to use the medication and how to properly store it is printed on the package or container. Also, any pharmacist can provide answers to questions on use and storage.

To ensure that medications are secure when storing, the following should be followed:

- Any storage area (including refrigeration) or medication room should be accessed only by those employees authorized to do so.
- Any storage area (including refrigeration) or medication room must be securely locked.
- Controlled substances should have added security. Any storage unit (cupboard, container), including refrigeration, that holds controlled substances should have a separate lock from the general medication storage area.
- It is recommended that all medications be stored under double lock as additional protection from unauthorized access.

When administering medications from a medication cart the following guidelines should be followed to ensure secure medication distribution:

- Never leave medications unattended.
- Medication cart should be returned to the secure storage area if leaving it temporarily unattended during administration times.

Disposal of Unused Medications

Follow facility policy and procedure for disposal of medications that are no longer ordered to be administered to the client. Medications that are being discontinued may be returned with appropriate documentation to the pharmacy for disposal whenever possible. Alternatively with two people present, medications may be discarded on site. Both observers should sign a medication record which includes documenting the date, time, medication quantity, prescription number, client name and the method of disposal.

Disposal of medications: Liquids, creams, suppositories, ointments and crushed pills/tablets may be disposed of in kitty litter or may be discarded directly into a bio-hazardous container. All disposed products should not be accessible to clients.

NOTE: ALL controlled medications, including suppositories,
should be destroyed on site by two personnel following employer policy and procedure.

Measuring Medication

Liquid medicine must be measured accurately in order to get the right dose. Some of the most common measuring devices include: dosing cup, dosing syringe, measuring spoons and dosing spoon. Be sure to use the right device in order to get the right dose.

Check the markings carefully on the measuring device. Most liquid medicine is measured by teaspoon (tsp) or milliliter (mL).

2.5 mL = 1/2 teaspoon (tsp)

5 mL = 1 tsp

15 mL = 3 tsp = 1 tablespoon (tbl or Tbsp)

30 mL = 2 Tbsp = 1 fluid ounce (oz)

DO NOT USE kitchen tableware instead of an accurate measuring device. An error in measuring liquid medicine can result in the wrong dose—either too much or too little of the medicine.

For example, a large kitchen spoon can hold twice as much liquid as a small kitchen spoon. Use the measuring device provided with the medicine. If the liquid medicine doesn't come with a measuring device, ask for one at the pharmacy.

Be accurate, measure liquid medicine at eye level, and never guess at the dose. This is especially important when giving liquid medicine to children.

Forms of Medication

Liquid

Aerosol: same as inhalant.

Drops: sterile solution that is administered directly in the eye, outer ear canal or the nose.

Elixir: medication dissolved in alcohol and water.

Inhalant: medication which is breathed or sprayed into the nose or mouth.

Spray: medication which is inhaled or sprayed into the nose or mouth. It may also be sprayed onto the skin.

Solution: medication that is completely dissolved in a water solution.

Suspension: finely crushed medications held in liquid. Requires mixing/shaking before administration.

Syrup: liquid medication that is mixed with a sugar and water solution.

Solid and Semi-Solid

Capsules/Caplets: gelatin coated powders or tiny time released beads as in spansules. Caplets have the medication in a very highly compressed form with the outer covering resisting digestion until reaching the intestines. These should not be crushed or mixed with food.

Tablets: pressed powders which are usually acted upon in the stomach.

Enteric Coated Tablets: hard and often colored coated tablets (similar to the M&M® candies). This is to prevent them from releasing the medication too soon in the gastro-intestinal tract and causing irritation. Enteric coated tables should not be crushed.

Time-released: capsules/tablets/caplets that are covered with a special coating which only dissolves when it reaches the intestines. These medications are not to be crushed or opened.

Lozenge: a medicated tablet that is allowed to dissolve in the mouth.

Cream: a water soluble, semisolid mixture applied externally to the skin.

Lotion: a liquid suspension or solution for external application to the body.

Ointment: a semisolid substance with an oil base applied to the skin or mucus

Paste: a soft semi-solid medication that is applied to the skin.

Powder: ultra-dry medication particles. Depending on use, can be dissolved in water or mixed with food to be taken immediately.

Suppository: large bullet shaped tablets administered either vaginally or rectally. Designed to melt at body temperature.

Transdermal patch: a medicated adhesive pad that is placed on the skin to deliver a timed-release dose of medication through the skin into the bloodstream.

Prescription and Over-the-Counter Medications

A 'practitioner' is any person who is authorized by law to prescribe drugs in the course of professional practice. Licensed practitioners include physicians, dentists, podiatrists, advanced practice nurses, and other individuals authorized under Delaware law to diagnose and prescribe medication to humans.

Only a licensed pharmacist, practitioner, or registered nurse is authorized to dispense medication in the state of Delaware.

LLAM trained UAPs who successfully complete a Delaware Board of Nursing approved course can administer medications. The LLAM program does not allow for administration of injectables with the exception of an epi pen and glucagon in life saving emergencies. This may not apply in all settings.

For the purposes of this course, a medication is a substance intended for use in the diagnosis, cure, mitigation, treatment, or prevention of any illness, condition, or disease in humans. There are two types of medications: prescribed and over-the-counter.

A prescription medication is a drug that requires an order/prescription by an authorized licensed healthcare professional and labeled in accordance with the requirements of the statutes and regulations of this State and the federal government. These medications include controlled and non-controlled substances.

Controlled substances are drugs which have been declared by federal or state law to be illegal for sale or use, but may be dispensed under a licensed professional authorized to prescribe. The basis for control and regulation is the danger of addiction, abuse, physical and mental harm (including death), the trafficking by illegal means, and the dangers from actions of those who have used the substances. These medications are stored under double locks and must be inventoried and accounted for in compliance with federal and state laws, as well as facility policy.

Over-the-counter medications (OTC) are medications or drugs which may be sold without a prescription and which are packaged for use by the consumer and labeled in accordance with the requirements of the statutes and regulations of this State and the federal government. Examples: aspirin, diaper rash cream.

A prescription is required for all medications, both prescribed and over-the-counter, for clients in the facilities outlined in Title 24, Chapter 19. A prescription is a written order from the practitioner, for the preparation and administration of a medicine or other treatment.

Information from the prescription is transferred to the medication container along with storage instructions such as 'keep refrigerated'. The label on the medication container will have

- the name, address, and phone number of the prescribing practitioner and the pharmacy filling the prescription
- prescription number, date, client's name, name of the medication, the directions for use, the dose, the route by which the medication is given, the amount of medication issued, refill information

In addition, a drug information or counseling sheet should be provided with each new prescription and requested with additional refills. If there is a change in the frequency or dosing amount, the label on the existing container must be changed by the pharmacist, prescribing practitioner or nurse within 72 hours of the practitioner's change in instructions.

Terminology

Objectives	Content Outline	Evaluation
The Learner will: Recognize that the same medication may have different names. Identify accepted abbreviations. Recognize the abbreviations that should not be used. List the different effects medications can cause, locally and systemically. State the purpose for which medication is given.	Terminology • Medication names ▪ Generic ▪ Brand or trade name • Abbreviations ▪ Use standardized abbreviations, acronyms and symbols ▪ Do not use abbreviations that should no longer be in use Medication Basics Therapeutic effects (desired effect) Side effects (reaction not part of main effect desired) Precautions (anticipate or prepare for conditions that may change effect of drug) Allergic reactions (life threatening – anaphylaxis) Adverse reactions (unpleasant or serious side effects, other than desired)	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations or other appropriate measure of achieving outcomes. Before actual client contact, skills lab exercises and evaluations include: • practice with terminology abbreviations "When in doubt, write it out" Provide a list of standard and accepted abbreviations. Develop matching quiz.

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Brand versus Generic

The Food and Drug Administration (FDA) approves the use of both brand name and generic drugs. What makes them different is brand name drugs are patent protected and are marketed under a manufacturer's brand name. Generic drugs have the same active ingredients, strength, and dosage form as brand name drugs. They also provide the same effectiveness and safety as its brand name counterpart but generally cost less.

Examples of brand name drugs and their generic equivalent:

Brand	Generic
Coumadin®	warfarin
Lasix®	furosemide
Motrin®	ibuprofen

Abbreviations

Abbreviations are commonly used by prescribers to communicate in a way that is universally understood by others in the medical profession. Many medical conditions and drugs have long complicated names that would take time to completely write on a client's chart or prescription. Abbreviations are used to save time and space. See Appendix A.

Responses to Medications

Desired Effect/Therapeutic Effect: good response, mission accomplished, the medication is bringing desired results.

Side Effects: known reactions to the medication which may or may not be desirable. Report observations of physical, mental, and behavioral changes to the facility supervisor, practitioner/pharmacist/nurse.

Precautions: caution labeling on the medication container. These labels warn of interactions with the environment and/or foods. For example, do not take with grapefruit juice or avoid the sun.

No Response: medication does not seem to be working

Allergic Reactions: medication that causes rashes (sometimes with itching), hives, or fatal shock. An allergy can occur several days after a client has been on a medication or from a medication the client has had many times before.

NOTE: If the client is having trouble breathing, call 911
and notify appropriate supervisor/personnel per facility policy.

Adverse Reaction: this is different from a side effect. Adverse reactions are negative responses to medications. An adverse reaction is an injury caused by the drug and any harm associated with the use of the drug (at normal dosage and/or due to overdose). LLAM trained UAPs are not expected to identify adverse drug reactions but instead must immediately report any changes in mental status or physical behavior.

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Use, Misuse, and Abuse

Use of medicines requires that at the right time the right client receives the right dose of the right medication by the right route and then it is properly/promptly documented.

Misuse of medications occurs when medication is not taken as ordered by the prescribing practitioner, and results in the improper action in any of the six rights of medication administration.

Abuse is the unauthorized misuse of a medication. Certain medications are addictive or habit forming and are considered 'controlled drugs' under federal law. The use of controlled substances is monitored by state and federal laws. Abuse of these medications is serious and can result in severe legal action against the offender.

Diversion offenses are the theft of any medication, including over-the-counter medications. Diversion offenses are reported to the Delaware State Police and punishable by law.

Safe Medication Administration

Objectives	Content Outline	Evaluation
The Learner will: List the three safety checks of medication administration. Identify the six rights of medication administration.	Three safety checks • When removing the medication package from storage (drawer/shelf) • When removing the medication from the package/ container it is kept in • When returning the package to where it is stored Six rights of medication administration • Right client • Right medication • Right dose • Right route • Right time • Right documentation	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations or other appropriate measure of achieving outcomes. Before actual client contact, skills lab exercises and evaluations include: • practicing the six rights of medication administration • practicing the basic steps of medication administration
The Learner will: Identify common methods of medication administration.	Routes of Administration • Oral • Sublingual • Inhaler (metered dose) • Nebulizer • Nasal	

	• Eye (ophthalmic) • Ear (otic) • Topical • Transdermal (e.g., patch) • Suppositories (rectal/vaginal) LLAM does not allow for administration of injectables with the exception of an epi pen and glucagon in life saving emergencies. This may not be taught in all settings.	
The Learner will: Describe basic steps of medication preparation prior to administration.	Medication Preparation • Wash hands • Identify the client • Introduce yourself • Explain what you are going to do • Glove if necessary • Position the client • Do what you explained • Remove gloves if used • Wash hands • Special considerations • Document	
The Learner will: State when the supervisor/designated person must be notified of a change in the client's normal condition.	Reporting of Changes in Client Condition • Report any change that is different from the client's normal condition including behavior changes. • Notify the supervisor/designated person as soon as possible with as much information as available.	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations, or other appropriate measure of achieving outcomes. Before direct client contact, skills lab exercises and evaluations are recommended for safely administering a medication.
The Learner will: State documentation requirements for medication administration.	Documentation of Medication Administration • Identifying initials and time on MAR. • Circle and document the reasons that a client may not take a medication	

Three Safety Checks

Check 1: At the right time, remove the medication from the locked area and check the prescription label against the medication record to make sure that they match.

Check 2: Before pouring or removing the medication from the package, check the prescription label against the medication order to make sure that they match.

Check 3: After the medication is poured/removed from packaging, but before it is administered, check the prescription label against the medication record again to make sure that they match.

Six Rights of Medication Administration

1. Right Client
2. Right Medication
3. Right Dose
4. Right Route
5. Right Time
6. Right Documentation

Each time medication is administered, it should be systematically and conscientiously checked against these six rights.

Right Client

In order to ensure that correct medication is administered to the right client, you should identify the client according to facility protocol. Do not administer medications unless you can identify the client.

Even when the client is well-known, mistakes can happen. Sometimes, when medications are being administered to more than one client in a setting, or if medications are prepared for more than one client at a time, distractions can happen and medication is given to the wrong individual.

Serious mistakes can be avoided if the LLAM trained UAP:

- Prepares the medication for one individual at a time.
- Uses the client's name and/or name band or validates the client's identity with another employee per facility policy.
- Gives the medication to the individual as soon as it is prepared.
- Works with one client at a time to prevent other clients from interfering with the medication process.
- Always completes the medication administration with the client before doing anything else.
- Pays close attention at all times when administering medications; always faces and observes the client during the administration process.

Right Medication

To ensure that the right medication(s) is administered to the right client:

1. Read the prescription label and check against the MAR.
2. Read the medication label carefully. Note that some medications have more than one name: a brand name and at least one generic name. If in doubt, confirm the medication is correct prior to administering.
3. Check the spelling of the medication carefully. If there is any doubt about whether the medication name is correct, stop and call supervisor/designated person per facility policy before administering the medication.
4. Read the medication order carefully. Be sure the medication name on the order matches the medication name on the label.
5. Pre-poured containers dispensed by the pharmacy may contain a single dose of a single medication or a combination of multiple medications. Be sure to administer based on the directions on the container.

Pill bottles should contain one drug and one drug only. Never mix the contents of an old pill bottle with the contents of a new pill bottle. There may be a change in the brand or dose which will create confusion and error. Mixing of pills would make it impossible to identify which were new and which were old pills should a problem occur.

Medication samples dispensed by a practitioner may not be used unless the samples are placed in a container and labeled to federal standards for the client. Request a prescription or have the practitioner properly label the sample.

Right Dose

The LLAM program does not allow for conversion of medication dosage.

Prescriptions will state the specific amount of medication to be administered. If confused about a measurement, seek confirmation from a supervisor, nurse or the pharmacist (based on the policy and procedure of the facility).

Common measurement terms and their abbreviations for tablets, pills and capsules are milligrams (mg or mgm) and grams (g or GM).

- The prescription will indicate how many pills to administer. For example: 'Tegretol 200 mg tablets give two tablets daily.'

NOTE: Always ask the pharmacist or the nurse about any order that requires administering more than 3 tablets or capsules of the same medication in one dose.
This could be an over-dosage!

Common measurement terms and their abbreviations for liquids are ounce (oz), tablespoons (tbsp), and teaspoon (tsp). Some prescriptions may indicate a measurement in milliliters (ml).

- Household teaspoons can vary in size and should NOT be used. Proper liquid medication measuring cups/containers are available and should be used.

NOTE: 5 ml = 1 teaspoon.

Ear and eye liquids are usually measured in drops (gtt or gtts) or dropper-full. Droppers should be included in the medication packaging.

Right Route

The LLAM program does not allow for the administration of injectables with the exception of an epi pen and glucagon in life saving emergencies. This may not be taught in all settings.

Clients with insulin must be independent with all aspects of filling the syringe with the correct dose, administering the medication, and disposing of the syringe into bio-hazard sharps disposable containers. The LLAM trained UAP can record the observation of the client administering the injection.

Oral: administration by mouth

Tablets: pressed powders which are usually acted upon in the stomach.

Enteric Coated Tablets: hard and often colored coated tablets (similar to the M&M® candies). This is to prevent them from releasing the medication too soon in the gastro-intestinal tract and causing irritation. Enteric coated tables should not be crushed.

Capsules/Caplets: gelatin coated powders or tiny time released beads as in spansules. Caplets have the medication in a very highly compressed form with the outer covering resisting digestion until reaching the intestines. These should not be crushed or mixed with food.

Liquids:

- Most prescription antibiotics have a short shelf life and frequently have to be either refrigerated or kept away from heat and out of direct sunlight. All doses of the antibiotic should be administered to the client per the prescription. The pharmacy label lists the date when the medication will expire.
- The label expiration date should be checked every time it is administered. Do not use medication beyond the expiration date.

Pour liquids away from the labeled side to keep the label legible.

Common Problems with Oral Medications

Client can't swallow pills: Inform prescribing practitioner. Medication may come in liquid form. If a liquid form is not available the practitioner, pharmacist or nurse can offer guidance about alternative methods of handling the medication.

Often older adults suffer from dry mouth. Offer water prior to administering medication to wet the mouth. Be sure to offer water after administering the medication.

Client hoards medication in mouth instead of swallowing medication: After the client appears to have swallowed the medication, ask client to show that his/her mouth is empty.

Do not place fingers in the client's mouth: Medications can be hoarded between the gum line and cheek. If medication is not noticed but the client has a known history of hoarding, have client

remain with a staff member for 30 minutes by which time many hidden medications will have dissolved enough to become distasteful. Hoarding should be reported to the prescribing practitioner per facility policy.

Client regurgitates medication after swallowing: If the client has a known history of regurgitating, have the client remain with the staff member for 30 minutes. Do not allow client to travel out of your line of vision. Regurgitation should be reported to the prescribing practitioner per facility policy.

Client acts out, refuses medication: Do not make a control issue out of medication. Calmly lock medication away and retry in 15 minutes. If the medication refusal continues, follow facility policy.

Client bites: Use paper or plastic medication cup to place medication to the lips of the client. Do not put your fingers in the client's mouth or use your fingers to put medication in the client's mouth. If you are bitten, follow the policy and procedure of the facility.

Rectal: administration to the rectum

Read the package instruction for valuable tips and clues. It is important that the suppository not be expelled prematurely. The package instructions will give the suggested retention time.

General instructions: Wear gloves and remove any packaging/wrapping from suppository. It is recommended to have a witness when administering suppositories. The client should lie on the left side with the right knee drawn up. The pointed or rounded end of the suppository should be inserted first, and will usually meet with some resistance from the internal and external muscles. A gentle, final push may be needed to pass the suppository into the rectal area. The client should retain the suppository as long as instructed on package. Be sensitive to the client's right to privacy.

Most suppositories are kept refrigerated. Slight softening of the suppository may allow for easier passage. Remove suppository from the refrigerator and expose it to room temperature for 10 minutes before insertion. A small amount of water soluble lubricant may be used to lubricate the tip of the suppository, if needed.

Vaginal: administration into the vagina

Read the package instruction for valuable tips. It is important that the suppository not be expelled prematurely.

General instructions: Wear gloves and remove any packaging/wrapping from suppository. It is recommended to have a witness when administering suppositories. The client should lie on her back. The rather pointed or rounded end of the suppository should be inserted first. The client should retain the suppository as long as instructed on package. When using creams or tablets, clean applicator according to package directions after use. Use only the applicator assigned for that client.

Teach females to self-administer vaginal suppositories or creams, and clean cream applicators. Females receiving antibiotic therapy are prone to vaginal discharge. LLAM trained UAPs should be aware that not all vaginal discharges indicate some form of sexually transmitted diseases (STDs). The LLAM trained UAPs should be sensitive when dealing with potential STD issues.

Most suppositories are kept refrigerated. Slight softening of the suppository may allow for easier passage. Remove suppository from the refrigerator and expose it to room temperature for 10 minutes before insertion. A small amount of water soluble lubricant may be used to lubricate the tip of the suppository, if needed.

Topical: applied to surfaces (skin, eye, ear) or hair

Topical medications may be creams, liquids, powders, soaps, shampoos, ointments, and transdermal patches.

Wash hands or use alcohol hand sanitizer and wear gloves when administering topical medications.

- Read and follow package instructions carefully.
- Pour or with a clean spoon dip out just enough of the medication for one application into a clean container and use. Never put unused medication back into its original container.
- Tubed ointments can be squeezed onto a gauze pad or a bandage.

Do not share tubes of ointment or liquid medications between clients to avoid spreading infections.

Transdermal medication (includes anti-smoking patches):

- Wear gloves when handling patches.
- Remove used transdermal patch before applying new patch.
- Write the date, time and your initials on the patch prior to applying to the skin.
- Report any skin irritation per facility policy.
- Dispose of the old patch per package instructions.

Ophthalmic: administration to the eye

Always confirm the medication is labeled for ophthalmic use. OTIC means ear not eye. The pharmacy label should indicate which eye or if both eyes are to be treated.

Never share medication between clients.

Wash hands and wear gloves; eye infections tend to be contagious.

- The client should be seated. Gently pull down the lower eyelid. The medication should be applied to the lower eyelid, and not on the eye.
- The end of the tube or medication vial must not touch the surface of the eye or eyelid. Serious injury could result as well as contamination of the tube or vial.
- Encourage the client to self-administer eye medication whenever possible.

Otic: administration to or by way of the ear

The pharmacy label should indicate which ear or if both ears are to be treated.

- If the medication has been refrigerated allow to stand for 10 minutes. Cold medication can cause pain.

- Have the client's head tipped so the ear to be treated is higher than the unaffected ear and instill the number of drops ordered.
- The client should keep their ear in this position for one minute to allow drops to reach ear drum.

Note: a practitioner may order ophthalmic medications (for eye use), in ears. This will not hurt the ears, but ear medications may never be used in eyes.

Inhalants: administered by the way of the nose (nasal) or mouth (oral)

Nasal Inhalants: Follow the directions on the package insert. Do not place the tip of the inhaler deeply into the nose. Place the inhaler tip just at the opening of the nose.

Oral Inhalants such as mist asthma inhalants: Follow the directions on the package insert. Be aware of discard dates on these medications as they must be discarded and replaced promptly.

Medications delivered via nebulizer units: Follow the policies established by the facility through its documented training program.

Right Time

Routine medications should be administered at established times. This helps to ensure desired levels of medication will be maintained and doses will not be given dangerously close to each other. Prescription labels may not offer specific times but use terms like Am for morning and PM for night. Employers will assign specific times for the AM and PM medications to be given.

As a general rule, when the directions for medications do not include the specific dosage times, keep doses at least four hours apart.

Sample of Standard Medication Times

Daily Medications	8am OR 8pm					
Twice Daily	8am AND 8pm					
Three X day	8am		12noon		8pm	
Four X day	8am		12noon	4pm		8pm
Bedtime						8pm
Every 6 hours	6am		12 noon		6pm	
Before meals	7am		12 noon	5pm		
After meals	9am		1pm	6pm		

Medications may be given 60 minutes before or after the indicated time. The exception is for medications to be given with or without food. Follow the directions on the label.

- Medicines that should be taken on an empty stomach should be given one hour before eating or two hours after eating.

- Medicine that should be taken with food should be administered either right before or right after a meal (full stomach).

Some medicines can work faster, slower, better, or worse when taken on a full or empty stomach. On the other hand, some medicines will upset the stomach, and if there is food in the stomach, that can help reduce the upset. If directions are not listed on the medicine labels, ask the prescriber or pharmacist.

Some medications should not be given at the same time, or in combination with other medications. If two or more practitioners prescribe medications, check medication compatibility with the nurse, pharmacist, practitioner, or Poison Control Center (based on the policy and procedure of the facility).

Right Documentation

Documentation is an important part of administering medication. It provides communication between individuals who care for clients. The medication administration record (MAR) is a legal document that verifies medications were or not administered.

- Document administration after giving the ordered medication
- Document if a client refuses taking medication
- Document the time, route, and any other specific information as necessary
- Document/report any change that is different from the client's normal condition including behavior changes.

NOTE: If it is not documented, it was not done!

Do	Don't
• Check name of client on MAR. • Write legibly. Be neat and accurate. • Use black non-erasable ink. • Draw a line through an error; write 'error' and your initials. • Use the MAR as instructed per the facility policy. • Document medication administration on MAR after a medication has been given. • Document on the MAR when a medication has not been given by circling your initials on the MAR and documenting the reason the medication was not administered.	• Use pencils. • Erase entries. • Use whiteout. • Scribble out entries. • Leave blank spaces. • Destroy or alter any part of the MAR. • Use judgmental language.

To complete the documentation of medication administration on the MAR:

- Write the time the dose was given with the correct date and sign or initial the entry.

- If a dose was not given; circle it, document the reason the medication was not taken, then sign or initial the entry.

Medication Preparation

When administering medication there are basic principles that should always be followed.

- Wash hands or use alcohol hand sanitizer. Hands must be washed before and after administering medication to each client.
- Identify the client.
- Explain what you are going to do before giving medication. Be sure to provide privacy for the client appropriate to the medication being administered.
- Glove, if necessary. Change your gloves as soon as administration is complete. Never re-use gloves for more than one client.
- Position the client.
- Do what you explained you are going to do.
- Wash hands. Wearing gloves does not eliminate the need for hand washing.
- Document the administration of the medication for each client immediately after administering the medication. Do NOT administer all the medications to all clients and then try to document.

Medication Administration Process

The LLAM trained UAP will:

1. Identify the right client and will never administer medication unless the client can be identified;
2. Use the client's name during the administration process;
3. Work with one client at a time to prevent other clients from interfering with the medication process;
4. Wash hands before and after assisting a client and follow other universal precautions as needed, such as wearing gloves;
5. Pre-fill water cups to avoid distractions; never turn away from client during medication process;
6. Keep medications in current use always within view;
7. Read the MAR, select the proper medication container and read the prescription label and check against the MAR. If in doubt, the LLAM trained UAP will not administer medication until it has been confirmed that medication is correct. Only medications in the original, pharmacy containers, with legible labels, will be used;
8. Give the correct dose of medication. Prescriptions must state the specific amount of medication to be measured out. If confused about a measurement, the LLAM trained UAP will not administer the medication and follow facility policy on medication administration.
9. Observe the client consuming the medication;
10. Sign MAR in the appropriate place after each client has received the appropriate medication; and
11. Report a medication error immediately as per facility policy.

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Leave of Absence Medications

There are only two methods for packaging medication to send home with a client who is leaving the facility on pass (or for any other absence):

1. Give the medication in its original container, as dispensed by the pharmacy, to the parent/custodian/responsible party of the client. It is recommended that the number of pills in the container be counted before the client leaves and upon return in order to verify the amount administered by the parent/custodian/responsible party. When the medication is a controlled substance, the count should be documented on the controlled substance record by the persons giving and receiving the medications; or

2. Have the pharmacy or registered nurse (RN) prepare a separate container(s) labeled in accordance with federal labeling standards and filled with a sufficient supply of medication to cover the anticipated period of absence. This process requires the pharmacy or RN to have advance notice.

LLAM trained UAPs should never remove a portion of medication from an original container and place it in any other container. Only a licensed practitioner, pharmacist or registered nurse can dispense medication.

If medication is to be sent with the client, contact the pharmacist. Explain the circumstance and request that the needed doses be dispensed.

Medication Errors

Objective	Content Outline	Evaluation Criteria
The Learner will: Identify information needed about the client and the medication prior to medication administration.	Prevention of Medication Errors Know the following before administering medications: • Name of client • Name of medication • Time client receives medication • Purpose of the medication • Special instructions as found on the label • Where to get help	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations, or other appropriate measure of achieving outcomes. Before direct client contact, skills lab exercises and evaluations are recommended for safely administering a medication.
The Learner will: Identify common causes of medication errors. State what steps should be taken when a medication error occurs.	Causes of Medication Errors These may cause an error: • Failure to exactly follow prescribers orders on medication label. • Failure to follow manufacturer's specifications/directions for use.	Include: • National Coordinating Council for Medication Error Reporting and

	• Failure to follow accepted standards and employer policy/procedures for medication administration. • Failure to listen to a client's or other responsible party's concerns. Report an error by: • Notifying the employer according to the agency policy. • Document medication error on form supplied by facility per policy.	Prevention Recommendations • IOM Brief on "Preventing Medication Errors" • IOM Fact Sheet on "What You Can Do to Avoid Medication Errors" See Appendix B, C, D

Errors do occur despite training and precautions. For client safety, errors should be reported immediately upon discovery.

Follow the facility policy for contacting 911, the Poison Center (800) 222-1222, practitioner, pharmacy, or facility supervisor in the event of an error. Errors must be documented according to facility policy.

Causes of Medication Errors

Some of the causes of medication errors include:

- failure to exactly follow prescriber's orders on medication label
- failure to follow manufacturer's specifications/directions for use
- failure to follow accepted standards and employer policy/procedures for medication administration
- failure to listen to a client's or other responsible party's concerns
- failure of staff communication of a new medication or a change in medication

Reporting Medication Errors

OVERDOSE: Call the Poison Control Center. If the client is having difficulty breathing or loses consciousness, call 911 and send client to the emergency room.

If there is an error

- in the right medication, or
- to the right client, or
- in the right route, or
- in the right time such as a missed dose, call the client's practitioner/pharmacist/nurse per the facilities policy and document the error accordingly.

It is the legal and ethical responsibility of the LLAM trained UAP to report/document all errors. Avoiding or choosing not to report/document errors could lead to serious injury or even death of a client.

Responsibilities and Resources on Drug Information

Objective	Content Outline	Evaluation Criteria
The Learner will: Identify resource materials and professionals to contact for clarification of medication questions.	Location of Resources and References • Nurse • Pharmacist • Physician • Packaging/Drug insert • Supervisor/Designated person • Organization approved online resources • Drug reference manual Do not ask caregiver/parent. Do not use the MAR. Setting specific.	Successful completion of the objectives is demonstrated through multiple-choice examinations, return demonstrations, or other appropriate measure of achieving outcomes. Before direct client contact, skills lab exercises and evaluations are recommended for safely administering a medication.

It is the responsibility of LLAM trained UAP to review possible side effects of the medication(s) being given. Information on medication side effects should be available in each entity using LLAM.

The LLAM trained UAP is not responsible for assessing side effects but should observe clients for mental, physical, and behavioral changes. Report all observations of mental, physical, and behavioral changes per facility policy.

For over the counter (OTC) medications, the information concerning how to use the medication and how to properly store it is printed on the package or bottle. Also, any pharmacist can provide answers to questions on use and storage.

For prescription medications, the following resources are available concerning how to use the medication and how to properly store it:

1. The container itself will give directions for use including whether it should be taken with or without food. Also if a drug must be refrigerated or has to have special handling, the pharmacist will put it on the container or labeling.
2. The pharmacy listed on the container can be called to ask for information concerning use and storage.
3. The client's practitioner listed on the container can be contacted for information in accordance with facility policy.
4. The Drug Reference Manual and/or organization approved online resources may be used for medication look-up.

The nurse, pharmacist, prescriber and supervisor/designated person per facility policy can be used as a resource for questions related to the medication and/or its administration.

Written Information References

Written information about medications is available upon request from the pharmacy. A package insert from particular medications can be provided. In general, the insert will describe the drug, its intended use, side effects which can occur with use, side effects which warrant immediate

medical consultation, warnings about individuals who should not be using the drug, and any special handling or storage directions as appropriate. The insert is available for prescription medications. Similar information can be found on the packaging of OTC medications.

Medication Administration Definitions

Abuse: unauthorized misuse of medication with malicious intent. Certain medications are addictive or habit forming and are considered 'controlled drugs' under federal law. The use of controlled substances is monitored by state and federal laws. Abuse of these medications is serious and can result in severe legal action against the offender.

Allergy: an adverse reaction to a medication that usually occurs after the first dose but can occur after multiple doses and may include itching, rashes, hives, or difficulty in breathing.

Board: Delaware Board of Nursing.

Controlled Substances: drugs which have been declared by federal or state law to be illegal for sale or use, but may be dispensed under a licensed professional authorized to prescribe. The basis for control and regulation is the danger of addiction, abuse, physical and mental harm (including death), the trafficking by illegal means, and the dangers from actions of those who have used the substances. These medications are stored under double locks and must be inventoried and accounted for in compliance with federal and state laws, as well as facility policy.

Examples: phenobarbital, Tylenol ® #3, Valium ®, codeine, Ritalin®, etc.

Controlled Substance Record: records the administration of controlled substances to client(s) that is updated at the beginning of each shift or no less than every 24 hours. It is a legal document that accounts for the inventory of the controlled medication.

Diversion: theft of any medication, including over-the-counter medications. Diversion is punishable by law.

Medication: a substance intended for use in the diagnosis, cure, mitigation, treatment, or prevention of any illness, condition, or disease in humans.

Medication Error: Any preventable event that may cause or lead to inappropriate medication use or client harm while the medication is in the control of the health care professional, client, or UAP. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labeling, packaging and nomenclature, compounding, dispensing, distribution, administration, education, monitoring and use.

Medication Administration Record (MAR): is the written record that lists the client's name; date of birth; allergies; names of all current, ordered medications; reason the medication is given, as appropriate; prescribing or primary practitioner; special instructions; and the dosage, route(s) and time(s) of administration for all medications. The MAR is signed/initialed after each client has taken and/or received the appropriate medication.

Misuse: medication that is not taken as ordered by the practitioner authorized by law to prescribe drugs in the course of professional practice, and results in the improper action in any of the six rights.

Over-the-Counter Medication (OTC): medications or drugs which may be sold without a prescription and which are packaged for use by the consumer and labeled in accordance with the requirements of the statutes and regulations of this State and the federal government. Examples: aspirin, diaper rash cream.

Practitioner: an individual who is authorized by law to prescribe drugs in the course of professional practice.

Prescription: a written order from the practitioner, for the preparation and administration of a medicine or other treatment.

Prescription Medications: medications that are prescribed by a licensed professional authorized to prescribe medications to an individual. These medications include controlled and non-controlled substances.

PRN Orders: PRN refers to the Latin word for 'as needed'. Examples of as needed medication are sunscreen to prevent sunburn, pain medication for a headache. These are non-routine medications. As needed or over the counter medications are to be ordered for the client and the instructions must be individualized for each client.

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Appendices

Appendix A: Abbreviations

There are also medical abbreviations that can and can't be used on the MAR. Joint Commission provides a list of abbreviations that cannot be used which is below and found at http://www.jointcommission.org/assets/1/18/Do_Not_Use_List.pdf :

Official "Do Not Use" List[1]

Do Not Use	Potential Problem	Use Instead
U, u (unit)	Mistaken for "0" (zero), the number "4" (four) or "cc"	Write "unit"
IU (International Unit)	Mistaken for IV (intravenous) or the number 10 (ten)	Write "International Unit"
Q.D., QD, q.d., qd (daily) Q.O.D., QOD, q.o.d, qod (every other day)	Mistaken for each other Period after the Q mistaken for "I" and the "O" mistaken for "I	Write "daily" Write "every other day"
Trailing zero (X.0 mg)* Lack of leading zero (.X mg)	Decimal point is missed	Write X mg Write 0.X mg
MS MSO_4 and $MgSO_4$	Can mean morphine sulfate or magnesium sulfate Confused for one another	Write "morphine sulfate" Write "magnesium sulfate"

Some following list of abbreviations (including ones that are NOT to be used) can be found at:
http://www.delmarlearning.com/companions/content/1401852467/student_resources/termabbrev.pdf

Medical Terminology Abbreviations

The following list contains some of the most common abbreviations found in medical records. Please note that in medical terminology, the capitalization of letters bears significance as to the meaning of certain terms, and is often used to distinguish terms with similar acronyms.

@—at
A & P—anatomy and physiology
ab—abortion
abd—abdominal
ABG—arterial blood gas
a.c.—before meals
ac & cl—acetest and clinitest
ACLS—advanced cardiac life support
AD—right ear
ADL—activities of daily living
ad lib—as desired
adm—admission
afeb—afebrile, no fever
AFB—acid-fast bacillus
AKA—above the knee
alb—albumin
alt dieb—alternate days (every other day)
am—morning

AMA—against medical advice
amal—amalgam
amb—ambulate, walk
AMI—acute myocardial infarction
amt—amount
ANS—automatic nervous system
ant—anterior
AOx3—alert and oriented to person, time, and place
Ap—apical
AP—apical pulse
approx—approximately
aq—aqueous
ARDS—acute respiratory distress syndrome
AS—left ear
ASA—aspirin
asap (ASAP)—as soon as possible
as tol—as tolerated
ATD—admission, transfer, discharge
AU—both ears
Ax—axillary
BE—barium enema
bid—twice a day
bil, bilateral—both sides
BK—below knee
BKA—below the knee amputation
bl—blood
bl wk—blood work
BLS—basic life support
BM—bowel movement
BOW—bag of waters
B/P—blood pressure
bpm—beats per minute
BR—bed rest
BRP—bathroom privileges
BS—breath sounds
BSI—body substance isolation
BSO—bilateral salpingo-oophorectomy
BUN—blood, urea, nitrogen levels
BVM—bag-valve-mask
bx—biopsy
c—with
C & S—culture and sensitivity
c-spine—cervical spine
CA—cancer
CAD—coronary artery disease
cal—calorie
CAT—computerized axial tomography
cath—catheter
CBC—complete blood count
cc—cubic centimeters
CC—chief complaint
CCU—coronary care unit, critical care unit
CHD—coronary heart disease
CHF—congestive heart failure
CHO—carbohydrate
chol—cholesterol
circ—circumcision
cl liq—clear liquid
CNS—central nervous system
c/o—complains of
COPD—chronic obstructive pulmonary disease
CPK—creatine phosphokinase
CPR—cardiopulmonary resuscitation
CPT—chest physical therapy
CS—central supply
CSF—cerebrospinal fluid
CT—computer tomography
CVA—cerebrovascular accident (stroke)
CVU—cardiovascular unit
cx—cervix or complaint of
CXR—chest X ray
cysto—cystography
d/c—discontinue
D & C—dilation and curettage
DAT—diet as tolerated
DC—discontinue or discharge
del—delivery
Del. Rm.—delivery room
diff—differential
DNA—deoxyribonucleic acid
DNR—do not resuscitate
DOA—dead on arrival
DOB—date of birth
DPT—diphtheria, pertussis, tetanus
DRG—diagnosis-related grouping
D/S—dextrose in saline
DT's—delirium tremens
DW—distilled water
D5W 5%—dextrose in water
Dx—diagnosis
EBL—estimated blood loss
ECG—electrocardiogram
ED—emergency department
EEG—electroencephalogram
EENT—eyes, ears, nose, throat
EKG—electrocardiogram
EMG—electromyogram
EOA—esophageal obturator airway
ESR—erythrocyte sedimentation rate
est—estimated

ER—emergency room
ET—endotracheal
ETA—estimated time of arrival
etiol—etiology
ETOH—ethyl alcohol, intoxicated
exam—examination
exp—exploratory
ext—external, extract, extraction
FBOA—foreign body obstructed airway
FBS—fasting blood sugar
FBW—fasting blood work
FF (F. FI)—force fluids
FH—family history
FHS—fetal heart sounds
FHT—fetal heart tone
FIFO—first in, first out
FSH—follicle-stimulating hormone
ft—foot
FUO—fever of undetermined origin
Fx—fracture
GB—gallbladder
GI—gastrointestinal
GU—genitourinary
GTT—glucose tolerance test (pancreas test)
gtt(s)—drop(s)
gyn—gynecology
H & H—hemoglobin and hematocrit
HCG—human chorionic gonadotrophin
hct—hematocrit
HDL—high-density lipoprotein
hgb—hemoglobin
HOB—head of bed
hr (h)—hour
HIV—human immunodeficiency virus
H&P—history and physical
HR—heart rate
hs—hour of sleep, bedtime
ht—height
Hx—history
hypo—hypodermic injection
hyst—hysterectomy
IBS—irritable bowel syndrome
I & D—incision and drainage
I & O—intake and output
ICP—intracranial pressure
ICU—intensive care unit
IM—intramuscular
ing—inguinal
inj—injection
IPPB—intermittent positive pressure breathing
irrig—irrigation
IS—intercostal space
isol—isolation
IT—inhalation therapy
IUD—intrauterine device
IV—intravenous
IVF—in vitro fertilization
IVP—intravenous pyelogram
K+—potassium
KCl—potassium chloride
KUB—kidney, ureter, bladder
L—lumbar
L & D—labor and delivery
lac—laceration
lab—laboratory
lap—laparotomy
lat—lateral
LD—lethal dose
LDH—lactic dehydrogenase
LDL—low-density lipoprotein
liq—liquid
LLQ, LLL—left lower quadrant (abdomen), lobe (lung)
LMP—last menstrual period
LOC—level of consciousness
LP—lumbar puncture
lt—left
LUQ, LUL—left upper quadrant (abdomen), lobe (lung)
MA—mental age
MAST—medical antishock trousers
MCI—mass casualty incident
meds—medications
MI—myocardial infarction
MICU—mobile intensive care unit
min—minute
MN—midnight
MOM—milk of magnesia
MRI—magnetic resonance imagery
MS—morphine sulfate, multiple sclerosis
MVA—motor vehicle accident
NVD—nausea, vomiting, diarrhea
Na+—sodium
NaCl—sodium chloride
N/C—nasal cannula
no—complaints
neg—negative
neuro—neurology
NG—nasogastric
NGT—nasogastric tube
nitro—nitroglycerine

NKA—no known allergies
noc (t)—night
NPO—nothing by mouth
NS—normal saline
nsg—nursing
NSR—normal sinus rhythm
NVS—neurological vital signs
O—oxygen
OB—obstetrics
OD—right eye, overdose
oint—ointment
OOB—out of bed
OPD—outpatient department
OR—operating room
ord—orderly
ORTH—orthopedics
ortho—correct, right (bones)
os—mouth
OS—left eye
OT—occupational therapy
OU—both eyes
oz—ounce
p—after
P—pulse
P & A—percussion and auscultation
PAC—premature atrial contraction
palp—palpation
PAR—post-anesthesia room
PAT—paroxysmal atrial tachycardia
pc—after meals
pCO2—partial pressure of carbon dioxide
PDR—physician's desk reference
PE—physical exam, pulmonary embolism
PEDS—pediatrics
per—by or through
PERL(A)—pupils equal and reactive to light (and accommodation)
PET—positron emission tomography
PH—past history
pH—hydrogen ion concentration
PID—pelvic inflammatory disease
PKU—phenylketonuria
pm—between noon and midnight
PNS—peripheral nervous system
po—by mouth
post (pos)—posterior
postop, PostOp—–postoperative
pp (p.p.)—postprandial (after eating)
pO2—partial pressure of oxygen
PPD—purified protein derivative (TB test)
preop, PreOp—before surgery
prn—as needed, whenever necessary
pro time—prothrombin time
pt—patient, pint
PT—physical therapy
PTT—partial thromboplastin time
PVC—premature ventricular contraction
Px—physical exam, prognosis
q—every
qd—every day
qh—every hour
q2h, q3h, ...—every two hours, every three hours, ...
qhs—every night at bedtime
qid—four times a day
qns—quantity not sufficient
qod—every other day
qs—quantity sufficient
r (R)—rectal
R (resp)—respirations, rectal
RAIU—radioactive iodine uptake study
RBC—red blood cell/count
reg—regular
Rh—rhesus
RK—radial keratotomy
RL—ringer's lactate
RLQ, RLL—right lower quadrant (abdomen), lobe (lung)
RML—right middle lobe (lung)
RO—reality orientation
R/O—rule out
ROM—range of motion
R.R.—recovery room
RUQ, RLL—right upper quadrant, lobe
rt—right
RV—residual volume
Rx—take (prescription)
s—without
S & S—signs and symptoms
ss—1/2
Sats—oxygen/blood saturation level
SA—sinoatrial
SB—small bowel
sc—subcutaneous
SGOT—serum glutamic oxaloacetic transaminase
SGPT—serum glutamic pyruvic transaminase
SIDS—sudden infant death syndrome
Sig:—label/write
SL—sublingual

SMAC—sequential multiple analysis computer
SOB—shortness of breath
spec—specimen
sp. gr.—specific gravity
SQ, sub q—subcutaneous
SSE—soap suds enema
stat—immediately
STD—sexually transmitted disease
STH—somatotropic hormone
SVD—spontaneous vaginal delivery
SVN—small volume nebulizer
SVT—supraventricular tachycardia
Sx—symptoms
T—temperature, thoracic
T & A—tonsillectomy and adenoidectomy
tab—tablet
tachy—–tachycardic
TAH—total abdominal hysterectomy
TB—tuberculosis
TCDB—turn, cough, deep breath
temp (T)—temperature
TH—thyroid hormone
TIA—transient ischemic attack
tid—three times a day
TMJ—temporomandibular joint
tol—tolerated
TPN—total parenteral nutrition
TPR—temperature, pulse, respirations
tr—tincture
trach—tracheotomy, tracheostomy
TSH—thyroid-stimulating hormone
TT—tetanus toxoid
TUR—transurethral resection
TV—tidal volume
TVH—total vaginal hysterectomy
TX—traction
UA—urinalysis
umb—umbilicus
unc.—unconscious
ung—ointment
unk—unknown
ur—urine
URC—usual, reasonable, customary
URI—upper respiratory infection
US—ultrasonic
UTI—urinary tract infection
V fib—ventricular fibrillation
V tach—ventricular tachycardia
vag—vaginal
VC—vital capacity
VD—venereal disease
vit—vitamin
vo—verbal order
vol—volume
V/S—vital signs
WA—while awake
WBC—white blood cell/count
w/c—wheelchair
WNL—within normal limits
wt—weight
y/o—year(s) old

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Appendix B: National Coordinating Council for Medication Error Reporting and Preventing Recommendations

The mission of the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) is to maximize the safe use of medications and to increase awareness of medication errors through open communication, increased reporting and promotion of medication error prevention strategies.

For more information on medication error prevention, visit: http://www.nccmerp.org/

What is a Medication Error?

The Council defines a "medication error" as follows:

"A medication error is any preventable event that may cause or lead to inappropriate medication use or client harm while the medication is in the control of the health care professional, client, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing; order communication; product labeling, packaging, and nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use."

The Council publishes recommendations on Medication and Human Errors and Packaging, Labeling, Dispensing and Administration Errors. To view the complete list and recommendations, visit http://www.nccmerp.org/councilRecs.html

Appendix C: IOM Brief on "Preventing Medication Errors"

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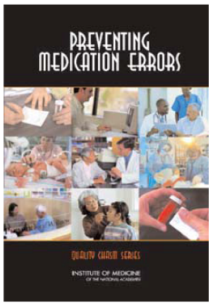
REPORT BRIEF • JULY 2006

PREVENTING MEDICATION ERRORS



Almost everyone in the modern world takes medication at one time or another. According to one estimate, in any given week four out of every five U.S. adults will use prescription medicines, over-the-counter drugs, or dietary supplements of some sort, and nearly one-third of adults will take five or more different medications.

Most of the time these medications are beneficial, or at least they cause no harm, but on occasion they do injure the person taking them. Some of these "adverse drug events [ADEs]," as injuries due to medication are generally called, are inevitable—the more powerful a drug is, the more likely it is to have harmful side effects, for instance—but sometimes the harm is caused by an error in prescribing or taking the medication, and these damages are not inevitable. They can be prevented.

Against this background, the Centers for Medicare and Medicaid Services requested that the Institute of Medicine study the prevalence of such medication errors and formulate a national agenda for reducing these errors. The resulting report, *Preventing Medication Errors,* finds that medication errors are surprisingly common and costly to the nation, and it outlines a comprehensive approach to decreasing the prevalence of these errors. This approach will require changes from doctors, nurses, pharmacists, and others in the health care industry, from the Food and Drug Administration (FDA) and other government agencies, from hospitals and other health-care organizations, and from patients.

When all types of errors are taken into account, a hospital patient can expect on average to be subjected to more than one medication error each day.

THE UNACCEPTABLE COSTS OF MEDICATION ERRORS

In hospitals, errors are common during every step of the medication process—procuring the drug, prescribing it, dispensing it, administering it, and monitoring its impact—but they occur most frequently during the prescribing and administering stages. When all types of errors are taken into account, a hospital patient can expect on average to be subjected to more than one medication error each day. However, substantial variations in error rates are found across facilities.

An ADE arising from an error is considered preventable. It is difficult to get accurate measurements of how often preventable ADEs occur. One study estimated 380,000 preventable ADEs in hospitals each year, another estimated 450,000, and the committee believes that both are likely to be underestimates. The numbers are equally disturbing in other settings. One study calculates, for example, that 800,000 preventable ADEs occur each year in long-term care facilities. Another finds that among outpatient Medicare patients there occur 530,000 preventable ADEs each year. And the evidence suggests that both of these numbers are likely to be underestimates as well. Furthermore, none of these studies includes errors of omission—failures to prescribe medication in cases where it should be. Taking all of these numbers into account, the committee concludes that there are at least 1.5 million preventable ADEs that occur in the United States each year. The true number may be much higher.

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These medication errors are undoubtedly costly—to patients, their families, their employers, and to hospitals, health-care providers, and insurance companies—but there are few reliable estimates of that cost. One study found that each preventable ADE that took place in a hospital added about $8,750 (in 2006 dollars) to the cost of the hospital stay. Assuming 400,000 of these events each year—a conservative estimate—the total annual cost would be $3.5 billion in this one group. Another study looked at preventable ADEs in Medicare enrollees aged 65 and older and found an annual cost of $887 million for treating medication errors in this group. Unfortunately, these studies cover only some of the medication errors that occur each year in this country, and they look at only some of their costs—they do not take into account lost earnings, for example, or any compensation for pain and suffering.

What is most striking about these statistics is that much of this harm is preventable, since a variety of strategies and techniques exist for reducing medication errors. Many of these approaches have already been tested and shown to work in practice, while others seem promising but will require further development. Given this situation, the committee concluded that the current state of affairs is not acceptable and it recommended a series of steps that should be taken to prevent medication errors.

...one of the most effective ways to reduce medication errors, the report concludes, is to move toward a model of health care where there is more of a partnership between the patients and the health care providers.

A PARADIGM SHIFT IN THE PATIENT-PROVIDER RELATIONSHIP

The first step is to allow and encourage patients to take a more active role in their own medical care. In the past the nation's health care system has generally been paternalistic and provider-centric, and patients have not been expected to be involved in the process. But one of the most effective ways to reduce medication errors, the report concludes, is to move toward a model of health care where there is more of a partnership between the patients and the health care providers. Patients should understand more about their medications and take more responsibility for monitoring those medications, while providers should take steps to educate, consult with, and listen to the patients.

To make this new model of health care work, a number of things must be done. Doctors, nurses, pharmacists and other providers must communicate more with patients at every step of the way and make that communication a two-way street, listening to the patients as well as talking to them. They should inform their patients fully about the risks, contraindications, and possible side effects of the medications they are taking and what to do if they experience a side effect. They should also be more forthcoming when medication errors have occurred and explain what the consequences have been.

Patients or their surrogates should in turn take a more active role in the process. They should learn to keep careful records of all the medications they are taking and take greater responsibility for monitoring those medications by, for example, double-checking prescriptions from pharmacies and reporting any unexpected changes in how they feel after starting a new medication.

Also, the healthcare system needs to do a better job of educating patients and of providing ways for patients to educate themselves. Patients should be given opportunities to consult about their medications at various stages in their care—during consultation with the providers who prescribe their medications, at discharge from the hospital, at the pharmacy, and so on. And there needs to be a concerted effort to improve the quality and the accessibility of information about medications provided to consumers. The committee recommends that the FDA, the National Library of Medicine, and other government agencies work together to standardize and improve the medication information leaflets provided by pharmacies, make more and better drug information available over the Internet, and develop a 24-hour national tele-

phone helpline that offers consumers easy access to drug information.

USING INFORMATION TECHNOLOGIES TO REDUCE MEDICATION ERRORS

A second important step in reducing the number of medication errors will be to make greater use of information technologies in prescribing and dispensing medications. Doctors, nurse practitioners, and physician assistants, for example, cannot possibly keep up with all the relevant information available on all the medications they might prescribe—but with today's information technologies they don't have to. By using point-of-care reference information, typically accessed over the Internet or from personal digital assistants, prescribers can obtain detailed information about the particular drugs they prescribe and get help in deciding which medications to prescribe.

Even more promising is the use of electronic prescriptions, or e-prescriptions. By writing prescriptions electronically, doctors and other providers can avoid many of the mistakes that accompany handwritten prescriptions, as the software ensures that all the necessary information is filled out—and legible. Furthermore, by tying e-prescriptions in with the patient's medical history, it is possible to check automatically for such things as drug allergies, drug-drug interactions, and overly high doses. In addition, once an e-prescription is in the system, it will follow the patient from the hospital to the doctor's office or from the nursing home to the pharmacy, avoiding many of the "hand-off errors" common today. In light of all this, the committee recommends that by 2010 all prescribers and pharmacies be using e-prescriptions.

More generally, all health care suppliers should seek to become high-reliability organizations preoccupied with improving medication safety. To do this, they will have to take advantage of the latest information technologies and the most up-to-date organizational and management strategies. They will also need to put effective internal monitoring programs in place, which will allow them to determine the incidence rates of ADEs more accurately and thus provide a way of measuring their progress toward improved medication safety.

...the committee recommends that the drug industry and the appropriate federal agencies work together to improve drug nomenclature, including not just drug names but also abbreviations and acronyms.

IMPROVED LABELING AND PACKAGING OF MEDICATIONS

Another way to reduce medication errors is to ensure that drug information is communicated clearly and effectively to providers and patients. Some errors occur simply because two different drugs have names that look or sound very similar. With this in mind, the committee recommends that the drug industry and the appropriate federal agencies work together to improve drug nomenclature, including not just drug names but also abbreviations and acronyms. At the same time, the information sheets that accompany drugs should be redesigned, taking into account research that identifies the best methods for communicating information about medications.

POLICY RECOMMENDATIONS

Reducing preventable ADEs will demand the attention and active involvement of everyone involved. The federal government should, for example, pay for and coordinate a broad research effort aimed at learning more about preventing medication errors. Various regulatory agencies should encourage the adoption of practices and technologies that will reduce medication errors. Accreditation agencies should require more training in medication-management practices. The committee believes that the effort will pay off in far fewer medication errors and preventable adverse drug events, far less harm done to patients by medications, and far less cost to the nation's economy.

FOR MORE INFORMATION...

Copies of *Preventing Medication Errors* are available from the National Academies Press, 500 Fifth Street, N.W., Lockbox 285, Washington, DC 20055; (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area); Internet, http://www.nap.edu. The full text of this report is available at http://www.nap.edu.

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Appendix D: IOM Fact Sheet "What You Can Do to Avoid Medication Errors"

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FACT SHEET • JULY 2006

What You Can Do to Avoid Medication Errors

PERSONAL/HOME CARE

- Maintain a list of prescription drugs, nonprescription drugs and other products, such as vitamins and minerals, you are taking.
- Take this list with you whenever you visit a health care provider and have him or her review it.
- Be aware of where to find educational material related to your medication(s) in the local community and at reliable web sites.

AMBULATORY CARE/OUTPATIENT CLINIC

- Have the prescriber write down the name of the drug (brand and generic, if available), what it is for, its dosage, and how often to take it, or provide other written material with this information.
- Have the prescriber explain how to use the drug properly.
- Ask about the drug's side effects and what to do if you experience a side effect.

PHARMACY

- Make sure the name of the drug (brand or generic) and the directions for use received at the pharmacy are the same as that written down by the prescriber.
- Know that you can review your list of medications with the pharmacist for additional safety.
- Know that you have the right to counseling by the pharmacist if you have any questions. You can ask the pharmacist to explain how to properly take the drug, the side effects of the drug, and what to do if you experience side effects (just as you did with your prescriber).
- Ask for written information about the medication.

HOSPITAL INPATIENT CARE

- Ask the doctor or nurse what drugs you are being given at the hospital.
- Do not take a drug without being told the purpose for doing so.
- Exercise your right to have a surrogate present whenever you are receiving medication and are unable to monitor the medication-use process yourself.
- Prior to surgery, ask whether there are medications, especially prescription antibiotics, that you should take or any that you should stop taking preoperatively.
- Prior to discharge, ask for a list of the medications that you should be taking at home, have a provider review them with you, and be sure you understand how these medications should be taken.

Source: Committee on Identifying and Preventing Medication Errors, Institute of Medicine

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Appendix E: Policies and Procedures