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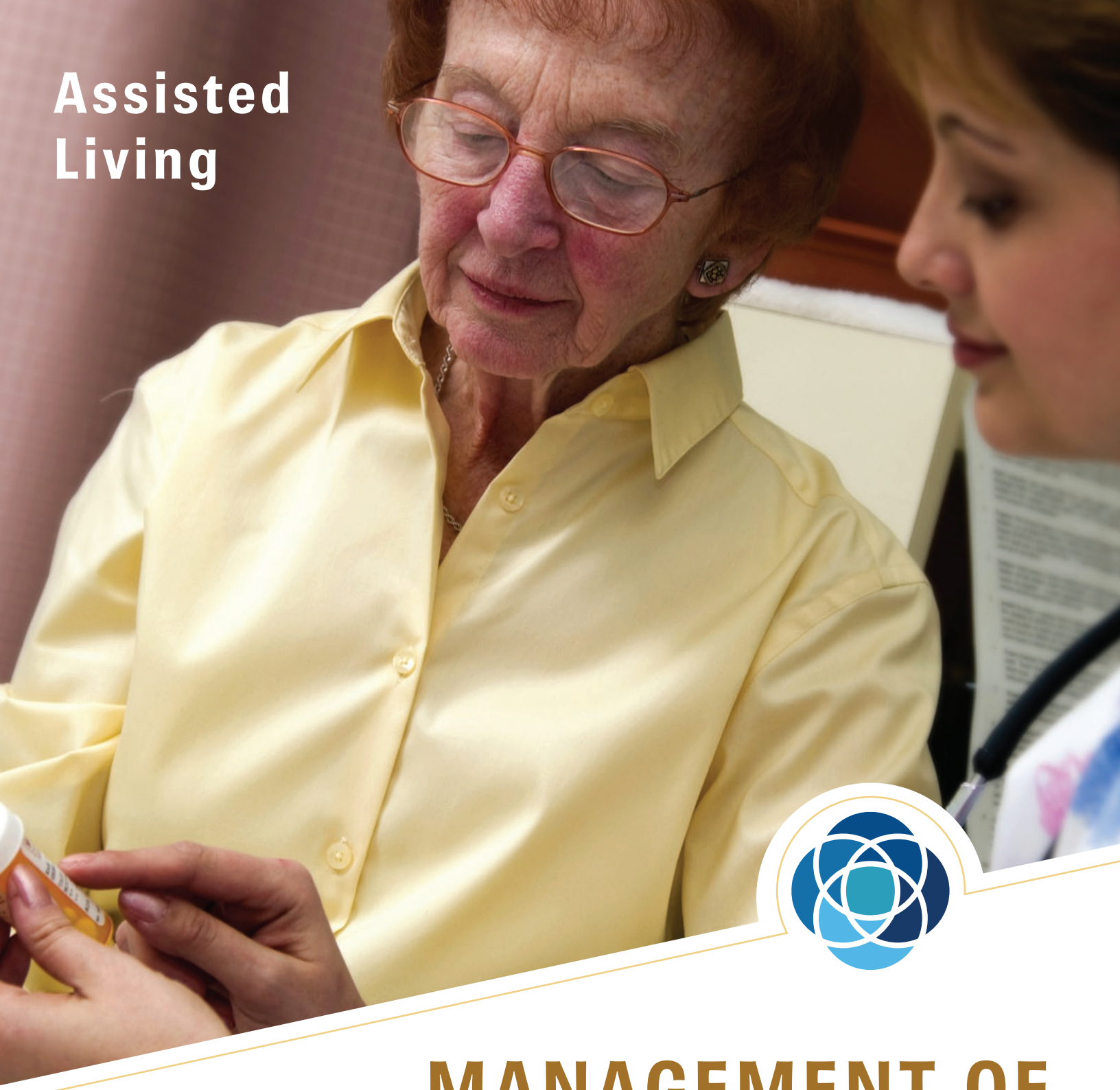

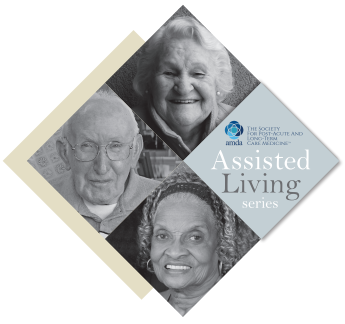

MANAGEMENT OF MEDICATIONS:

A Manual for Caregivers

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AMDA – Dedicated to Long Term Care Medicine

AMDA wishes to thank the following individuals who have contributed to making this manual an informative and useful tool:

Anthony J. Lechich, MD, Chair
Alec Pruchnicki, MD, Co-Chair
Marie Butler, RN
Sandi Flores, RN
Sandra Goodin-Hicks, RNC, CALN
Loretta Kaes, RN B-C, C-AL, LNHA, CALA
Nancy Losben, R.Ph. CCP, FASCP, CG
Ethel L. Mitty, EdD, RN
Fran Savard, RN, ASN, BSM
Cathy Sayers, RN, BSN
Annmarie Swida

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Hartford Institute for Geriatric Nursing College of Nursing New York University

AMDA Staff: Nancy Robinson, MS, BSN. Associate Director of Clinical Affairs

Technical Writer: Jennifer Holmes

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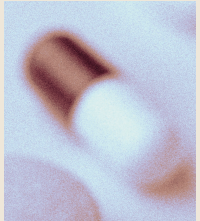

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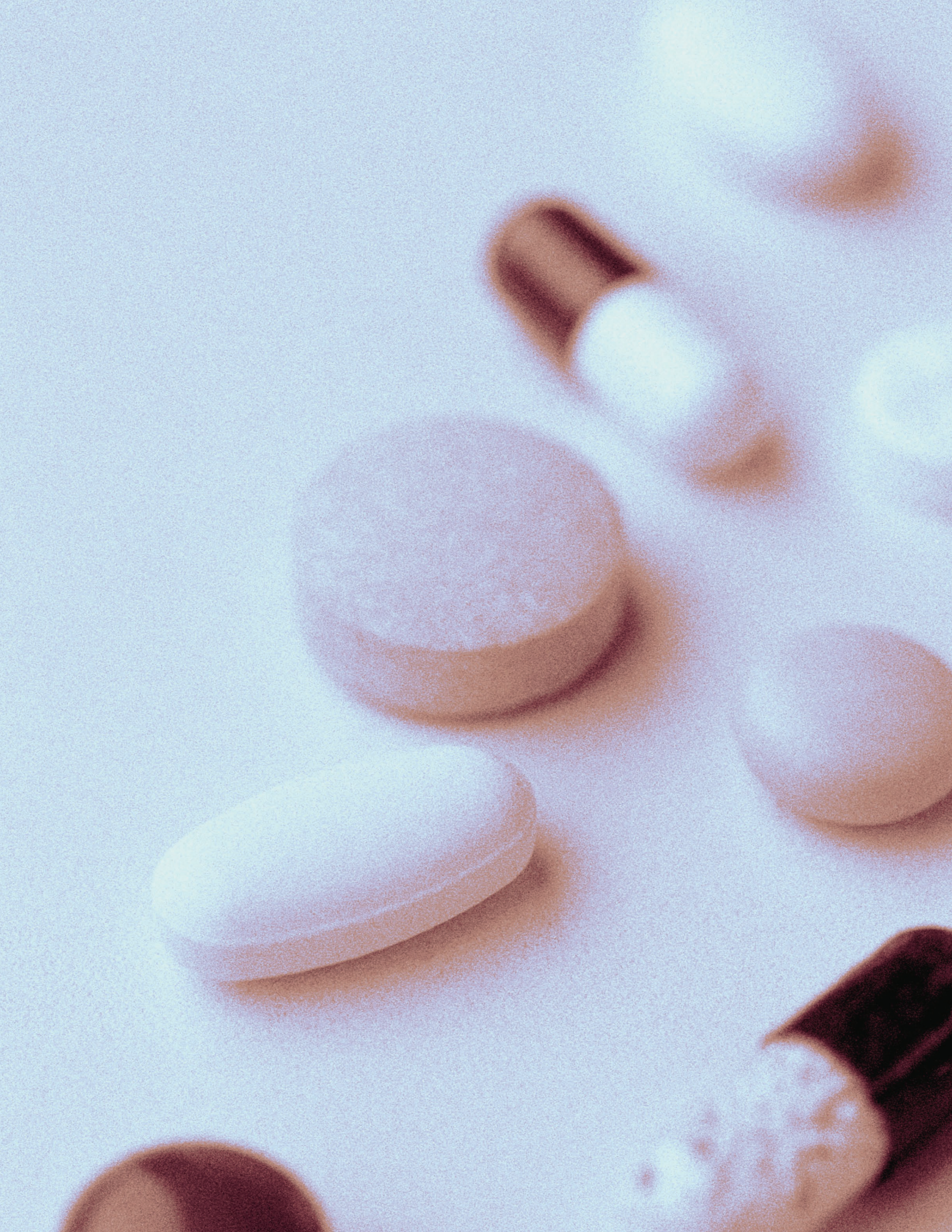

Preface

Many older adults move into an assisted living community (ALC) because of their need to safely manage their medications. They take these medications for their chronic (lifelong) health care conditions. Some of these conditions are heart conditions, breathing conditions, and diabetes.[1] As many as 85% of assisted living (AL) residents need assistance with managing their medication.[1] Many older adults need help opening a pill bottle or other medication containers. Others may need help or reminders to take their medication at the right time.

- In this manual, the term ***caregiver*** refers to all unlicensed personnel working in the ALC who ***assist with*** medication administration or who ***administer*** medications. In some states, unlicensed assistive personnel (UAP) are referred to as "direct care workers" or "nursing assistants." In those states that permit it, the unlicensed caregivers that are permitted to administer medications are generally known as "medication aides" or "medication technicians."

This Manual is written for the caregiver who will *assist* a resident with his or her medications or a caregiver who will *administer* medications to a resident.

Helping residents with their medications may mean doing some or all of the following:

- Administering medication to the resident (see Definitions).
- Checking and entering (transcribing) new medication orders for a resident who returned from the hospital or office visit.
- Checking the delivery of medications. Making sure the right medication has been delivered.
- Helping (assisting with) the resident take his or her medication (see Definitions).
- Keeping an eye on any medications not ordered for the resident. These medications are usually brought in by the resident, family, or others. They are called "over-the-counter" (OTC) medications and can include "herbal" medications or supplements such as vitamins.
- Keeping an eye on residents who are taking their own medication (see Definition for Self-Administration).
- Knowing the resident's allergies (e.g., medication and food).
- Knowing that some foods can affect how a medication works.
- Observing the resident for negative effects from the medication (see Definitions for Adverse Drug Event or Reaction [ADE/R]).
- Ordering medication refills.
- Asking questions when medication orders are not clear.
- Storing and disposing of medications properly by following state and ALC policy.
- Telling the right ALC staff person when a resident has a change of condition (e.g., when they say they just don't feel right.) Communicate this information to the next shift and follow your ALC policy about writing a note (documenting) in the resident's record.
- Telling the right people about changes in medication doses and orders. The right people in the ALC may be the nurse or supervisor, ALC manager, practitioner or pharmacist. Know who you are to report these changes to when they occur.

These aspects are all part of the process of medication management. As the caregiver who assists the resident with self-administration of his or her medications or administers medications, you can be responsible for some or all of the list above. Know your ALC's policies regarding the role of the caregiver and medication management.

Every state has its own rules about who can ***assist with*** self-administration of medications or who may ***administer (give)*** medications. You need to know, as a caregiver, what you can and cannot do in the medication management process.

Helping residents with their medications is an important part of the quality of care in the ALC.

A companion piece to this guide is AMDA's *Assisted Living Medication Management Manual: Operations Level.* There are many tools and forms in that manual that may be helpful to you with medication management. Throughout this guide those tools are mentioned.

Introduction

This guide was written to help caregivers learn the best ways to manage medications taken by residents in ALCs. This guide may help caregivers learn skills and steps that can be used to better manage residents' medications. Caregivers will be able to talk about medication(s) with their residents, family members, and primary care practitioners (PCP) (see Definitions). Learning how to manage medications can:

- Help avoid errors
- Help the caregiver, the resident, and family members know when a medication does not have the effect that it should have
- Help the caregiver, the resident, and family members know when a medication might be causing a side effect or an ADE/R that could hurt the resident

You may not be able to follow every suggestion in this manual. You must know your state's rules and ALC policies. Ask for a copy of your state's rules and those of your ALC. Be sure that the ALC is not asking you to do something that the state does not allow you to do.

DEFINITIONS

Notes:

e.g. means "for example"

If you have any questions about these definitions, ask your ALC nurse, manager or the person you report to for help.

Administration of Medication – Checking, giving, and documenting that a medication has been given to the resident. The person giving the medication must be approved by law such as a nurse or medication aide/medication technician. The medication must be ordered by a prescriber (e.g., a physician, advanced practice nurse, physician assistant).

Assistance with Self-Medication Administration – This has different meanings from state to state. Tasks of assisting the resident with his or her medications may include:

- Bringing the medication container to the resident
- Checking the dose
- Guiding the resident's hand to his or her mouth
- Opening the container
- Reading the label to the resident
- Reminding the resident to take the medication
- Removing the medication from the container
- Watching that the resident took the medication

(See Chapter 6 for the difference between administration of medications and assistance with medication for self-administration).

Adverse Drug Event or Reaction (ADE/R) – An adverse drug event (ADE) is an injury resulting from the use of a drug. The term ADE includes harm caused by the drug (adverse drug reactions and overdoses) and harm from the use of the drug (including dose reductions and discontinuations of drug therapy). ADEs may result from medication errors but most do not. An adverse drug reaction (ADR) is a harmful, unintended reaction to a drug administered at normal dosage.

Anti-anxiety Medication (Anxiolytics) – Medication used to treat anxiety (e.g., clonazepam [Klonopin], diazepam [Valium], lorazepam [Ativan]). These medications may increase risk of confusion, sedation, falls.

Anticholinergic – Medication that affects the nervous system (e.g., diphenhydramine [Benadryl], oxybutynin [Ditropan], digoxin, paroxetine [Paxil]). Side effects can include feeling sleepy, unable to think clearly, forgetting, being confused, dry mouth, constipation, unable to urinate, and feeling dizzy.

Anticoagulant – Medication used to prevent clotting of blood also known as a "blood thinner" (e.g., warfarin sodium [Coumadin]). This is a high-alert medication (see Chapter 9).

Antidepressant – Medication used to treat depression (e.g., sertraline [Zoloft], paroxetine [Paxil]).

Antipsychotic (Mood Stabilizer) – Medication used to treat mania, psychosis and other mental and emotional conditions. A person with psychotic behavior has extreme changes in personality, is unable to function normally in their daily activities, and has a changed sense of reality. Some examples of antipsychotic medications are haloperidol (Haldol), aripiprazole (Abilify), risperidone (Risperdal), olanzapine (Zyprexa).

Caregiver – Refers to an unlicensed staff member (also known as unlicensed assistive personnel or UAP) of the ALC who may assist with medication administration or who may administer medications (according to state and ALC regulation). A UAP can be a medication aide/technician, direct care worker, or nursing assistant.

Controlled Substances – Specific medications, such as morphine, oxycodone, that are covered by federal and state laws regarding how they are packed, stored, monitored, and discarded because of their potential for criminal misuse.

Dispense – To select, package, and label medications ordered (prescribed) by a physician, advanced practice nurse, or physician assistant. Only licensed pharmacists and physicians can dispense medications.

Drug-Drug Interaction – A change in the *effect* of one medication when it is given with another medication.

Herbal Medications – A drug or supplement made from plants.

Hypnotics – Medication that helps a person fall asleep or stay asleep. Some examples of these are temazepam (Restoril), zolpidem, (Ambien), eszopiclone (Lunesta). If a hypnotic is given too late at night, the person may feel very drowsy in the morning or have a hard time "waking up."

Medication Administration Record (MAR) – A written document (record) of medications administered (given) to and taken by a resident; it is a part of the legal medical record.

Medication Reconciliation – To compare a list of medications a resident had been receiving or taking in one setting of care with a list of medications ordered for a resident's new setting of care. For example: comparing the list of medications the resident took while at the ALC (before going to hospital) and the list of medications sent with the resident from the hospital ordered by the prescriber. This should also be done when the resident is transferred or moved between nursing home or home setting and ALC.

Medication Observation Record (MOR) – A daily medication observation record is used in some states for the resident who receives assistance with medications or self-administration of medications. The MOR should contain the same information a Medication Administration Record (MAR-see above) should contain.

Near Miss (a "close call") – An event or situation (such as a medication error) that almost – but did not – happen. Since no medication error or event happened, there is no actual harmful effect on the resident.

Over-the-Counter (OTC) Medication – A medication for which a prescription is not needed, such as many antacids or painkillers (e.g., acetaminophen [Tylenol]). OTC medications should be noted on the MAR. There might be specific state regulations and ALC policies about whether or not a written order is needed for OTC medications.

Prescribe – To order the use of a medication. A licensed person who prescribes medication (or treatment) is a "prescriber." A prescriber is a physician, advanced practice nurse, or physician assistant.

Prescription – Written instructions for a medication.

Primary Care Practitioner (PCP) – The person with the legal authority (and clinical responsibility) for the resident's medical care. This can be a physician (medical physician or doctor of osteopathy, advanced nurse practitioner [ANP], or physician assistant [PA]). The PCP is also known as a "prescriber."

PRN Medication – Any prescription or nonprescription medication that is to be taken when needed or "as necessary" according to the PCP's order. It is usually written as "every xxx hours as needed" for XXX (reason). The order also

states when and if it can be given again in XX hours. The use and effect of PRN medication must be charted, usually on the MAR. Some states and ALCs do not permit PRN orders for psychotropic medications.

Psychotropic Medications – Medications used to manage behavior, stabilize mood, or treat psychiatric (mental) disorders. These medications include antipsychotics, antidepressants, anxiolytics, and hypnotics.

Self-Administration of Medication – A resident has the mental and physical ability to take his or her medications as ordered.

Side Effect – An *expected* reaction to a medication, but not an intended or desired reaction, such as getting sleepy when receiving a medication for pain.

Significant Change – The presence of signs and symptoms (see Chapter 2) that differ from the resident's normal function. Changes can be physical, mental, behavioral, or affect a person's ability to function. A significant change must be reported to the ALC staff person in charge and/or PCP as per ALC policy.

Vaccine – Medication taken to prevent certain infectious (communicable) diseases; (e.g., "influenza" vaccine and "pneumonia" vaccine).

PREFACE AND INTRODUCTION REVIEW QUESTIONS

1. **T/F** As many as 85% of ALC residents need assistance to manage their medications – from opening the container to taking the medication at the right time.

TRUE FALSE

2. Steps involved in managing a resident's medications include all the following except:

a. Packaging and dispensing the medication to the resident
b. Helping the resident take the medication
c. Writing down when medication is taken
d. Reporting an ADE/R

3. T/F State rules and laws determine who can *assist with* administration of medications or who may *administer* medications.

TRUE FALSE

4. Match the following list of words with the correct definitions

A) Significant Change	_____	Medication used to treat mania, psychosis and other mental health conditions.
B) Adverse Drug Event/Reaction (ADE/R)	_____	Primary health care provider taking care of the resident, also known as physician, advanced practice nurse/nurse practitioner, and physician assistant.
C) Antipsychotic (Mood Stabilizer)	_____	Some tasks include reminding the resident to take the medication, bringing the medication container to the resident, reading the label to the resident, opening the container.
D) Assistance with self-medication administration	_____	Refers to an unlicensed staff member of the ALC who may assist with medication administration or who may administer medications (according to state and facility regulation). Some examples of unlicensed assistive personnel may have the title medication aide/technician, direct care worker, or nursing assistant.

E) Caregiver	_____	A medication effect that was not wanted or expected.
F) Dispensing medications	_____	A documentation form (i.e., a record) of medications taken by the resident that is used by all staff who administer medications.
G) Medication Administration Record	_____	To order the use of a medication (or other treatment) by a PCP.
H) Over the Counter Medications	_____	To select, package, and label medications ordered by the physician, advanced practice nurse, or physician assistant. Can only be done by licensed pharmacists and physicians.
I) Prescribe	_____	A physical or mental change in the resident.
J). Primary Health Care Practitioner (PCP)	_____	Medications that are normally used to alter behavior or mood. These medications include antipsychotic medications, major tranquilizers, antidepressant agents, anxiolytic agents, and hypnotic medications.
K) Psychotropic medications	_____	An expected reaction to a medication that is not a desired effect.
L) Side Effect of Medication	_____	A medication for which a prescription is not needed such as an antacid or acetaminophen.

CHAPTER 1. WRITING AN ORDER FOR A MEDICATION (PRESCRIBING): THE FIRST STEP IN MANAGEMENT OF MEDICATIONS

Medications are ordered by a resident's primary care practitioner (PCP) for several reasons:

- To control an illness or condition from getting worse (such as heart failure or breathing problems)
- To cure an illness
- To prevent an illness
- To reduce the symptoms of an illness (such as fever from the flu)

The first step – before writing an order for a medication – is clinical assessment (physical exam) so that the PCP knows what the illness or condition is. Writing the order for a medication to treat that illness or condition is the second step in medication management. Medications are ordered by writing a "prescription". This can only be done by the person who is legally allowed to do this, the PCP. Many errors in managing medications happen at the time they are ordered. Some of these errors are due to:

- Not being aware of possible drug-drug interactions or allergies
- Ordering the wrong dose
- Ordering the wrong medication
- Failure to instruct the caregiver to closely watch the resident for the effect of the medication

A medication order should indicate why the medication has been ordered (e.g., "Maalox every xx hours for complaints of stomach "burning", feeling "gassy"; Digoxin 0.125 mg for congestive heart failure). You are responsible for asking questions about an order for a medication when something is unclear or does not "sound right."

When a medication is ordered, a review of all medications the resident is already taking should be done before:

- A new medication is prescribed
- An older medication is discontinued
- The dose of a current medication is changed

This is something that you can do with the PCP even if it is done on the telephone.

You need to know why a medication has been ordered. You should also know the possible side effects of a medication. Ask questions, listen, and watch (observe) the resident for clues such as:

- Does the resident feel better?
- Does the resident feel worse?
- Has the medication changed their sleep, mood, or appetite?
- Are there signs of a rash or does the resident feel any itching?
- Does the resident feel jittery, restless, or sleepy?

If you see any of these changes, you must tell the resident's PCP, ALC nurse, a supervisor, or the ALC manager. *The PCP cannot possibly list all the possible side effects that occur with taking a medication.* So, you should know as much as you can about the resident's normal behaviors, mental status, and mood. When you see a change from the resident's normal status, report it. As you have already read (and heard) many times, it is important that you know the person in the ALC to whom this information should be reported.

The PCP needs to know as much as possible about the resident to select and order the best medication for the resident. A form such as the "Practitioner's Office Visit Form" or a "Practitioner Order Medication Reconciliation Form" provides helpful information to the PCP. Copies of these forms are in the AMDA's *Assisted Living Medication Management Manual: Operations Level*. (Get to know these forms – and use them). Facts about the resident that will help the PCP choose the best medication include:

- Allergies to any foods or medications
- Any changes in the resident's condition, such as weight loss or gain, the way they act, vital signs, fingerstick blood test results, complaints, problems with teeth or gums, and test results
- History of falls and possible causes
- If the resident asks for PRN medications (such as medications to help them sleep, for pain, or for headache)
- List of medications the resident is taking now
- OTC and herbal medications taken by the resident
- Whether or not the resident can follow directions
- Whether or not the resident can tell you how they are feeling especially when they are not feeling well

The "Practitioner's Office Visit Form" or "Practitioner Order Medication Reconciliation Form" (see AMDA's *Assisted Living Medication Management Manual: Operations Level*) should be filled out by the PCP. It should list all new medications and dosage changes in current medications, stopped medications *and* the reason(s) for such changes. A copy of the *signed* form should be given to the resident, a family member, or to you and taken back to the ALC. If a new medication is ordered (needed), then the prescription must match what is written on the "Practitioner's Office Visit Form" or "Practitioner Order Medication Reconciliation Form".

When writing an order for a medication, the PCP should state if certain instructions should be followed. Instructions may include whether to take the medication on a full or empty stomach or a certain time of day (morning or evening).

Questions to ask the PCP by the resident, family members, or you may include:

- Why has the medication been ordered?
- What are any side effects that we/I should look for?
- If a dose is missed at the time it should be taken, what should be done (e.g., call ALC nurse or PCP)?
- What foods or herbal supplements should not be taken when taking this medication?
- Are there any Special Warnings that apply to these medications? Examples of special warnings are: do not take the medication with milk products; do not go out in direct sunlight; or sit upright for 30 minutes after taking the medication.
- Does the resident need special monitoring such as taking vital signs, checking the weight, checking the skin for changes such as redness or bruises, or noting changes in mental status?
- If the resident refuses to take the medication, what steps should be taken (e.g., call ALC nurse or PCP)?
- Is any lab work needed? If it is needed, how often?

Pharmacist Role and Responsibility in Medication Prescribing

Orders for medications are filled by a registered/licensed pharmacist. The pharmacist must receive a clear, complete, and signed written order from a PCP. See the "Checklist for a Complete Prescription" below to know what is required. If the pharmacist has a question or identifies a problem such as a potential drug interaction, he or she will contact the PCP before dispensing/filling the prescription.

Instructions come with the medication from the pharmacy. They state what condition the medication is used for (reason); how to store the medication; its possible side effects; and if there are special instructions or directions for giving the medication. The law requires that type written instructions are included with every medication dispensed by the pharmacy.

Contact the nurse in charge or other ALC staff right away if you have question(s) about a prescription. Gather all your facts before you contact the ALC staff member, the PCP, or the pharmacist when you question an order for a medication. Be ready to describe or explain why you think there is a problem with the order. Use the information you know about the resident and what is required for a complete prescription.

Table 1. Checklist For A Complete Prescription

A complete prescription includes all of the following:

- Resident's name
- Resident's address
- Medication name (brand or generic) *
- Dosage form (tablets, liquid, patch, shot, cream, capsule)
- Strength (grams [g], milligrams [mg], milliliters [ml])
- Frequency (number of times a day) or time(s) of day to give the medication
- Number of days to be given for certain drugs like antibiotics, eye drops, nasal spray, steroids
- Method the medication should be given (e.g., by mouth, rectum, patch, injection, skin)
- Amount to be dispensed
- Name and signature of the person writing the order
- Number of refills for generic or brand name medications
- Special warnings or instructions (e.g., take with or without food)
- Date of order
- Reason medication has been ordered (usually, the medical diagnosis or a specific symptom or complaint)
- PRN (as needed) and why it is needed (e.g., acetaminophen for pain or headache; or antacid for upset stomach)

** **Generic medications** are medications not protected by trademark; they are a "class" of drugs. Antacids are a class of drug or medications.*
** **Brand name medications** have a distinctive name or trademark. Mylanta is a brand name or trademark name for an antacid.*

Remember, the PCP orders a medication. The pharmacy dispenses it. You, the caregiver, give the medication to the resident or help the resident give him or herself the medication.

CHAPTER 1 REVIEW QUESTIONS

Pharmacy Label (to be used for review questions)

Regis Pharmacy 534-660-5123 4700 Belair Road Perry Maryland

Name: Benny Hill Date: 2/9/2010 Ciprofloxin 250 mg tablets # 6

Take one tab by mouth in the morning and one in the evening for 3 days RX # 123456 Dr Ben Franklin

Refills: #0 Expiration Date of the medication: 2/9/2011

Precautions: Avoid unnecessary or prolonged exposure to sunlight

1. What is the name of the medication? _____

2. When should the medication be taken or given? _____

3. How many days should it be taken? _____

4. Special precautions are: _____

5. The first step before writing an order for a medication is:
   a. having the prescriber check the resident to find out what is wrong
   b. check insurance coverage
   c. check if the resident has an allergy to the medication
   d. giving the medication as ordered

6. List six items you would see on the PCP's medication order (prescription): *Example: resident's name*

_____ _____

_____ _____

_____ _____

7. List five questions to ask the PCP or the pharmacist when a medication is ordered for a resident.

_____

_____

_____

_____

_____

8. Compare the prescription (medication order) with the pharmacy label just below it. List at least 4 things that are different between the order and the label.

_____

_____

_____

_____

_____

Prescription (Medication Order):

Patient Name: Dana Wheeler Date of Birth: 2/9/55 Sex: F Room 360

Medication	Dose	Time to be administered	Route	Reason	PCP/ Specialist
Ciprofloxin	250mg	two times a day for 3 days 8AM & 8PM	mouth	urinary infection	Ben Franklin

Regis Pharmacy 534-660-5123

4700 Belair Road Perry Maryland

Patient Name: Benny Hill Date: 2/9/2001

Ciprofloxin 500 mg tablets #6

Take one tab by mouth in the morning

RX # 123456 Dr Dave Dorman

Refills: #0 Expiration Date: 2/9/2002

Precautions: plan to avoid unnecessary or prolonged exposure to sunlight

9. What would you do if the pharmacy label on the medication container did not match the written order (prescription) for the medication received from the PCP?

_____

_____

CHAPTER 2: OBSERVATION, COMMUNICATION, AND DOCUMENTATION

In this chapter, three important areas of medication management are discussed: 1) observing (watching) the resident for side effects that may be due to the medication, 2) knowing who to tell (to contact) with information about a resident's medication effect, and 3) writing in the resident's record what was seen and to whom this information was given.

Observing (Watching) the Resident

It is very important to observe the resident when taking his or her medication. Unlike nursing homes, where 24-hour licensed nurses (RN, LPN/LVN) are available, you are the ALC person who is likely best able to notice changes when:

- A resident starts to take a new medication
- A dose is changed
- A medication is stopped

You might be the first of all staff to notice that a resident is having side effects or problems related to a medication. This is why it is so important that the PCP, (or specialist), or pharmacist tell you *and* write down what the possible side effects that might be caused by a medication. This is especially important if you know that the resident also takes OTC or herbal medications. Some examples of ADE/Rs or side effects are dizziness, falls, nausea and vomiting, not feeling hungry, rashes, slurred speech, and heartburn. You need to observe the resident for these effects all the time because they can occur at any time the resident is taking the medication. *Routinely* ask the resident how they feel.

Medications can have four possible effects on the resident:

- ADE/R
- Desired effect
- No effect
- Side effect

As the resident's caregiver, you must also check if the medication is doing what it is intended to do. For example, some "desired effects" of a medication for a resident with a urinary tract infection might be relief of pain, burning, and the need to go to the bathroom often. Some medications take a few days to have the desired effect. Ask the ALC nurse, PCP, or pharmacist when the medication should start to take effect (e.g., 24 hours, week, etc). If there is no effect in the expected time, record this in the resident's record and tell the right person on the ALC staff.

When the dose of a medication is changed or the medication is stopped, you need to observe the resident to see if he or she is getting better or feeling worse, if symptoms have returned, or if there are any other changes. You need to know what to look for. These changes should be written on the medication order by the PCP. Changes must be reported to the PCP so that the dose can be changed or the medication restarted, if necessary. *Know the right person at your ALC to whom you should report changes and where to record this information.*

Communication: Signs and Symptoms

A very important part of managing a resident's medications is telling (reporting) what you observe when the resident is on a medication. You have the freedom - and skill - to discuss with the ALC staff and PCP all aspects of medication management. Ask the PCP, ALC nurse, and pharmacist about what signs and symptoms to watch for. These signs and symptoms can be written on the MAR; check the ALC policy about MAR notes. Report what you have seen to the right person at the ALC.

A ***sign*** is a change that you see in the resident who is taking a medication. These signs may include vomiting, mood change, crying, shaking, moaning, frowning, rash, or slurred speech. Results from blood tests, vital sign changes (blood pressure, pulse, breathing rate), and weight changes are other signs.

A ***symptom*** is a change in the resident that may be reported by the resident, such as pain, feeling dizzy, feeling "sick to his or her stomach," feeling weak, or straining while moving his or her bowels (e.g., constipation). To help you remember the signs and symptoms, side effects and ADE/Rs to look for in the resident when taking certain medicines:

- Attach a "warning statement" on the medication administration record (MAR)
- Attach "drug information sheets" sent by the pharmacy to the MAR; highlight the important information
- Refer to a nurse's drug handbook (one *should be* available) that lists medicines in alphabet order. It also provides information about the reason a medicine is used, side effects, the right dose for an older person, and symptoms of taking too much of the medicine.

Documentation: Keeping Medication Records

It is important to keep a written record of all the medications taken by a resident. Documentation should be organized, kept up-to-date, correct, and easy to understand by others. These records are very important to prevent mistakes from happening when a medication is given. These records also "show" that the resident is getting the best care possible to manage his or her medications.

Two forms that can be used to record notes about a resident's medications are in AMDA's *Assisted Living Medication Management Manual: Operations Level*. These are the Weekly Care Notes and the Resident Weekly Log. Your notes about health issues, changes in the resident's mental status, lab tests and results, and other tests done in the past week should be written in the Weekly Care Notes. These notes help track changes in the resident who is taking medications. They also remind you to follow up on labs and help you notice and report any new issues. The Resident Weekly Log is easy to fill out and can be completed by the caregiver with yes and no answers. There is also a space to write any notes about behaviors, new complaints, changes in medications, and practitioner visits.

CHAPTER 2 REVIEW QUESTIONS

1. As a caregiver, to whom would you report any changes in a resident's health or ways of acting that you notice after they take a medication?

_____

2. Mr. Smith takes an antibiotic and develops a rash. This is called an

_____

because _____

3. Mr. Jones was given acetaminophen for a headache and the headache was gone one hour later. This is called a

_____effect

4. When a resident tells you that he or she is dizzy or has vomited, this may be an example of an

_____

5. A *sign* is:
   a. a change in a resident that is directly noticed by a caregiver such as vomiting or a rash
   b. a change in lab results
   c. a change in vital signs such as blood pressure
   d. all of the above

6. A *symptom* is:
   a. a change in pulse rate
   b. a change in breathing rate
   c. a resident saying they feeling dizzy or weak
   d. a change in a resident's eating habits

7. A caregiver is the best person to notice changes that might happen when:
   a. a new medication is started
   b. the dose of a medication is changed
   b. a medication is stopped
   d. all of the above

CHAPTER 3: PHARMACY SERVICES

Types of Medication Orders

There are five basic types of orders for medications:

- New
- Refill
- Controlled substances
- Emergency
- STOP/discontinue

1. **New.** This is an order for a new medication.

2. **Refill.** This is an order to give a new supply of a medication that the resident is already taking (same dose and timing).

Orders for refills must be made according to the policies of the pharmacy and the ALC. There are different kinds of pharmacies. One type of pharmacy provides a range of services to residents in nursing homes, hospitals, or hospices that do not have a pharmacy on-site. These pharmacies may require that requests for refills are faxed when a three

or five-day supply remains of the medication. The pharmacy may also require that refill orders must be faxed over by a certain time of day to make sure that the medication is delivered on time. Other pharmacies may be able to deliver the medication on the same day when the refill request is phoned in by staff. This is done by using the prescription number on the label or when it is faxed by the ALC to the pharmacy. A mail-order pharmacy has their own procedures for requesting and receiving medications on time. It is very important to know the type of pharmacy that has been filling a resident's medication orders. It is also important to know if the resident has any "refill" orders left on the prescription (and where that can be found on the prescription). If the resident has no more refills, you need to notify the correct ALC staff member or the PCP. You want your residents to get their medication(s) on time.

3. **Controlled substances**. Some medications are under US government rules because they may be misused for illegal reasons (e.g., theft). Controlled medications (also known as "controlled drugs") are divided into five classes called "schedules":

- Schedule I (1) – includes medications that are usually not ordered by a PCP, such as heroin and marijuana. These medications are not legal in most states. Marijuana is approved for treatment of pain by some states.

- Schedule II (2) – includes medications such as morphine, fentanyl transdermal system (Duragesic patches), Percodan, Percocet, oxycodone, and Ritalin. These medications must be stored under "double lock and key" and checked and counted by ALC staff when different staff have access to these medications over 24 hours (e.g., shifts). As with Schedule I drugs, these medications are considered to pose a risk for illegal misuse. At the time of this printing, a written prescription for Schedule II medications must be received by the pharmacy before it can be filled.

- Schedule III (3) – includes medications such as Vicodin and Tylenol with codeine

- Schedule IV (4) – includes medications such as Valium, Xanax, and Klonopin

- Schedule V (5) – includes medications such as Lomotil, cough suppressants that contain codeine, and Lyrica

Follow state and ALC policy for the safe storage and destruction of these controlled medications.

4. **Emergency order.** This is a new, high-priority order for a medication because a resident is acutely ill. An emergency order can be a STAT order, which means "urgent" or "rush delivery" of the medication. You need to know how long it will take for a STAT order to be delivered by the pharmacies used by your residents or ALC. Each pharmacy has a different policy for handling and delivering emergency medications.

5. **Discontinued orders.** Medications that are not working should be stopped. Medications that cause side effects or ADE/R may be stopped or the dose, time, or way the medication is given may be changed to reduce or stop the ADE/R. A "discontinue order" should clearly state that the medication is to be stopped (e.g., "Discontinue Lasix 20 mg every morning"). Such an order should be written *whether or not* a new medication is ordered or a different dose of the same medication is ordered. When a new order is written for a medication currently being given, the old order must be stopped. For example, a resident has been taking Lasix 20 mg, every morning. The PCP writes a "new" order for Lasix 10 mg, every morning. The PCP must also write a discontinue order: "D/C Lasix 20 mg, every morning." Clear lines of communication must be in place between the ALC and the PCP when changes are made to a resident's medication(s) so that the ALC medication records are correct. This helps make sure that you can safely give medication(s) to a resident.

Medication Delivery and Verification

When medications are received from the pharmacy, a staff person at the ALC must check to make sure that the medications match what was ordered by the ALC or PCP. This is called verification and is an important step that can help prevent medication errors. It is recommended that two *signed* forms be used to confirm that medication(s) have been delivered. The first form states that the shipment has been sent to the ALC. This form is signed by the ALC person who received the delivery. The second form is signed only after the *contents* of the delivery are checked and it is confirmed that the contents match with what is listed on the delivery slip. Look for any "notes" in the bag that might explain why a medication was not delivered. The ALC should have a log to list all problems with delivery of medications. This includes "back" orders (a medication that cannot be sent at this time), changes in the way the medication looks (e.g., color or shape), an order that is not complete (not all the pills are included in the order), or that the

pharmacy is waiting for PCP to approve the new prescription. The log should be routinely checked by an ALC person (e.g., ALC nurse, ALC manager, or supervisor) for problems that occur more than once so that steps can be taken to fix such problems.

The "check-in" process for medications should happen as soon as possible after they are delivered to the ALC. If there is not enough time to carefully check that the medication(s) match the PCPs' orders, lock them in a secure place until they can be properly checked in. Mistakes can happen if a person is not paying close attention or is interrupted or distracted when checking the medication delivery. Checking in medications is very important and you should take the time to do this in the right way. Make sure you will not be interrupted or distracted; go to a quiet place.

The steps listed below will help avoid errors when you check in medications.

1. Compare each item in the bag, box, or tote to the packing slip sent by the pharmacy.
2. Tell the designated ALC staff about medications that were not sent. Perhaps the pharmacy had only 10 tablets of a medication even though the order was for 30 tablets. The pharmacy slip may say that "the remaining 20 tablets will be sent the next day." ALC staff should follow up the next day and make sure that the missing 20 tablets are delivered.
3. The pharmacy label on the medication container is compared with the PCP order.
4. Sometimes you will find differences between what was ordered and what was delivered by the pharmacy. These may include missing medication, mistakes on the medication label (such as wrong patient name or wrong dose) or no information about missing or incomplete medication supply. If you notice any problems or think a mistake has been made, first double-check and confirm that there is a problem. If so or if you still are not sure, call the pharmacy right away to report the problem and tell the designated ALC person to whom you are to report problems.
5. Record the receipt of all medications in the resident's medication record.
6. Keep a copy of the packing slip that came with the pharmacy delivery or medication verification logs for at least 30 days (90 days for those ordered every 90 days). This will allow the ALC staff to refer back to the packing slips or medication logs, if needed.
7. Place all medications in the correct storage areas as soon as possible. Medications that are to be kept in a refrigerator should be placed there right away.
8. Check the delivery slip against the order written in the resident's chart and the medication re-order sheets to make sure that all ordered medications were sent.
9. Double-check the label on each medication container and compare it with the medication order and MAR. If you see an error on the container, place that container apart from the other medications in the shipment. If you notice that something does not match between what was ordered from the pharmacy and what you got, call and ask if there is a reason.

Storage of Medications

Guidelines for medication storage include that:

- Medications must be stored in their containers with the original pharmacy labels. It is not safe to pour medications from the old bottle to a new bottle for any reason. One reason is because the old container may have an expiration date that is different from the new bottle. Also, the "pills" may look different because they are from a different manufacturer.
- Each resident's medications must be separated from those of other residents and stored in a locked place. Each state and ALC have different rules about medication storage.
- Ointments and lotions must be separated from medications taken by mouth. They are usually placed on another shelf or in a different area. This can prevent an error where a resident mistakenly takes a lotion by mouth or a liquid oral medication is applied to the skin.
- Medications stored in a medication cart or room must be locked at all times when not in use or in sight.
- Only staff with permission to give medications should have access to locked medication carts or rooms. Medications that must be kept cold must be stored in a locked refrigerator, if the refrigerator is not in a locked room. The refrigerator should be checked to make sure that medications are stored at the right temperature. Only medications should be stored in this refrigerator; no food and drinks. The ALC should make sure that medications are stored at their correct temperatures. This is listed in the United States Pharmacopeia guidelines for temperature ranges. A list of temperature ranges can be found in the United States Pharmacopeia guidelines[2].
  - Room Temperature: 59° - 77° F or 15° - 25° C
  - Refrigeration: 36° - 46° F or 2° - 8° C
  - Freezing: -4° to 14° F or -20° to -10° C

- Insulin vials must be dated when opened or used for the first time. Insulin expires 28 days after opening. The vial must be discarded (thrown away).

Controlled Substances

By federal law, Schedule II controlled substances are stored in a double-locked area. Two different keys are needed to access these medications. This means that if the controlled substance is kept in a medication room, that room has one lock on the door and the medication is stored in a cabinet in that room with a different lock and key. When Schedule II medications are stored in a medication cart, two keys are also needed. The outside of the cart must have a different key from the locked box inside the cart. All Schedule II medications are kept in that locked box.

Disposal of Controlled Substances: Review State Regulations with ALC Staff

Throwing away (disposal) of controlled medications must follow state rules. State environmental protection agencies (EPAs) also have their own rules about throwing away medications. Follow the guidelines set up by your ALC for disposal of these medications.

The following are some *suggested guidelines* for disposal of controlled substances in the ALC:

1. At least two of the following people must be present when a medication is thrown away. These may be the ALC administrator or designee, a registered nurse, or a pharmacist, and one other ALC staff member.
2. If a controlled substance is destroyed, this must be recorded on a form provided by the pharmacy. It can also be written on an ALC controlled drug count form. These forms must be signed by each of the staff members who witness the destruction of the medications.
3. Write down the medication name, dose, and amount or number destroyed.
4. Write down the date the medication was destroyed.
5. Record the way in which the medication was destroyed.
6. The administrator or designee, a registered nurse, or a pharmacist and one other employee who assisted in the disposal of the medication/s must sign the drug destruction form.

As always, follow your state and ALC policies, as these policies differ from state to state.

CHAPTER 3 REVIEW QUESTIONS

1. Which medication order listed below is *not* one of the **basic** orders sent to the pharmacy from an ALC?
   a. refill
   b. emergency or STAT
   c. intravenous
   d. new order
   e. discontinued order

2. By law, Schedule II controlled substances need to be stored under _____ and _____.

3. **T/F:** Schedule II controlled substances can be stored in a medication cart if there is a different key to lock the cart and a different key to open a locked box inside the cart.
   TRUE FALSE

4. **T/F:** Schedule II controlled substances can be stored in a locked box in a closed, unlocked medication room.
   TRUE FALSE

5. Steps to follow for proper storage of medication(s) include:
   a. store them in their original containers with the original pharmacy label
   b. store them in a medication cart or room that must be locked at all times when not in use or in sight
   c. ointments and lotions must be stored away from medication(s) given by mouth (e.g., on another shelf)
   d. all of the above

6. To make sure all ordered medication(s) have been delivered, the staff member receiving the shipment should match the _____with the _____ or written order when the medication is received from the pharmacy.

7. The medication refrigerator should:

a. maintain a temperature between 36° – 46° F
b. be locked if not in a locked medication room
c. not contain food items
d. all of the above

CHAPTER 4: DOCUMENTATION OF MEDICATION ADMINISTRATION: THE MEDICATION ADMINISTRATION RECORD (MAR)

All medications and orders for medications must be written on a specific form commonly known as the Medication Administration Record or MAR. Medications brought to the ALC by the resident, family members, or medication orders from the PCP must also be recorded on the MAR. A nurse is not always present in the ALC when the resident comes with an order (prescription) for a medication or when pharmacies deliver medications. Compare the PCP's written order to what is written on the MAR. You should also compare the written order/prescription to the pharmacy label when medications are received from the pharmacy.

Each state has its own regulations and ALCs have policies about who can write ("transcribe") an order for medication into the resident's chart and MAR. Know your state regulations and ALC policy.

If you have any questions about the order/prescription, you should ask the correct person at the facility (e.g., ALC manager or designee, nurse, or PCP) right away. This may mean you need to call the PCP or pharmacist to ask your question before you can write the order for a medication into the medical chart and the MAR. When you come on duty, find out which ALC staff you would call if you have any questions about orders for medication(s).

Different forms might be used to record when you give medication to a resident or help a resident take his or her medication. The type of form may vary with the ALC or with state rules. The ALC's rules for medication management should list correct abbreviations that you can use to note that a medication was not given. This might be out-of-stock (OOS), refused (R), or the resident not in ALC at the time (OOB = out of building). Some medications have special things that need to be done before you can give them, such as taking the resident's pulse, or blood pressure, or doing a fingerstick to check blood sugar (glucose) level. It is important that you know the ALC's requirements about where to write down (record) this information; where to record the place (or site) a shot (injection) is given or a patch is placed/removed.

The information listed below should be written on each MAR:

- Allergies *(If the resident has no allergies, this should also be written on the MAR.)*
- ALERT if there are two residents who have the same name on the floor or unit
- Month and year [NOTE: this does not have to be the first day of the month since a resident can start taking a medication on any date of the month.] (Most residents have a "new" MAR every 30 to 31 days.)
- Name of ALC
- Resident's name, room, date of birth, and name of the PCP

The following information should also be recorded on the MAR about each medication taken by the resident:

- CRUSH information. Ask the ALC staff, pharmacy or PCP if the resident's medications should be crushed before they are given or before the resident is helped to take his or her medication. (NOTE: Time-release medications should not be crushed.)
- Date the medication was ordered
- Dose to be given
- Full name of medication (generic and trade name) with no abbreviations

- HOLD information: reasons why a medication should not be given. These may include changes in pulse, blood pressure, glucose level shown by the fingerstick result, or a resident's complaint that they do not feel well. This might be a sign of an ADE/R. The ALC policy and/or PCP instructions will indicate when to hold a medication
- Reason for giving: Not all ALCs or MARs require that you write the reason a medication is ordered, but it is a good idea. A reason could be to treat high blood pressure or to control blood sugar levels. Writing down the reason a medication is given can help you know what effects to look for after the medication is taken
- Route by which the medication is given (e.g., by mouth, patch, shot, drops, rectum)
- STOP date for when the medication is no longer to be given. This is common with medications such as antibiotics that are only given for a specific length of time
- Time(s) to be given
- Type of diet
- When *not* to take the medication with other medications or foods
- Whether to take the medication with certain liquids (e.g., water, milk, or juice)

When a new medication is ordered in the middle of the medication cycle or month, it does not require a new MAR. Simply enter (write down) the new medication on the current MAR. Draw a line with an arrow from the first day of the month or medication cycle to the date that a new medication was started. For example, if a resident starts a new medication on July 15, draw a line in the row from July 1 to July 14. This shows that this medication was not given on these days in July.

If a new medication is to be given only for a certain number of days, this can be shown by blocking out the number of days from the start date (and time) to the end date (and time). In your ALC, the policy might be to write an X on every day and time that the medication would not be given.

Many medication errors are due to problems caused by using abbreviations. The most common abbreviation that causes an error when giving medications is the use of "qd" in place of "once daily"[3]. The ALC should have a policy about which abbreviations *can and cannot* be used. How to get information regarding a list of "Error Prone Abbreviations" can be found in AMDA's *Assisted Living Medication Management Manual: Operations Level*. Abbreviations should be clearly written. Sometimes a prescription has been written correctly, but the PCP's handwriting makes it very hard to read the abbreviations. In this case, ask what the abbreviation means. *Do not guess what it means!*

The MAR is a legal document. That means that you make an entry on the MAR in ink, only – not pencil.

If an error is made on the MAR:
- **Do not** use white out to cover the error.
- **Do not** attempt to erase the error.
- **Do** draw a line through the error and initial it. Then enter the right information on the MAR.

CHAPTER 4 REVIEW QUESTIONS

1. The MAR is
   a. a legal document
   b. a form to record when medication(s) are given, including PRNs
   c. all of the above

2. **T/F** If an error is made on the MAR, **do not** use white out to cover the error and **do not** erase the error.
   TRUE FALSE

3. Information needed on an MAR includes everything listed below *except*

   a. resident's date of birth
   b. mental status exam results
   c. name of PCP
   d. month and year

4. Other information written on the MAR includes

   a. generic and brand name of each medication
   b. dose of medication and how it should be given
   c. time(s) the medication should be given
   d. all of the above

5. An ALC should have policies about what should be written on a MAR such as

   a. every MAR must start on the first day of the month
   b. medication "errors" that *do not* have to be reported
   c. abbreviations that can be used on the MAR
   d. All of the above

CHAPTER 5: GIVING MEDICATIONS TO RESIDENTS

Every ALC should have written policies, job descriptions, and ways to evaluate staff who assist with or give medication(s) to residents. As a caregiver who will assist with or give medications, you need to read these policies. After reading the policies, talk about them with the person to whom you report (e.g., ALC nurse, ALC manager, or supervisor). The system used by the ALC to manage residents' medications should be described to you. Always feel free to ask questions.

If you are giving medications to residents, information you need to know includes:

- The different kinds of medications such as those for the heart, breathing, infections, and diabetes
- The effects of medications and what they are ordered for
- The types of side effects that some medications may cause
- Watching (observing) a resident for changes in how they feel and act
- Listening to the resident describe how they feel after taking a medication and reporting this information to ALC staff
- The right way to report any errors that might occur when giving medication to a resident or helping a resident take his or her own medication

It is very important that you know who to tell and how to contact staff about all medication issues.

Principles of Medication Management

Principles are like rules. They help to guide what you do. Some rules for giving medication(s) to a resident are:

- Only those medications that have been ordered or approved by the PCP can be given to a resident. This includes OTC medications and herbal supplements that the resident may have bought or were brought by family members.
- The ALC should have a policy that allows checking or looking in a resident's room for medications that have not been ordered by the PCP. This includes OTC medications and herbal supplements. You should be aware of the ALC's rules about checking a resident's room.
- The resident should be part of any discussions and decisions about his or her medications. If a resident is not able to understand or be part of these talks, then the family should take part.
- The resident should know why they are taking a medication. They should also know about side effects that a medication might cause. This will help them tell you when they think they might be having a side effect. You can talk with your residents about this and remind them from time to time.

- The resident has the right to refuse any medication. Sometimes, the resident may not be able to understand or decide if they want to take a medication. In this case, the family should be asked.
- You cannot decide on your own that a resident should take a certain medication.

Safety is the most important issue when giving medication(s) to a resident. Below are six "rights" of medication administration to help you give medications safely[4].

1. Right Resident

Errors can happen when a resident is given a medication that was ordered for some other resident. To make sure this does not happen, you need to identify the resident before giving the medication by:

- Asking the resident to state his or her name. If you are not sure who the resident is, STOP. Do not give any medication if you are not sure you are giving it to the right resident.
- Calling the resident by name or checking his or her identification band, if they are wearing one. (NOTE: Calling is not fool-proof. A confused resident might answer to any name he or she is called).
- Checking with another staff member to make sure that you have the right resident. Do not check with another resident who may not be sure.
- Identifying the resident by photo.
- Do not use the resident's room (or bed in which he or she is lying) as a way to identify the resident. This is because they may have changed rooms when you were off duty or a resident may have entered the wrong room.

2. Right Drug

Orders are required for all medications given to a resident. After you make sure that the information on the MAR is right, compare the label on the medication container with the MAR *three times* before giving the medication. You should do the following:

a. First, before taking the medication container (bingo card, unit dose, pillow pack, vial, etc.) from the cart, shelf, or drawer.
b. Second, when you remove the right amount of medication from the container.
c. Third, before you put the container back on the storage cart, shelf, or drawer or before you throw away the unit-dose pack.

You also need to check:

- The date the medication expires.
- The size, shape, and color of the medication (liquid or solid, tablet, capsule). If the size, shape, or color seems different to you, or if the resident or family member thinks it looks different, tell the ALC nurse or call the pharmacy. Some medications have numbers or markings on them. The pharmacy may have gotten the medication from a different manufacturer. This may mean that it is the same medication but it looks different.
- The spelling of new handwritten orders to avoid mix-ups between medications with names that sound or look alike (e.g., Zyprexa/Zyrtec, Celexa/Celebrex).

3. Right Dose

Check the dose written on the container label with the dose written the MAR three times. Follow Step 2, above. If you have any questions, do not give the medication to the resident. Ask the right ALC person about what you should do. You might have to call the PCP or the pharmacy. When giving a liquid medication for the first time, it is good practice to have the nurse or other health care giver check that you are giving the right amount.

4. Right Time

Follow all orders about the time when a medication is to be given, such as before meals (AC), after meals (PC), or with meals.

- Some medications have to be given at certain times and these should be closely followed. For example, antibiotics should be given on time (e.g., "every 8 hours"). This helps make sure that the proper level of the antibiotic is in the resident's blood system. Oral medications for diabetes and insulin shots should also be given in the right time period.
- Be alert for special blocking on the MAR for medications that should be given weekly, every other day, or only on certain days such as Mondays, Wednesdays, and Fridays.

If a specific time is not written on the MAR or the medication container label such as "give once in the morning", check with your ALC nurse or ALC manager. Ask what time the medication should be given. Write down (document) the question you asked and the answer you got in the resident's record.

5. Right Route

Always ask the PCP, ALC nurse, or supervisor, if the medication order does not state *ho*w the medication should be given (e.g., by mouth, shot, rubbed on the skin)**.**

- When getting the medication ready to give to a resident, check that what is written on the MAR matches the order: by mouth (PO), subcutaneous (sub q), per rectum (PR), or rubbed on the skin.
- Some tablets (e.g. nitroglycerin) are placed under the tongue where they dissolve. These medications are absorbed through the membranes in the mouth. Do not give a medication that is supposed to dissolve in the mouth at the same time with a medication that should be swallowed. First, give the medication that is to be swallowed and then give the medication that should dissolve in the mouth.

6. Right Documentation

- After giving a resident his or her medication, write down (document) that the medication was given. This is usually done by placing your initials in the right block on the MAR or the MOR. This can prevent the resident from getting the medication a second time by mistake.
- Do not write down that a medication has been given until after it has been given or taken by a resident.
- Record where all shots (injections) are given or patches are placed on the resident's body. Insulin injection sites should be "rotated." Medications delivered by "patch" (e.g., Oxytrol) should be rotated. The ALC policy should indicate the insulin and patch rotation sites and how these are entered on the MAR. For example, LL means left leg, RA means right arm, and RB means right abdomen.
- If you see any changes in the resident after giving a medication, tell the PCP or ALC nurse right away. Then write down what you observed that made you think that the resident might be having a side effect or an ADE/R. In the resident's record, write down the person to whom you gave the information.
- Follow all ALC rules if a resident refuses to take a medication. Tell the correct ALC staff and/or PCP – especially if the resident continues to refuse the medication.

Charting an As-Needed (PRN) Medication

Many states do not allow caregivers who do not have licenses to give PRN medications. Be sure that you know the state's and the ALC's PRN rules.

A PRN order for a medication must state the reason why the medication is ordered. Writing down when you have given a PRN medication requires that you write down the **reason** for giving the medication (if the reason is not stated on the MAR) **and** its effect. It may take some time for a medication to have its effect. Get this information from the ALC nurse, pharmacist, or PCP. Ask the resident if the medication worked. For example, you give a resident acetaminophen for a headache and you check on the resident one hour later to ask if the headache is better. Write down if the PRN medication had the effect that it was supposed to have, that is, relief of the headache. If you find that you are routinely giving the resident his or her "PRN" medication, report this to the appropriate person at the ALC.

Resident Right to Refuse Medications

If a resident refuses to take a medication, ask the resident "why". Return to the resident at least one more time to give the medication. (Check ALC policy.) If the resident still does not want the medication, write the resident's refusal on the MAR; usually with an "R." Report the refusal and the reason per ALC policy to the right person and record it in the resident's chart. It may be that the resident is anticipating an unpleasant or frightening side effect (e.g., rapid pulse) that happened before – and that he or she does not want to happen again!

Charting a Medication When Given Outside of Time Frames

When a medication is not given within the ordered time frame, tell the ALC nurse or PCP. You will need to be told whether or not to give the medication at some other time that day or to skip the dose. Make sure you write down what you are told. If the resident is away from the ALC when they are scheduled to receive a medication, talk about this with the resident and staff. A decision has to be made as to whether or not to give the medication at a different time. Sometimes you can give a responsible person the medication to give the resident when he or she is out of the ALC. Sometimes, the resident may not receive the medication at all. In either case, discuss this in advance and write down what was decided and done in the resident's chart.

Documenting a Medication Error

Errors when giving medications can occur in a number of ways. These include:

- Medication given to a resident who has an allergy to that medication
- Medication given to the wrong resident
- Medication given at the wrong time
- Wrong dose
- Wrong medication
- Wrong route

When a medication error occurs, it must be reported to the designated ALC staff person and the PCP. You must also record the error on the specific ALC form for medication and treatment errors. Review all ALC rules about recording and reporting medication errors. Be aware of the ALCs policies for telling the resident or the family about the error. If an error involved an important medication such as one that could affect a resident's blood pressure, this should be told to the ALC staff on the next shift. The staff on the next shift should check the resident's blood pressure and watch the resident for any side effects.

Charting When a Medication Has Not Been Written Correctly in the MAR

Sometimes a medication order can be written incorrectly on the MAR. If this happens:

- Draw a line through the medication order that is not correct on the MAR.
- Write your initials and the date on the MAR next to the medication order that was not written correctly.
- Write your initials and date in the medication box on the MAR where you enter the correct medication order.

Safety Tips for Medication Administration

In addition to the above steps to make sure all medications are given safely, these tips may help to create and maintain safe medication practices and reduce the risk of errors when giving medications.

- Gather all the equipment and items you will need to perform a medication "pass" (such as stethoscope, thermometer, water, thickened liquids) before you begin to give any medications. This reduces the risk that you will be distracted by leaving the medication cart or resident's room to find the equipment you need. Such distractions can lead to errors.
- Make sure that the PCP's order matches the medical record order, the MAR, and the pharmacy label. **This is very important.**
- Wash your hands before giving any medications. You can also use a liquid alcohol hand gel between giving medications to each resident.
- Give only the medications that you have personally checked and prepared for the resident.
- Prepare and give only one resident's medication at a time.
- Record the medications (usually with your initials) given on the MAR right after you have given them and only record the medication that you have given.
- Do a triple check of each medication before you give it to a resident.
- Never leave medications unattended or medication carts unlocked.
- Stay with the resident until they have taken all of the medication that was ordered.
- Never give medications that have an expired date.
- Never give medications that are the wrong color or that you think might be contaminated. This might be a medication that looks cloudy when it used to be clear.
- Never touch any medication with your bare hands.
- Report any medication errors right away.
- Report near misses (see Definition).

CHAPTER 5 REVIEW QUESTIONS

1. What are the six rights of giving medications?

a. _____ d. _____

b. _____ e. _____

c._____ f._____

2. Safety tips for giving medications include all the steps listed below *except:*

a. wash hands between each resident
b. wait to write in (initial) the MAR all the medications you have given until the end of the shift
c. initial only those medications that you gave on the MAR
d. match information on the PCP order, pharmacy label, and MAR

3. When doing the triple check each time a medication is given, which of the following are correct?

a. when taking the medication from the medication cart or shelf or box
b. right before pouring the medication
c. after pouring the medication
d. all of the above

4. A resident is out of the ALC and misses his morning dose of a medication. What would you do?

a. contact the PCP/ALC nurse and ask if the medication can be given when resident returns
b. write down directions received from PCP or ALC nurse about what to do (such as things to watch for in the resident since no medication was given)
c. write down when or if the medication was given
d. all of the above

5. You notice that a medication order has not been correctly written on the MAR. What would you do?

a. draw a line through the wrong entry, write the correct order, and date and sign both places
b. tell the ALC person in charge that an error was made
c. both a & b

6. **T/F.** Residents should be aware why they are taking the medications and any possible side effects so that they can tell you when they are having a possible side effect or if the medication is not working.

TRUE FALSE

CHAPTER 6: RESIDENTS TAKING THEIR OWN MEDICATIONS. HELPING RESIDENTS TAKE THEIR MEDICATIONS.

You need to know the ALC policy on:
- Giving medication(s) to the resident
- Helping (assisting) a resident to take his or her medications
- Residents giving him or herself their own medication(s)

Self-Administration

In ALCs, many residents take their medications on their own. Health care staff must make sure that a resident is able to safely give themselves their medications or if they need help to do so. Some states require a physician, nurse practitioner, physician assistant, registered nurse, or pharmacist to decide if a resident is able to take his or her medication(s) on their own. ALC policies should state:
- That an order must be written to allow residents to give themselves their own medication(s)
- What is looked at or tested (the assessment criteria)
- Who can assess the resident for self-administration of medication

Many older adults do not take their own medication(s) for a number of reasons such as:
- Cost
- Having side effects due to the medication but not telling this to the ALC staff or PCP
- Not knowing how to take the medication
- Poor understanding about the medication
- Trouble opening the container
- Vision problems

Residents who self-administer medications need to know important things such as:
- Right times to take medications
- What to do if they are going to be out of the ALC when a medication is due
- What to do if they don't "feel right" after taking a medication
- What to do if they miss a dose of a medication
- Who to tell when they need more medication or how to refill medications
- What types of foods they should not eat when taking certain types of medications

These safety steps may help residents avoid going to the hospital or seeing their PCP because of problems managing their medications.

The ALC should have a policy about your role and the tasks you need to do for the resident who is able to take his or her own medication. An ALC policy can be to:
- Check if the medication has been taken
- Check that the medications are locked in a safe place
- Write on an ALC (e.g., MAR/MOR) form that the resident was seen taking his or her medication

As a caregiver, you might be the first person to notice that a resident is no longer able to take his or her medications on their own. You should tell the correct ALC staff person and PCP if you see such changes and write this in the resident's chart.

Helping (Assisting) Residents Take Their Own Medications

Helping (assisting) with administration of medications may include:
- Bringing medications to the bedside
- Offering liquids
- Opening containers or vials
- Reminding the resident to take his or her medication
- Storing medications

Some states also include directing the resident's hand or arm to his or her mouth.[2] However, the definitions of "assist with" and "administration of" vary between states and are based on the state's rules or laws.[5.] In an online survey conducted by Center for Excellence in Assisted Living (CEAL) in 2008, definitions for 'assist with' and administer are shown in the table below:

Table 2. Difference Between "Assist With" and "Administration of" Medications

Assist with:	**Administer** (including any or all of the actions):
• Checking the dose • Guiding the resident's hand • Opening the container • Reading the label • Reminding the resident • Removing the medication from the container • Watching that the medication was taken	• Ensuring it is given at the right time • Giving topicals (e.g., eye drops) • Guiding the cup to the resident's mouth • Obtaining the medication • Placing it in a cup and handing it to the resident • Storing • Writing down that the medication was taken • Watching for any change in status or the way the resident is acting

Source: Mitty, 2009[5]

CHAPTER 6 REVIEW QUESTIONS

1. State two reasons why an older adult would not take his or her medications

_____

_____

2. The resident who takes his or her own medication(s) needs to
   a. know about potential side effects
   b. tell a caregiver if they notice any side effects as soon as they occur
   c. know about safety tips such as not taking two doses when a dose is missed, skipping a dose because they are out on a trip, foods they should not eat, and the right time to take the medication
   d. all of the above

3. **T/F.** Any change(s) in a resident's ability to take his or her own medications must be told to the PCP and designated ALC staff person and needs to be written in the resident's chart.
   TRUE FALSE

CHAPTER 7: MONITORING THE MEDICATIONS TAKEN BY THE RESIDENT

Monitoring the medications taken by a resident is needed to maintain the resident's health and to make sure that the right medications are taken at the right time. Unlike nursing homes where 24-hour care is given by licensed nurses, monitoring ALC residents' medications often depends on caregivers, residents, and family members to notice and report any problems. As a caregiver, you need to be aware of the desired effects of medications and their possible side effects.

Whenever a resident has a problem (e.g., a fall) or a change in condition (e.g., weight loss), one of the first things to ask should be, "Could the resident's medication have caused this problem?" An ALC policy should require that any member of the care team who thinks there may be a medication-related problem or sees any changes in the resident should report this "hunch" to the ALC nurse, ALC manager, and PCP. All staff should be aware **that any new symptom**, especially if it occurs right away or a few days after a resident takes a new medication, could be an ADE/R or side effect. In some cases, side effects or ADE/Rs can happen after the resident has been taking the medication for some time.

You need to be aware of ALC policy about when the resident's PCP should be told about possible side effects or ADE/R. For example, you see that a resident is having problems with balance after taking a medication or the resident tells you that he or she feels dizzy after taking a medication. You should know who to tell if these things happen. The ALC policy should guide you to whom to tell: the ALC nurse, PCP, ALC manager, or supervisor. Residents and family members should be taught about common symptoms that may be caused by some medications (see Table 3).

Table 3. Common Signs and Symptoms of Adverse Drug Reactions in the Elderly

This a only a list of some adverse reactions that may occur with medications

- Changes in mental status or signs of dementia getting worse
- Changes in vision such as double or blurred vision
- Changes in walking style
- Confused thinking that is new
- Diarrhea
- Dizziness
- Fainting
- Feeling sleepy
- Feeling tense or anxious
- Lack of energy
- Loss of balance or falling
- Loss of desire to eat
- Muscle twitching
- Nausea, vomiting
- New onset of forgetting and memory problems
- Rashes and other skin changes
- Restless or not able to sit still
- Seeing or hearing things that are not there
- Shaking (trembling)
- Stiffness
- Swelling of lower legs, ankles
- Trouble having a bowel movement
- Trouble staying or falling asleep
- Weight loss or gain of weight that is not intended

CHAPTER 7 REVIEW QUESTIONS

1. Common signs and symptoms that might be a sign of a side effect or an ADE/R to medication(s) may include:
    a. falls
    b. loss of desire to eat
    c. nausea, vomiting
    d. new onset of confusion
    e. rashes and other skin changes
    f. all of the above

2. **T/F** An ALC policy should require that any member of the care team who thinks there may be a medication-related problem or sees any changes in the resident should report this "hunch" to the ALC nurse, ALC manager, and PCP.

    TRUE FALSE

CHAPTER 8: PSYCHOTROPIC MEDICATIONS

Psychotropic medications are any medication used to change mood, mental status, or the way a person behaves. More than half of ALC residents receive this kind of medication[6]. It is very important to tell the resident's PCP or the correct ALC staff person about any changes you notice in the way a resident behaves after taking a psychotropic medication. (NOTE: Some behavior changes are good; some are not.)

Psychotropic medications (see Definition) are ordered for:

- Relief of feeling very sad (depression)
- Relief of feeling "crazy" such as seeing things that are not there (psychosis)
- To calm the resident down or help them relax and sleep
- To help prevent going from a happy mood to a sad mood – back and forth, without stop

The most common reason for giving a resident of an ALC a psychotropic medication is to relieve feeling anxious. As with all psychotropic medications, you need to know:

- The desired (behavior) changes
- The undesired changes
- To whom changes should be reported
- When (how soon) the desired changes are likely or expected to happen
- How to record the changes you notice

As stated in an earlier chapter, direct caregivers are often the first staff in an ALC who will notice problems that may be caused by medications. Telling this information right way to the right person at the ALC is very important. This will help make sure that any problems related to medications are quickly fixed before they cause serious harm to a resident. Also, letting the PCP know how the resident's behaviors are changing with the medication is very important. This helps the PCP decide the best dose of the medication for the resident.

CHAPTER 8 REVIEW QUESTIONS

1. A psychotropic medication is ordered to change
    a. weight gain
    b. thyroid function
    c. mood, feeling anxious, behaviors
    d. heart rate

2. Psychotropic medications include
    a. antidepressants
    b. analgesics
    c. antipyretics
    d. all of the above

3. A resident taking a psychotropic medication should be watched for
    a. blood count changes, every month
    b. major change in the way they act or behave
    c. hair loss
    d. changes in the amount of time they like to listen to music

4. When a resident is taking a psychotropic medication, the caregiver needs to know
    a. why the resident is taking the medication
    b. common side effects
    c. desired effects of the medication *and* when these are likely to be seen
    d. all of the above

CHAPTER 9: HIGH-ALERT MEDICATIONS

"High-Alert" medications can cause great harm to a resident if they are given incorrectly or given to the wrong person. As a caregiver, know which of your residents are taking these types of medications, the reasons they are taking these medications, and the desired effect. You also need to know the side effects or ADE/Rs that may be caused by these medications.

High-Alert medications discussed in this chapter are:
- Warfarin (pronounced war-fer-in) sodium, which is a blood thinner also known as Coumadin
- Insulin, a medication to treat diabetes that is given by a shot (injection) and diabetic medication taken by mouth
- Opioids (pronounced o-pea-oyds) or narcotics to relieve pain

Warfarin (Coumadin) reduces the risk of blood clots. The PCP will order a specific lab test (called "INR") on a routine basis for a resident who is taking warfarin. ALC staff must watch residents for any signs of bleeding from the gums or nose, bruises on the skin, blood in the urine, blood in the stool, (which may look like black "tar-colored" stool), and changes in mental status. The PCP and appropriate ALC staff need to be told right away when this occurs.

Warfarin should be given at the same time each day as written on the PCP's order. Some medications given with warfarin (Coumadin), such as antibiotics, may increase the risk of bleeding. In this case, the PCP may order more

frequent blood tests. It is very important to know your ALC's policy about who should be told if a dose of warfarin is missed; this could be life threatening. Some foods and drinks can also change the effects of warfarin. For this reason, it is important to ask the PCP and pharmacist what foods should not be eaten when the resident is taking warfarin.

Insulin is a "hormone" produced in the pancreas, a gland that lies behind the stomach. Insulin causes cells in the liver, muscles, and fat tissue to take glucose (sugar) from the blood to use to make energy. Some people are not able to make enough insulin. This prevents their bodies from using blood sugar. As a result, levels of blood sugar rise and the condition known as diabetes is diagnosed. Residents with diabetes may need to receive pills by mouth and/or receive insulin shots (injection) to control the amount of sugar in their blood.

To reduce errors when giving insulin shots, the PCP should write the word "units" instead of using the abbreviation "U" when writing the insulin order. Errors happen when the word "units' has been abbreviated because the "U" looks like a zero. For example, an order written for "10 U" of insulin, could be mistaken for "100" units of insulin. This would be ten times higher than the dose ordered and could greatly harm the resident, possibly requiring hospitalization.

There are different types and names of insulins. Different types of insulin take effect at different times and speed after they are injected. Types of insulin include:

- Rapid-acting
- Short-acting
- Intermediate-acting
- Long-lasting
- Pre-mixed

The names of different types of insulin can sound the same, such as Novolin R and Novolin N or Humalog and Humalog Mix. To make it less likely that you give the wrong insulin medication, do each of the three safety checks (*see Chapter 5 Right Medication*) before you give a resident an insulin shot. It is important also, to change the place (site) of the insulin shot and to check for lumps or swelling that can appear at the site. As a caregiver, you need to know if insulin shots can be given in your ALC and who is approved to give insulin - whether by a licensed nurse or caregiver.

Oral (by mouth) medications for diabetes control (lower) blood sugar levels. Some examples of these medications (a pill or tablet) are:

- glipizide (Glucotrol)
- glyburide (Diabeta or Glynase)
- metformin (Glucophage)
- nateglinide (Starlix)
- pioglitazone (Actos)
- repaglinide (Prandin)
- rosiglitazone (Avandia)
- sitagliptin (Januvia)

If this medication is not taken as ordered by the PCP, the resident's blood sugar levels may rise too high or drop too low. Caregivers should know the signs and symptoms of high blood sugar (hyperglycemia) and low blood sugar (hypoglycemia). If a caregiver thinks a resident has any of these symptoms, they should immediately tell the PCP and ALC staff person (see Tables 4 & 5).

Table 4. Possible Signs of High Blood Sugar in Older Adults

High blood sugar (hyperglycemia) signs include:
- Blurred vision
- Breath that smells fruity
- Feeling very thirsty
- Feeling weak and tired
- Loss of weight that is not intended
- New or recent confused thinking
- Recent or repeat infections (urinary, fungal, and abscesses)

Table 5. Possible Signs of Low Blood Sugar in Older Adults

Low blood sugar (hypoglycemia) signs include:
- Falling down
- Feeling irritable that is not normal for that person
- Feeling very hungry
- General weakness
- Hearing, seeing, or feeling things that are not there
- Increase need for sleep or increased tiredness
- Pale skin color or "clammy" skin
- Seizure
- Stroke
- Sudden changes in the way the person acts
- Sudden confused thinking
- Sweating
- Unable to control movement of their body

✶(See AMDA: *Diabetes Management For The Older Adult for the Assisted Living Setting.)*

Opioids are most often used to treat pain. Some of the most common opioids ordered by PCPs are:
- Acetaminophen and hydrocodone (Vicodin)
- Codeine
- Fentanyl transdermal (Duragesic transdermal)
- Hydrocodone
- Hydromorphone (Dilaudid)
- Morphine
- Oxycodone (OxyContin)
- Oxycodone and acetaminophen (Percocet)

Many opioids have names that sound alike such as hydrocodone and hydromorphone. To help reduce the chance that the wrong medication will be given, do the three safety checks (*see Chapter 5 Right Medication*) before you give a resident the medication.

Opioids are made as regular and time-released tablets. Time-release opioids may have the following letters included in their names:
- Continuous-release (CR or Contin)
- Controlled-release (CR)
- Extended-release (ER, XR, or XL)
- Sustained release (SR)

Opioids that are released over time are made to slowly dissolve. The medication is released into the bloodstream over time and relieves pain over time. Time-released opioids (and all time released medications) should **never** be crushed because this will cause the entire medication to be absorbed into the bloodstream at once. When this happens, it can cause breathing problems, sedation, or death. Look closely at the name of the medication to see if it is a sustained or time-release type medication.

Opioids also come in liquid form and some can be very strong. Many liquid opioids come with a dropper or cup with lines and numbers. Be sure to **carefully** review, with the ALC nurse or PCP, the right amount of liquid that should be given to the resident and use the right dropper with the right dose markings. Giving too little of an opioid may mean poor pain relief. Giving too much of an opioid can cause an ADE/R such as breathing problems or sedation.

CHAPTER 9 REVIEW QUESTIONS

1. **T/F** High-Alert medications are those medications, that when given in error, have an increased risk of causing harm to the resident.
   TRUE FALSE

2. Match the correct medication with the best description

a. Warfarin (Coumadin)	_____	Pain medication
b. Opioid/narcotic	_____	Blood thinner
c. Insulin	_____	Shot (injection) to help control blood sugar levels

3. **T/F** A written order for insulin should include the word "units" instead of the letter "U" to decrease the chance of an error.
   TRUE FALSE

4. **T/F** Medications that have SR, CR, XL, and XR are examples of **time-release** medications.
   TRUE FALSE

5. **T/F** Time-release medication should not be crushed.
   TRUE FALSE

6. Crushing a time-release opioid
   a. helps it work faster for pain relief
   b. makes it longer for the body to absorb the medication
   c. can cause breathing problems
   d. is up to the caregiver to decide

CHAPTER 10: QUALITY ASSURANCE IN MEDICATION MANAGEMENT

The purpose of a Quality Assurance (QA) program is to:
1. identify real and potential problems; and
2. take steps to solve these problems – or prevent them.

A QA program for medication management in an ALC can include these activities:
- Collect information about:
  - Delivery issues
  - How often ADE/Rs of any kind occur
  - Medication errors
  - Side effects or ADE/Rs such as falls
  - Talking with the staff at the ALC and the PCP about medication issues
  - Review what is known about ADE/Rs and try to figure out why certain things did or did not happen
  - Assess if any changes in assisting with or giving residents their medications resulted in fewer errors
  - Share the information from your QA assessment with ALC staff

As a caregiver, you have an important role in QA. One of these is to report all errors and all "near-misses." After an error or near-miss is reported, the ALC will look in to why or how the error happened. This is the first step to stopping the error from occurring again. Telling the right people about errors is one of the best ways to protect residents and help make sure they are safe. Future errors can be prevented by sharing the specific situation with all caregivers and nurses. When an error is reported, it gives all the ALC staff a chance to look at what led to the error. They also can help decide what steps to take to prevent such errors from occurring again. For example, a caregiver reports that she/he almost gave Mr. John Smith's medication(s) to Mr. William Smith. This is a "near-miss." In looking in to it, the QA people learn that both residents are confused *and* both residents refuse to wear their ID band (with their family's' permission). The outlines of the problem are now clear. The ALC staff, resident, and family need to arrive at the best solution for both residents and staff.

Reporting an error should **never** be used to blame or punish the person. Reporting errors and near misses helps all staff improve the care of ALC residents. A QA (culture of safety) plan focuses on putting programs in place that will help staff and systems avoid errors. This is very different from using information about errors to punish staff.

Examples of QA activities that may decrease errors when giving medications are to:

- Designate ALC staff to watch caregivers give medication or help residents take their own medications; give feedback
- Review medication error events without telling the name of the staff or resident involved including "near miss" errors
- Train and review with staff the steps of safe medication management

Recommendation: All staff at an ALC who are authorized by law to give medications to residents should be checked on a routine basis. See the Medication Administration Competency Checklist in AMDA's *Assisted Living Medication Management Manual: Operations Level.*

TABLE 6. Types of Medication Errors

Type of Error	Definition
Wrong dose or amount	Medication is delivered from pharmacy or given in a dose, strength, or amount that differs from that ordered by the PCP. Example: PCP ordered glyburide 2.5-milligram tablets and the pharmacy sent 5-milligram tablets. Example: PCP orders Lanoxin po 0.5mg once daily; resident is given 0.5 mg every other day (qod).
Wrong form of medication	Medication is delivered from pharmacy or given in a form that is not the same as that ordered by the PCP. Example: The PCP ordered tablets and the pharmacy sent liquid.
Wrong resident	A medication is ordered for the wrong resident, dispensed by the pharmacy for the wrong resident, or given to the wrong resident. Example: Mr. Smith was given a medication that was ordered for Mr. Jones rather than Mr. Smith.
Wrong medication	A medication is given by staff or taken by a resident that was not approved by the PCP. Examples: (1) The pharmacy sends the wrong medication to fill an order; (2) A family member brings a medication for the resident that they were taking at home but should no longer be taking.
Error in medication preparation	The wrong preparation, formulation, reconstitution, or dilution of a medication is given. Example: 1) Metamucil is mixed with wrong amount of water or 2) crushing a time-released medication.
Error ordering a medication	A PCP prescribes the wrong medication, dose, route or time to give a medication. A PCP orders the wrong form of a medication; orders a medication for the wrong resident; or orders a medication the resident is allergic to.
Extra dose	A resident receives a second dose of a medication because the first dose was not written (charted) on the MAR when a caregiver gave it at an earlier time.
Wrong route	The right medication is given but by the wrong route. Example: Eye drops were given as ear drops.
Wrong method used when giving a medication	Example: The resident has two inhalers. The bronchodilator inhaler is supposed to be given first, then wait a few minutes, and then use the steroid inhaler, but the steroid inhaler is given first instead.
Omission error	Not giving an ordered dose. If a resident refuses to take a medication or there are clinical or other valid reasons not to give a medication, these are not errors of omission. Example of error of omission: resident was in restroom when medications were being given and caregiver did not go back and give the medication(s).
Wrong time	A medication is given at a time that is outside the time ordered by the PCP. Example: a medication that should be given one hour before a meal on an empty stomach is given with breakfast.

A pharmacy consultant can be very helpful in thinking about the reasons that medication errors happened and how to prevent them in the future. Training programs on methods to prevent or reduce medication errors can also be conducted by the pharmacy consultant.

Medication Reconciliation

Medication reconciliation is a process to prevent medication errors that happen when a resident moves from one setting of care to another (e.g., hospital to ALC). A list of current medications (including OTCs and herbals) that the resident is on (taking) is compared with the list of medications (orders) written by the PCP when a resident returns from the hospital, office visit, or nursing home. Reconciliation should also occur when the resident moves in to the ALC. If any part of the ALC list of medications does not match (e.g., dose, time, route) with those ordered by the PCP, this should be told to the PCP and designated ALC staff person (e.g., nurse, manager, or supervisor). The goal is to have the most current and correct list of all medication(s) taken by a resident.

The resident and family should tell the right person at the ALC about any OTC and herbal supplements the resident is taking. These should be added to the resident's medication list because they can speed up or delay the effect of medications that are prescribed. It is a good idea for you to sit down with the resident (and/or family) on a regular basis and ask them if they are taking any medications other than those listed on their MAR. You can also look in the resident's closet or cabinet for any medications, OTCs , or herbals that are not on the resident's MAR. Before doing so, however, make sure you follow ALC policy about respect for resident's privacy. Consider doing the "search" with the resident and/or family. Discuss what was found, if anything, with the resident. Why do they have these things and how often are they taking them? Report what was found (and the discussion with the resident) to the right ALC person and write this in the resident's chart. The PCP should be notified as well.

Medication Storage

All the places where medications are stored should be checked on a regular basis. This includes medication carts and rooms, cabinets, closets, resident's rooms, and refrigerators. Steps to take when checking where medications are stored can include:

- Storing internal medications (e.g., pills, liquids), external medications (e.g., eye drops, ointments), and household chemicals in separate marked areas
- Storing medications that have been "stopped" in a different place from those medications that are currently being given to residents until the stopped medications can be safely thrown away
- Throwing away medications that have passed their expiration date

CHAPTER 10 REVIEW QUESTIONS

1. A quality assurance program includes:
    a. collecting data and analyzing the data
    b. monitoring changes made in the medication management system
    c. reporting and sharing information with staff
    d. all of the above

2. **T/F** Reporting medication errors and "near misses" helps the staff to make medication management safer.
    TRUE FALSE

3. Parts of a QA medication management program include:
    a. attending training sessions on medication management and policies and procedures
    b. learning proper medication management skills
    c. reviewing QA data
    d. observing medication administration
    e. all of the above

4. A medication error is a violation of any of the "6" rights of medication administration and includes:
    a. medication given to the wrong resident
    b. wrong dose of medication was administered
    c. medication was given in the morning and should have been given in the evening
    d. all of the above

5. Medication reconciliation
    a. helps the ALC to keep the most accurate list of medications (including OTCs and herbals) for the resident
    b. maintains an accurate medication list throughout the resident's stay
    c. is part of the medication management and QA process
    d. all of the above

ANSWERS TO REVIEW QUESTIONS

Preface and Introduction – Answers: 1: T; 2: A; 3: T; 4: C,J,D,E,B,G,I,F,A,K,L,H

Chapter 1 – Answers: 1. Ciprofloxin; 2. Once in morning; once in evening; 3. 3 days; 4. Stay out of direct sunlight; 5. a.

6. Acceptable responses: a) resident's name, b) address, c) medication name, d) dosage form, e) strength of medication, f) how many times a day, g) refills, h) prescriber name, i) number of days to be taken, j) how medication is taken/given (e.g., mouth, rectum, skin)

7. Acceptable responses: a)Why has the medication been ordered? b) What are any ADE/Rs? c) What to do if a dose is missed? d) What foods or herbal supplements should not be taken while on medication? e) Are there any special warnings that apply to these medications? f) Does the resident need special monitoring such as taking vital signs?

8. Acceptable responses: a) difference between how many times a day the resident is to take the medication b) different patient names c) different doctor names d) different dose

9. Acceptable responses: call pharmacy; call PCP; call ALC manager/nurse.

Chapter 2 – Answers: 1. Acceptable responses: call PCP; call ALC nurse/other; 2. ADE/R; Acceptable responses: undesired, unintended, or unexpected reaction to a medication. 3. Desired effect. 4. ADE/R 5. d. 6. c. 7. d.

Chapter 3 – Answers: 1. c; 2. double lock and key; 3. T; 4. F; 5. D; 6. Pharmacy packing slip/contents of the bag; 7. d

Chapter 4 – Answers: 1. c; 2. T; 3. b; 4. d; 5. c

Chapter 5 – Answers: 1. Right patient/resident; right medication, right dose, right time, right route, right documentation 2. b; 3. d; 4. d; 5.c.; 6. T

Chapter 6 – Answers: 1. Acceptable responses: impaired vision; impaired understanding/cognition; unable to open container; afraid of telling family/staff/other about not feeling good; cost of the medications; 2. d; 3. T

Chapter 7 – Answers: 1. f; 2. T

Chapter 8 – Answers: 1. c; 2. a; 3. b; 4. d

Chapter 9 – Answers: 1. T; 2. B, A, C; 3. T; 4. T; 5. T; 6. c

Chapter 10 – Answers: 1. d; 2. T; 3. e; 4. d; 5. d

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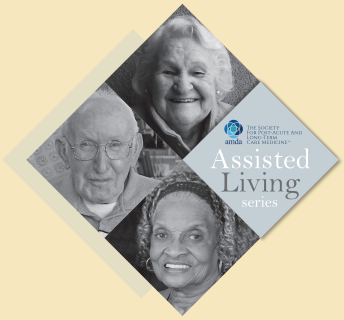

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AMDA – The Society for Post-Acute and Long-Term Care Medicine
10500 Little Patuxent Parkway
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