



MEDICATION

TECHNICIAN

TRAINING

PROGRAM

ASSISTED

LIVING

STUDENT MANUAL

*STATE OF MARYLAND BOARD OF NURSING
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MEDICATION TECHNICIAN TRAINING PROGRAM FOR ASSISTED LIVING

INTRODUCTION

The purpose of this Medication Technician training program is to prepare care providers of Assisted Living Programs to administer medications to residents. The medication technician program specially is designed for Assisted Living Programs certified by the Department of Health and Mental Hygiene, Office of Health Care Quality (OHCQ). There are specific rules and regulations that must be followed when administering medications in an assisted living practice setting. The medication technician training program is designed to provide a basic foundation for safe medication administration in the assisted living setting.

The Maryland Board of Nursing set standards in their regulations which govern the administration of medication in Maryland. These regulations state that medication administration is a nursing act. The registered nurse case manager/delegating nurse delegates medication administration in assisted living and then only to someone who is prepared and qualified as a medication technician. Individuals who are not licensed nurses and who administer medication in assisted living must be supervised regularly by a registered nurse case manager/delegating nurse. This nurse will be identified for you by your agency and will be readily available to you, both in person and by telephone, to help you learn how to safely give medications to the residents. The registered nurse will visit the resident and you at least every 45 days, or more often if needed, to promote safe medication administration. This registered nurse is a case manager/delegating nurse for your employer, the assisted living facility.

This training will help you protect the health and well being of those under your care. Each resident is an individual with his or her unique health problems and medications to take for those health problems. Medications that are ordered for one individual, must be given only to that individual. The consistent use of correct medication administration procedures will help you to avoid making errors which could be harmful to those in your care. Medication errors may also result in serious legal consequences.

As you begin this medication technician training program, you must successfully pass a reading examination and math examination. You must successfully pass each examination prior to progressing in the training program to begin Chapter one. In each chapter of the student manual, beginning with Chapter one, there are objectives and content specific to safe medication administration. The student manual is to be used during each class, and as a resource after the training program is completed.

ORIENTATION TO MANUAL

This training manual is yours to keep. After the training is over and you can refer to it when you have questions about medication. This manual has been developed using minimal technical language. However, you will need to become familiar with some medical terms and abbreviations. The responsibility for learning this material rests with you. You will be responsible to keep all information given to you by your instructor. For each Chapter and each section of each chapter, you should:

1. Read the objectives

The objectives will indicate to you the most important information to look for during your reading.

2. Read each section slowly and carefully

Highlight the important information and write notes in your manual to explain material you have trouble understanding. Use specific examples that apply to the individuals with whom you work.

3. Do the Feedback Exercises

These exercises cover the most important information to remember in each section. They include fill-in-the-blanks, short answers, etc. These Feedback Exercises are “mini-tests” designed so you learn i.e. “master” the material as you go along. These Feedback Exercises are completed at the **DIRECTION** of your instructor.

Training Program Overview

Unit I provides you with background information. Topics include:

- medication administration and medication technician’s role;
- different uses for medication;
- medication standards and regulations;
- observing physical and behavioral changes;
- reporting and recording changes; and
- responsibilities when assisting in a visit to a health-care professional (i.e., physician, dentist, nurse practitioner).

After you attend the program and review all the information in Chapter I and have completed the feedback exercises, you will be ready to progress to Chapter II. Chapter II focuses on the concepts and procedures you must know and the skills you must demonstrate to administer medication. They include:

- basic medication responses and interactions;
- forms of medication and routes of administration;
- correct storage procedures;
- how to use reference and resource material;
- procedures for safely administering medication; and
- documentation procedures.

Chapter III contains information regarding abbreviations and equivalents.

Chapter IV contains additional learning material for specific diseases, problems and medications. The material you need to learn will vary with the specific needs of the individual.

Chapter V contains information relative to common high risks drugs you may see utilized with the assisted living population.

Chapter VI contains material addressing the Clinical Update you will be required to successfully complete every two years in order to maintain your medication technician certification with the Board.

Chapter VII contains content on special routes of medication administration and procedures. These procedures will be addressed with you by your agency's registered nurse, case manager/delegating nurse before you are asked to perform these procedures.

Training Program Evaluation of Participants

In the theory component of the training program, Chapters I, II, III and V will be tested. Students must successfully complete the written tests known as Feedback Exercises. Secondly, students must perform a simulated medication administration demonstration. The simulated demonstration will include the correct procedures to prepare, administer and record medications. This simulated demonstration must be completed with 100% accuracy. The third and final evaluation component requires the student to administer medication to an individual (patient/resident) in the assisted living facility. This will include the correct procedures to prepare, administer and record the medication(s) administered. This also must be completed with 100%

accuracy. The clinical demonstration must be observed by the RN who teaches the medication administration training program or the registered nurses case manager/delegating nurse for the assisted living facility.

Upon successful completion of the training program (successful completion of all three components) the students will be eligible for Certification as a Medication Technician by the Maryland Board of Nursing.

CHAPTER 1
SECTION I
MEDICATIONS AND
RELATED
ISSUES

OBJECTIVES

1. Identify the four (4) reasons to use medications.
2. Identify the single, primary reason for the rules, regulations, policies, and guidelines for medication administration in a community-based service system.
3. Identify two basic principles you need to give medication safely.
4. Identify three of the four (4) basic rules regarding medication administration.
5. Identify six of the eight (8) components of medication administration process.
6. State three of six (6) practices that assist in protecting individual rights throughout the medication administration process.
7. List two (2) practices that strip individuals of their dignity.

Student Guide

Medications are used for four reasons:

- to prevent illness,
- to control or stop illness,
- to reduce symptoms related to an illness and
- to manage an illness (keep them from getting worse).

The majority of adults in our society take for granted calling the doctor and making appointments, complaining about a health problem and getting prescriptions filled. The individuals under your care may have complicated health needs and also have difficulty in communicating or even identifying some of their own needs. Most of the individuals under your care may need prescribed medications and treatments that are not familiar to you and which may be potentially dangerous.

When a community based caregiver such as an Assisted Living Program provider agrees to provide services to a person, that provider becomes responsible for the health and safety of those to whom the care is given. The provider is required, by law, to make special efforts to protect the safety of the individual served. The protection of the health and well-being of the individuals you work with is most important. Having a basic knowledge of medication administration procedures will help you in providing safe care.

To give medications safely to those individuals under your care in your Assisted Living Program, you must acquire a basic knowledge of:

- medications and their use;
- drug actions and possible negative reactions;
- methods of administration;
- trained observation skills;
- references and resource materials that may be available to you;
- procedures used to obtain assistance of the individual's registered nurse, the physician or primary care practitioner who prescribes the medication.

There are four rules for administering medications to individuals in Assisted. Living Programs:.

1. Only unlicensed persons who have successfully completed this medication administration training program and who have been certified with the board of nursing as a medication

technician can administer medications.

2. Only registered nurses, case manager/delegating nurses may delegate the administration of medications to certified medication technicians who are staff of assisted living programs.
3. No medication can be given without an authorized prescriber's (i.e., physician, certified nurse practitioner, etc) order.
4. "Over-the-counter" medication(s) cannot be given without an authorized prescriber's order. The medications must be in the original sealed manufacturer's container and administered in accordance with the authorized prescriber's written order and the policies of the assisted living program.

STAFF RESPONSIBILITIES IN ADMINISTERING MEDICATIONS

When medications are used cautiously and correctly, it can be expected that the individual will benefit from the medication. When used carelessly or incorrectly, medications can be harmful or even fatal. As the medication technician, you will be enlisted to assist individuals in taking medications safely. Taking medications safely requires more than just making sure the medications are swallowed.

Medication administration consists of:

- (1) observing the individual for changes in physical condition and/or changes in behavior;
- (2) reporting these observations to the right person as soon as possible;
- (3) assisting (or assisting a family member) in a visit to the health care professional and communicating all information;
- (4) consulting with the pharmacist and obtaining the prescribed medication (i.e., new orders and refills)
- (5) storing the medication safely;
- (6) administering medications correctly;
- (7) ensuring medications are taken; and
- (8) recording information promptly, correctly, and on appropriate forms.

Individual's Rights

DO NOT HANG MEDICATION RECORDS ON THE WALL OR LINE PERSONS UP TO RECEIVE MEDICATIONS. EVERY EFFORT SHOULD BE MADE TO AVOID ACTIVITIES THAT STRIP THE INDIVIDUALS OF THEIR DIGNITY.

Specific regulations have been written to avoid the misuse of medication by providers of Assisted Living Programs. Each individual and/or his or her family has the right to be involved with the decision making process to take medication. The individual has the right to refuse treatment and/or services, including medication. If the individual refuses medication, inform your supervisor or manager immediately and document according to agency policy. The supervisor/manager is responsible for follow-up with the case manager/delegating nurse or family member with power of attorney. Remember, Medication can be given only for the benefit of the individuals; not for the convenience of staff.

The Assisted Living Program individuals must participate as fully as possible in the decision making process regarding medication. Self administration should be taught and encouraged as much as possible. Encourage participation of the individual at the health professional's office and at the pharmacy. The individual health care professional and the assisted living manager shall determine what level of self-administration is appropriate. Self administration policies and training tasks are discussed further in CHAPTER II. (Complete Feedback Exercise A and B).

CHAPTER I
SECTION 2
OBSERVING

OBJECTIVES

1. State the three (3) main effects of medication and provide one example of each.
2. Explain two (2) things to remember about drug interactions.
3. Explain the differences between a sign and a symptom.
4. Give two (2) examples of signs.
5. Give two (2) examples of symptoms.
6. Explain the difference between verbal and nonverbal behavior
7. Explain two (2) side effects of taking medications.
8. Describe two (2) of the three (3) principles of good observation.
9. List four (4) of seven (7) observations of physical changes you should know when administering medications.
10. List six (6) of nine (9) changes in a individual's behavior you should know when administering medications

Student Guide

As a medication technician, you spend more time with the individual than anyone else. Because of this, you are the most important person in communicating the preferences and needs of the individuals in your care. You, along with the assistant living manager and other staff, become responsible for ensuring their health, well-being, and behavior. You are in the best position to notice when there are any changes in the individuals' physical condition or changes in their usual way of behaving. What you observe is very important to the individual's care. You must pay attention to the individuals and their environment. You need to know what is usual for a particular individual, and what is a change in that individual's usual pattern. Some changes may be sudden and drastic, while others are more subtle. You must be able to recognize changes. It is important to remember that physical problems can result from behavioral changes and behavioral changes can result from a change in the individuals's physical condition.

IDENTIFYING EFFECTS OF MEDICATION

There are three main effects of medication:

- desired effects - the reason why the drug was prescribed
- negative effects - undesirable or unwanted effects
- no apparent effects

Your observation skills are important in reporting the effects of the medications. Whenever medications are prescribed, the health care prescriber must weigh the possible benefits of the desired effects and possible dangers of negative effects. For example, Digoxin is often ordered to strengthen the muscle of the heart, but can have a negative effect of nausea and vomiting. Because of these possible dangers, **ONLY** authorized prescribers, i.e. physicians, dentists, podiatrists, certified nurse practitioners and certified nurse midwives may prescribe medications. Only registered pharmacists or physicians may dispense and label medications. Licensed registered nurses can delegate the administration of medications to certified staff.

Medication may be prescribed for a number of reasons. Some common reasons are: to prevent illness, to control or to stop an illness, or reduce symptoms related to an illness.

Medications are also occasionally ordered to aid in the management of a individual's behavior.

A desired effect is an indication that the medication is doing what it is meant to do. Examples of desired effects:

- Tylenol given for headache - headache is relieved

- Robitussin given for a cough - cough is reduced

A negative effect is unwanted or unintended. For the purpose of this training, we will use the term negative effects. A negative effect could be one that may be expected to occur or it could be unexpected and could be dangerous. Negative effects can sometimes be harmless and at other times be potentially fatal. **IT IS YOUR RESPONSIBILITY TO ALWAYS OBSERVE FOR ANY NEGATIVE EFFECTS FROM THE MEDICATIONS YOU WILL BE ADMINISTERING TO YOUR Individual.** The registered nurse and the pharmacist can provide you with information regarding any negative effects of the medications that are prescribed. Some examples of negative effects include:

- Drowsiness from taking allergy medication
- Stomach irritation from taking aspirin
- Dizziness from taking a blood pressure medicine

A drug to drug interaction means that each drug can potentially interact with another drug. For the individual, who takes many drugs at one time, this can cause negative effects. The two most important things to remember concerning drug to drug interactions include:

1. The greater the number of drugs taken at once, the greater the possibility of drug to drug interaction.
2. By knowing what medications the individual is taking, and by reporting your observations, the physician or nurse practitioner may make a medication change. Only they can make a medication change.

Negative effects may show up as physical and/or behavioral changes. They can be easily seen (such as a rash, diarrhea or vomiting) or hard to detect (such as blurred vision, dryness of the mouth or confusion). Any change in the individual, especially during the first few days when a new drug is started, may have been caused by drugs already in the body. Negative effects due to medications can also occur after the individual has been receiving the drug over a long period of time. As the medication technician, you are the person best able to observe for both physical and behavioral changes. It is up to you to observe and immediately report any and all changes to ensure the health and safety of the individual.

Different medications require different amounts of time before one can notice their full desired effect. Some medications may not have any noticeable effect, such as those medications which are used to prevent illnesses from getting worse. Be sure you know exactly what the desired

effect of the medication and approximately when you and the individual should notice the effect of the medication. You should also know when to contact the Assisted Living Manager or Case manager/delegating nurse if the medication is not having the desired effect. The health care professional can then prescribe a different medication or change the dose of the current medication. As an example, Tylenol may be prescribed to be given every four hours for fever. If after 24 hours, the fever remains unchanged, the physician should be called and told there is apparently no effect. The physician can then prescribe a new medication or change the dose of Tylenol. (Complete Feedback Exercise C.)

SIGNS AND SYMPTOMS

Signs: The changes you see in a individual's appearance, behavior and bodily functions are called signs. They can be seen, heard, felt or smelled. They can also be detected by taking a temperature or pulse and conducting laboratory tests. All of your senses are involved when you're observing a individual for changes in physical condition and behavior. All of the following are examples of signs. You may

- see or hear an individual crying or moaning
- feel an individual's skin as warm or cold
- see that an individual has vomited or has diarrhea
- hear an individual slurring his speech

Symptoms: The changes that you can not see but are experienced and/or reported by the individual are called symptoms. A individual may verbally tell you of changes occurring or may use nonverbal behavior to express these changes. All of the following are examples of symptoms.

The individual may complain of:

- pain
- itching
- dizziness
- feeling upset or worried
- weakness
- nausea
- loss of appetite

There are times when you might have to observe a individual's nonverbal behavior and report these behaviors to assist in detecting symptoms. Some examples of observed behaviors that a individual might display include:

- holding one's head
- pointing towards parts of the body
- limping

- restlessness
- pacing

CHANGES IN PHYSICAL CONDITION

To observe correctly you must notice any changes that might occur in the individual's physical condition. These changes might be obvious if you have observed signs or the person complained about a problem (symptom).

You must also be familiar with the individual's daily patterns, health status and restrictions. If you pay attention to these, you will be able to observe changes in the individual's physical condition. Some of these are:

- a change in body weight
- urinary patterns change to frequency or incontinence
- constipation or the occurrence of diarrhea
- loss of appetite
- changes in walking or balance
- change in ability to dress or groom
- change in eating pattern

It is important that you read each individual's health record, paying close attention to recommendations from the health care professional. Ask questions if you don't understand.

CHANGES IN BEHAVIOR

Each person behaves differently. In identifying changes in a individual's behavior, it is necessary to first learn what is usual for that individual. Then you must compare his or her present behaviors to the usual behaviors that the individual has shown in the past. It is also necessary to become familiar with the daily activities of the individual. For individuals with dementia or behavior problems, it becomes especially important to know what their "usual" behavior pattern was like before receiving any medication..

Some changes in a individual's behavior include the following:

- mental or emotional changes
- change in sleep patterns
- change in level of activity
- changes in communication
- changes in socialization with others

- drowsiness
- increased irritability
- increased pacing
- increased or decreased resistance to care

While only the authorized prescriber can order medication, your observations and descriptions of the physical and behavior changes are extremely important. Your information may have more influence on the doctor's treatment decisions than any other factor. Because you are the person in closest contact with the individual experiencing physical or behavior changes, it is your responsibility to observe, describe and report signs and symptoms. The health care professional will make his or her decision based, in part, on the information you provide, the individual's examination, and other tests and measures.

While some medications eliminate the cause of a problem (for example, antibiotics killing germs), medications used to control a individual's behavior (for example, anti-anxiety drug for agitation) may only temporarily control behavior. Even if the medication is effective in decreasing the behavior (agitation) it is not a complete solution. Drugs that control behavior can not be used as a substitute for socialization. They also can not be used as a punishment or for staff convenience.

Being on medications can have some disadvantages. For example, any medication can interfere with a individual's daily functioning and the ability to perform "usual" activities of daily living for example, by causing drowsiness. Medications can also cover up or mask the actual cause of a problem. (Complete Feedback Exercise D.)

CHAPTER 1
SECTION 3
REPORTING AND
RECORDING CHANGES

OBJECTIVES

1. State three responsibilities of the medication technician in observing and reporting changes.
2. State the three (3) categories of changes that must be reported.
3. Describe when, to whom, and how an emergency medical condition should be reported.
4. List four (4) of eleven (11) conditions that are always considered emergency medical conditions.
5. List three (3) physical changes and three (3) behavioral changes that are considered non-emergency medical conditions.
6. Describe three (3) essential components in documenting other physical and behavioral changes.
7. State where emergency medical numbers are posted.
8. Given a situation of an individual's behavioral and/or physical changes, write a report of situation including: what, when, to whom, and how.

Student Guide

In addition to observing physical and behavioral changes, you must know what to report, when to report, to whom to report, and how to report. You are not responsible for making medical judgments about the conditions you observe. Medically-trained specialists make medical judgments. Your responsibility is to observe and report any changes to the right person, at the right time, in the right way. Assisted Living Programs will have their own policies and procedures to follow for reporting and recording observations. The information in this Section is basic to most Assisted Living Programs.

Each individual has a primary health care provider (i.e., physician, nurse midwife, or nurse practitioner) who is responsible for prescribing medications and following up on the effects of the medication technician. A registered nurse case manager/delegating nurse will be identified by the Assisted Living Program who will be responsible for delegating the administration of medications to the medication technician. The case manager/delegating nurse will help you learn the specifics about the medications for each individual in your care. The case manager/delegating nurse, the primary health care provider and the assisted living manager, are responsible for the health of the individuals and the safe administration of medications. The case manager/delegating nurse will make on-site visits to the individual at a minimum of every 45 days. The case manager/delegating nurse delegates the nursing functions of medication administration to you the medication technician. Pharmacists are also involved with each individual who is receiving medications and are a resource for you. If you have questions about a medication any of these identified professionals, the nurse, physician or pharmacist can assist you. The Assisted Living Manager will help you obtain the information about the medication from the health professional. Your Assisted Living facility will provide you with forms to be used in observing and reporting your medication administration (covered in CHAPTER II).

WHAT TO REPORT

There are three categories of changes that must be reported:

1. Emergency Medical Conditions
2. Non-Emergency Medical Conditions
3. Other Physical or Behavioral Changes

Emergency medical conditions

An emergency medical condition is ANY situation that required immediate medical attention. It may be from an illness or an accident. It may result in a severe, life-threatening situation. It is not your responsibility to figure out what caused the condition. Your job is to react quickly and appropriately to the condition. There is no rule to follow in deciding what is and what is not an emergency condition. If you are unsure, always report immediately. The following examples are always considered emergency medical conditions:

1. bleeding which you cannot control
2. accidents involving severe injury (including broken bones)
3. not breathing (failure of respiratory system)
4. no heartbeat or pulse (failure of circulatory system)
5. loss of consciousness (not related to seizure activity)
6. lengthy seizure activity
7. behavior which is a danger to self or others and is not controllable
8. sudden numbness or slurring of speech
9. sudden onset, severe headache
10. chest pain
11. respiratory distress

In your verbal report always include: who, what, when, and where. In your follow-up written report include: the action you took and the results of those actions.

When to report an emergency medical condition: *IMMEDIATELY!*

To handle an emergency medical condition, you should follow procedures you have been taught (in-house procedures, information from CPR and First Aid courses) and report the emergency to the designated person (supervisor or assistant living manager). If others are

present, one person can begin emergency assistance, while the other telephones for help. Your primary responsibilities are to see that the phone call to emergency services is made and to provide whatever assistance you can to the individual until help arrives.

To whom to report:

To obtain the quickest response to an emergency, your agency has designated an emergency number to be called. In most cases, 911 is the designated emergency number. In the following space, write in the phone number of the emergency service in your area.

In case of emergency, call: Phone Number _____

How to report:

After the emergency is under control, write a report of the incident. Each staff person involved should write an independent report and send it to the designated supervisor. Your supervisor is responsible for reporting this information to the physician, the registered nurse as well as the family.

Non-emergency medical conditions:

Non-emergency medical conditions are those physical and behavioral changes that must be reported to your designated supervisor, but are not an immediate threat to the life or safety of the individual. It is the responsibility of the supervisor to call the health care professional. You know the individuals you work with better than anyone else; you know their usual physical and behavioral patterns. If you are not sure, report it. Many situations are possible that can be considered non-emergency medical conditions. For example, think of situations that would lead you to call your personal physician, but not an emergency number.

What to report:

When reporting non-emergency medical conditions, the same information must be reported as emergencies: who, what, when and where. In addition to this basic information, your written report must include: the action you have taken and the results of those actions.

When to report:

Report non-emergency medical conditions immediately after the condition is observed.

To whom to report:

Whenever you observe changes in a individual and you think it may be a non-emergency medical condition, call your supervisor. Your supervisor will then determine the next step. Follow your phone call with a written report documenting your observations and the action you took. Be sure to use forms developed for your agency. Continue to observe the individual for additional changes.

Other physical and behavior changes that require notification and documentation:

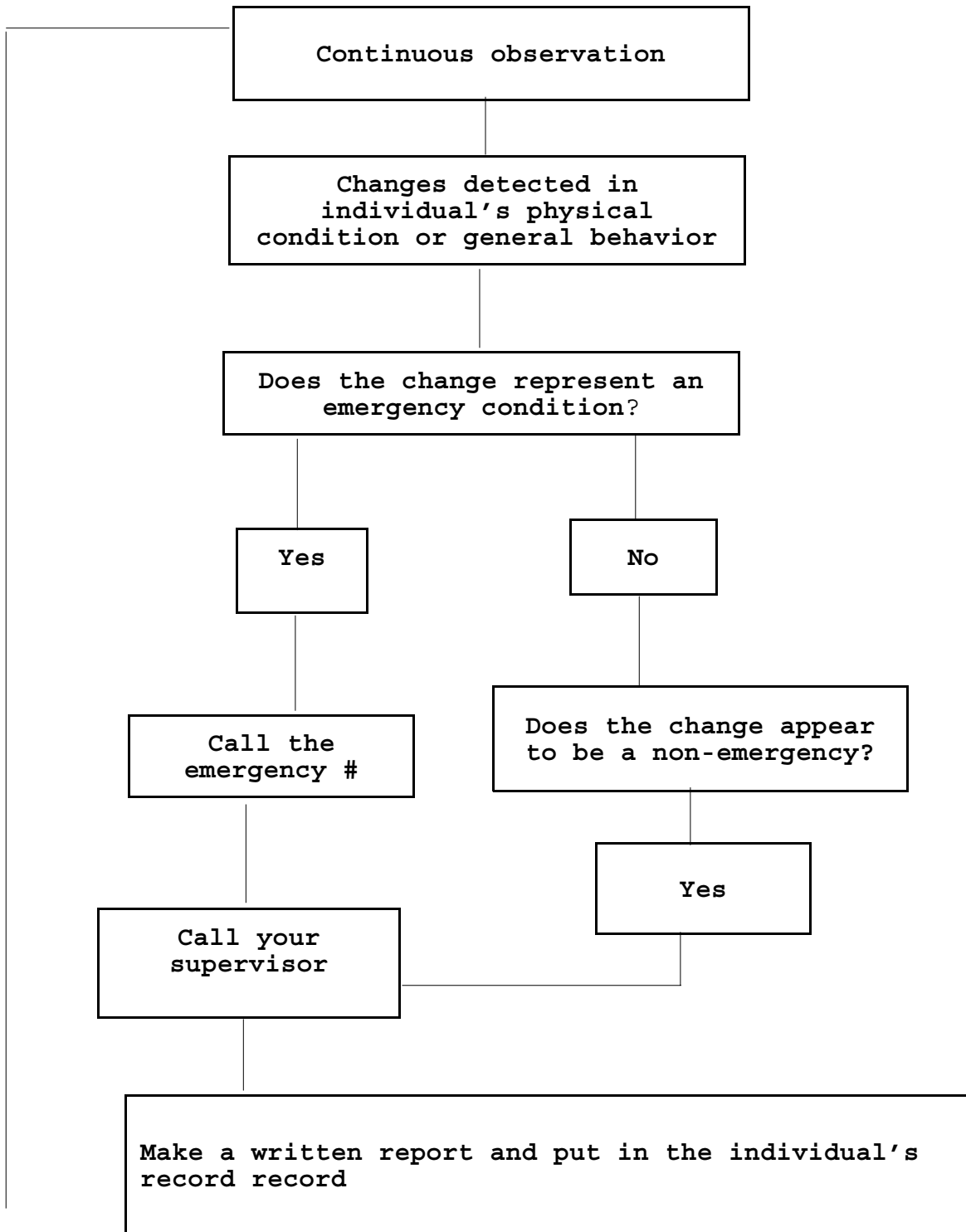
What to report: Any change could be important and could be the result of medication prescribed or other medical treatment. Changes should be documented and reported so they can be used in future planning sessions for the individual.

When to report: Report these changes as soon as they are observed.

To Whom and How to report: Verbally report changes to your supervisor and follow up with a written description of the changes observed and the time they were observed on agency forms. Continue to **observe for future changes.**

When in doubt: Sometimes you may be uncertain whether a situation is an emergency, non-emergency, or "other" change. Situations are not always clear. It is always best to be on the safe side and treat it as an emergency. (Complete Feedback Exercise E.)

OBSERVATION /REPORTING SEQUENCE



CHAPTER I
SECTION 4
VISITS TO THE HEALTHCARE
PROFESSIONALS

OBJECTIVES

1. Name the location where the individual's complete health record is kept in the Assisted Living Facility
2. List the six (6) pieces of informational items provide to the health care professional when assisting the individual on his/her visit.
3. Discuss two (2) ways to encourage individuals to participate during a visit to a physician.
4. Identify six (6) of seven (7) frequently asked questions which may be asked of a health care professional when a new medication is prescribed.
5. List the two (2) documents you must have when leaving the health care professional's office when a medication is prescribed.
6. List the nine (9) informational items found on a prescription form.
7. Describe the difference between "reorder" and "refill" as they relate to prescriptions.

Student Guide

There are different reasons why you or a family member may assist a individual with a visit to the physician or nurse practitioner: a physical exam, a visit for an illness or an emergency such as a sudden change in the individual's condition. Before the visit it is important that you assist the individual with personal hygiene, grooming and dressing. It is also important that you and the family member become familiar with the individual's current health status, medical needs and medications. The person accompanying the individual to the physician's office should know:

1. Why the individual is visiting the physician
2. What information to take to the physician
3. What information to obtain from the physician
4. What to do with the information obtained

Information for the health care professional:

In order to prescribe the best medication for the individual, the physician will need the following information that should be found in the individual's health record:

1. History of medication and/or food allergies. Medication **allergies can be fatal**. A individual who is allergic to one medication may be allergic to others. This information is life-saving.
2. A list of all current medications and treatments being administered and their purpose. This includes dietary supplements, over-the-counter and herbal medications. The more medications a individual is taking, the greater the possibility for medication interactions.
3. Current dietary information. Special diets should be noted.
4. Written observations of recent changes in physical signs or symptoms or changes in behavior. This information is valuable in explaining the circumstances which led up to this visit.
5. Health care insurance cards and information.
6. Any previous tests or consultations

THESE RECORDS CANNOT BE LEFT WITH THE PHYSICIAN

This information must be kept in the individual's file. Staff should be familiar with where this information is located. When you assist an individual with a health care visit take this information with you, do not take original resident records.

Encouraging Individuals to Participate in Health Care Visits

Individuals will differ greatly in their ability to express themselves at the physician's office. While some will need your help only to gather the necessary information, others will depend almost entirely on your help. Your responsibility is to assist individuals in performing these tasks as independently as possible. In all cases, the individuals should be encouraged to participate in the decision making as much as possible during the visit. Questions that he or she may have for the physician during the visit can be written out ahead of time and can be discussed. Encourage the individuals to ask the physician all questions related to their medication and/or treatment. During the visit, all possible treatment options should be discussed so the individual can express his/her preferences and choices.

Information to Get From the Physician

After the physician examines the individual, he or she may prescribe a medication. You must be sure to get certain information so you can safely administer the medication. The following must be obtained before leaving the physician's office:

A Physician's Medication Order Form (PMOF) must be completed and signed each time new medications are ordered or existing medications are reordered. A copy of a PMOF, (a sample is included in appendix II), must go to every physician's visit. Each medication, treatment, and/or the discontinuation of a medication/treatment must be recorded on this form and signed by the physician. If prescriptions are required, physicians must write prescriptions that match what is written on the PMOF(s) exactly.

The PMOF records the following information:

1. name of the medication
2. dosages (how much?)
3. the frequency (hours/times) to be given (when)
4. method to give the medication (how given)
5. purpose of the medication/treatment (why?)

6. stop date (often next scheduled appointment)
7. reporting guidelines (when to report back to physician).
8. prescriber's name, address and phone (Printed with signature)

If in the event that a family member accompanies the individual for the visit to the physician, remind them to bring this form back to you so you will be able to include any changes from the visit on the medication chart.

Important Questions to Ask During the Visit

In addition to the information listed above, there are several important questions you must get answered in order to administer the medication safely. During the health care visit, you, the individual and/or the family must get the following questions answered. Do not rely on your memory or those of others. Write these answers down. If you are unable to get this information during the office visit, you must contact the registered nurse, case manager/delegating nurse. The nurse will be able to help you answer the questions necessary to administer the medication(s) safely. After the physician tells you the name of the medication, be sure the following questions are answered:

1. What is the purpose of the medication? How will you know the medication is working?
2. How much time should it take before the desired effects can be expected to occur?
3. What are the negative effects to watch for?
4. Are there potential drug interactions to watch for? Other medications and some food can result in negative effects. Be sure the physician has a list of all current medications and allergies.
5. What are the specific instructions for taking this medication? Are there any foods that the individual should not eat while taking the medication?
6. Are there any special lab tests/monitoring/observations that need to be done while taking this medication? (i.e. some medication such as Coumadin change the blood so that it does not clot normally and these changes need to be followed regularly with a blood test).
7. What should you do if the individual refuses to take the medication?

Information found on a prescription:

When the health care professional hands the individual (or you) the prescription form, be sure to review it before leaving the office. While formats of prescriptions vary, the information always included on a prescription form will be:

1. the person's name;
2. date of the prescription;
3. the generic or brand name of the medication. Generic can be substituted unless the health care professional signs "dispense as written" (this will be discussed more in CHAPTER II);
4. route/method of administration;
5. dosage (strength of medication);
6. amount of medication in container;
7. how often medication is administered;
8. number of refills permitted; and
9. the health care professional's signature, address and phone number, and registry number.

Each medication has three different names. A chemical name, a generic name, or a brand (trade) name.

Chemical Name: **medications are chemicals and these names are often long and difficult to pronounce.**

Generic Name: **usually a simplified version of the chemical name**

- Generic names are usually not capitalized.
- Prescribing professionals are encouraged to prescribe generic medications because they are often less expensive than brand names.
- Many state and federal prescription programs require that generic medications be prescribed.

Brand (Trade) Name: **the name given to the medication by the manufacturer.**

Several companies may market the same generic medication, so there can be different brand names for the same medication.

- The first letter of a brand name is always capitalized.
- The symbol "R" to the right of the name indicates that it is a trademark and registered to that company.

The following is an example of three names for aspirin:

Chemical Name: acetylsalicylic acid

Generic Name: aspirin

Brand (Trade) Name: (example) Bayer Aspirin

It is recommended that each Assisted Living Facility have established times for administering routine medications. The case manager/delegating registered nurse who works with you will help you to establish these times.

Prescriptions have the number of refills allowed written on them by the physician. When a medication has been refilled to its maximum (the number of times specified on the prescription form), and if the medication is still required, the individual must go back to the health care professional and have the prescription form re-written. This is called re-ordering the medication. Most medication orders are good for 90 days but, behavior modifying drugs must be re-ordered every 30 days. (Complete Feedback Exercise F.)

CHAPTER I
SECTION 5
VISITS TO THE PHARMACY
AND OBTAINING THE
MEDICATION

OBJECTIVES

- 1 . Given sample labels, read and interpret the twelve (12) components of a pharmacy label.
2. State how you would determine if the Physician's Medication Order Form (PMOF) and pharmacy label agree.
3. Describe how you verify that you have received the right medication from the pharmacy.
4. State three (3) types of medication packaging

Student Guide

In Section 4, you were given instructions for visiting a health care professional. The health care professional may have given you and the individual you work with prescriptions for medications. He or she may also have referred you to the pharmacist for more information about special instructions and possible medication and/or food interactions. The pharmacist is a valuable resource for further information about medications.

Information to get from the pharmacist:

When you give the pharmacist the prescription from the health care professional, be sure to ask any additional questions you and the individual may have. Pharmacists are required to keep a computerized data bank for customers. This computerized system will notify the pharmacist of any potential negative effects. Since there is the potential to receive prescriptions from more than one health care professional and pharmacy, be sure that all are aware of all current medications and allergies.

The pharmacist will have additional information about storage requirements and special instructions on how to take the medication. Check with the pharmacist each time a prescription is filled to be sure that you and the individual you work with have as much information as possible.

Information Found on a Pharmacy Label:

The pharmacist will give you the medication in a container that has a pharmacy label. The pharmacy label should contain at least as much information as the PMOF. There are generally twelve (12) parts to a pharmacy's medication label. These are:

- The Pharmacy Name, Address, and Phone Number
- Prescription Number (given by the pharmacy)
- Date the Prescription was filled
- The Individual's (patient's) Name
- Medication Name (Brand Name or Generic)
- Dosage
- Directions for Use (how much and how often)
- Quantity being provided
- Any Special Instructions
- Name of Prescribing Health Care Professional
- Number of Refills

- Expiration Date of Medication

The following page is an example and explanation of a pharmacy label.

Line 1

Line 2

Line 3

Line 4

Line 5

Line 6

Line 7

Line 8

Super Pharmacy	(410) 555-1234
48 Oak, Anytown	
Rx # 13579	
LOUISE SCOTT	1/10/03
Ampicillin 250 mg.	#24
Take one (1) capsule by mouth four (4) times a day.	
Dr. Donald Berry	
Refills Remaining: 0	Exp. Date: 1/10/03

Label Explanation

Line 1 Pharmacy's name and phone number

Line 2 Pharmacy address

Line 3 Prescription number

Line 4 Person's name who is to receive the medicine and date the prescription was filled

Line 5 Name, strength, and count of medication.

Line 6 Directions for taking the medication

Line 7 Name of the health care professional prescriber

Line 8 Number of times the medication may be refilled before a new prescription is needed. The expiration date warns you not to take this medication after a certain date.

Although medication labels may look different, all the information above should appear on the label. (Complete Feedback Exercise G).

From time to time, you may receive medication in a bottle with both a pharmacy label and a label from the manufacturer. Manufacturer's labels are often on medications you and I may get as "over-the-counter" drugs. But remember, every medication obtained for individuals in an Assisted Living Facility must have an order from a health care provider. On the following page is a Sample Label from a manufacturer. Read the material and complete Feedback Exercise H..

SAMPLE MANUFACTURER LABEL

FRONT: TYLENOL

sealed with printed foil under cap
for your protection.

PAIN RELIEVER

Without Aspirin

(ACETAMINOPHEN)

100 Tablets 325 MG., (5 Gr.) Each

BACK: This product provides temporary relief of simple headache, minor muscular aches, the aches and pains associated with bursitis, neuralgia, sprains, overexertion, menstrual cramps, and from the discomfort of fever due to colds and "flu". Also for temporary relief of minor aches and pains of arthritis and rheumatism. (Caution: If pain persists for more than 10 days, or redness is present, or in arthritic or rheumatic conditions affecting children under 12 yeas of age, consult a physician immediately). This product contains no aspirin: therefore, it is unlikely to cause upset or gastric irritation associated with aspirin and aspirin compounds. It may be safely used by persons with peptic ulcer when taken as directed for recommended conditions. It is not likely to cause a reaction to those who are allergic to aspirin.

WARNING: KEEP THIS AND ALL MEDICINES OUT OF THE REACH OF CHILDREN. IN CASE OF ACCIDENTAL OVERDOSE, CONTACT A PHYSICIAN IMMEDIATELY. AS WITH ANY DRUG, IF YOU ARE PREGNANT OR NURSING A BABY, SEEK THE ADVICE OF A HEALTH PROFESSIONAL BEFORE USING THIS PRODUCT.

ACTIVE INGREDIENT: 325 Acetaminophen

9C026

EXP 02/03

Distributed by the Super Market Company, Inc., Any City, NY 00000

Comparing the PMOF and the pharmacy label:

When the pharmacist hands you the medication container, immediately check the label and compare it to the order form (PMOF) you received from the health care professional. If there are any differences, show them to the pharmacist before you leave. If you are not satisfied with his or her explanation, contact the prescribing health care professional. Try to straighten out all the problems before you leave the pharmacy.

If the medication containers are delivered to you at the Assisted Living Facility check the medication label with the order form as soon as it is delivered. If you find a discrepancy, contact the pharmacist or prescribing health care professional immediately. On the following pages, you will find three (3) examples of PMOFs and their corresponding pharmacy labels. All correct answers are on the page following the examples.

1. Find the disagreements

Name: Louise Scott Birthdate: August 8, 1920 Sex: Female

<u>Medication</u>	<u>Dose</u>	<u>Time given</u>	<u>Route</u>	<u>Purpose</u>	<u>D/C</u>	<u>Special Instruct.</u>	<u>MD</u>
Lasix	80mg	daily in AM	mouth	dec.BP	0	call if dizziness occurs	D. Berry

Pharmacy Label

People's Pharmacy 17 High, Anytown	410-555-6789
Name <u>Louise Scott</u> Lasix 40 mg	<u>Date 1/5/03</u> #30
Take one daily in morning. Take with orange juice	
Rx# <u>13580</u>	Dr. Donald Berry
Refills <u>2</u>	<u>Exp. date 1/5/04</u>

2. Find disagreements

Name: Louise Scott Birthdate: August 8, 1920 Sex: Female

<u>Medication</u>	<u>Dose</u>	<u>Time given</u>	<u>Route</u>	<u>Purpose</u>	<u>D/C</u>	<u>Instruct.</u>	<u>MD</u>	<u>Special</u>
Digoxin	0.25mg	daily in AM	mouth	Improve Heart action	0	Hold if	D. Berry	pulse is less than 60 beats per minute

Pharmacy Label

People's Pharmacy 17 High, Anytown	555-6789
Name: <u>Louise Scott</u> Digitoxin 25 mg	Date: 1/5/94 #30
Take one daily by mouth in morning. Hold if pulse is less than or more than 60 beats per minute	
<u>Rx #13581</u>	Dr. Donald Berry
Refills 2	Exp: Date 1/5/95

3. Find the disagreements:

PMOF

Name: Louise Scott Birthdate: August 8, 1920 Sex: Female

<u>Medication</u>	<u>Dose</u>	<u>Time Given</u>	<u>Route</u>	<u>Purpose</u>	<u>D/C</u>	<u>Special Instruct</u>	<u>MD</u>
Bactrim	1 tab.	Twice daily	mouth	urinary	1/15/04	0	D.Berry

Pharmacy Label

People's Pharmacy	410-555-6789	High, Anytown
Name <u>Louise Scott</u>		Date: 1/5/04 #20
Bactrim 1 tablet		
Take one daily in morning by mouth		
RX 13582		Dr. Henry Biggins
Refills 0		Exp Date 1/5/04

1. Dose is incorrect. It says 80mg on the PMOF but 40mg on the label. It does not specify to take by mouth. The route of administration must be included on the label. Instructions are different.
2. Name of medication is different. It says Digoxin on the PMOF but Digitoxin on the pharmacy label. These are actually two different medications. Also the dose is written 0.25mg on the PMOF and 25mg on the label.
3. Frequency of administration is different PMOF says two times a day and the label says to take one in morning. Doctors name is different - Dr. Berry on the PMOF and Dr. Biggins on the label. The label must be totally correct.

Types of medication packaging:

There are three types of medication packaging generally used: bottles, Unit doses, and blister packs (bingo cards). You will have an opportunity to look at packaging examples when you attend the classes covering Chapter II.

Bottle Containers

Traditional bottle containers contain the amount of medication prescribed for one individual. The entire prescription is packaged in one bottle. The pharmacist will fill the prescription and put the information onto the medication label. The pharmacist will attach necessary precaution labels for using the medication. When you and the individual receive the bottle, read the label to make sure you fully understand the directions.

UNIT Doses

The medication you receive from the pharmacist may be in Unit Dose packets, a packaging system that is being used more frequently. Tablets, capsules, and liquids can all be prepared in Unit Dose packets. Unit Dose packets contain medication for one individual. Each single dose is separately wrapped. Each single dose is labeled with:

- the medication's brand and/or generic name;
- strength of the dose;
- the expiration date.

The name of the individual and any special storing instructions are printed on the container.

Blister Packs or Bingo Cards

Blister packs are medications packed by the pharmacist for one individual for a specific time period. The medication usually appears as a large package, similar to a sheet of paper. The medication contents of the package are visible through the sheet. Each bubble usually contains the prescribed dose of that medication for that specific time. There is one label for the entire sheet and it contains the same information as the Bottle Container and Unit Dose packets. (Complete Feedback Exercise I)

CHAPTER II
SECTION I
CATEGORIES AND
RESPONSE OF MEDICATIONS

OBJECTIVES

1. State three (3) factors that affect how an individual responds to medication.
2. Explain the difference between local and general actions of medications.
3. List the medication routes medication technicians are authorized to administer.
4. Explain the reason for categorizing some medications as “controlled substances”.
5. Explain two (2) things to remember about medication interactions.
6. Identify the four (4) possible unwanted effects of a medication.
7. Explain the importance of medications being eliminated from the body.

Student Guide

No two people are exactly alike in the way they are affected by medications. The same dosage of one medication may produce a negative effect in one individual and no apparent effect in another. The major reason for these differences is the individual variation that occurs as a result of several factors.

FACTORS AFFECTING THE Individual's RESPONSE TO MEDICATION:

1. AGE

Children and older people require smaller doses of medication or may react differently to certain drugs. The effect of medications on the older individual may be altered greatly and therefore it is important to examine the potential for harm.

When administering medications to older persons, consider the following:

- A. The body's ability to digest and absorb foods and medications may be altered therefore, the desired effect may take longer to appear in the aging individual.
- B. During the aging process, the abilities of the kidney and liver to clear the body of medication may be reduced. This can cause a buildup of excess medication. Therefore, the aging individual may be at an increased risk for drug toxicity, and may need a lower dose of medication.
- C. In the aging individual, change in the level of mental functioning is often identified as "confusion" and mistakenly thought to be "just getting old". Changes in memory and thinking is due to disease or may indicate a drug reaction. When using the term "confusion", specifically describe the change in behavior that you are seeing so the health care professional can review the medications as a possible cause.
 - 1. Is the individual oriented to person (can he/she state first and last name?)
 - 2. Is the individual oriented to place (does he/she know where he/she is?)
 - 3. Is the individual oriented to time (does he/she know time of day, day, month, year?)

Answers that are very different from the individual's usual response (patterns of living) should be included in the report of behavioral change.

2) WEIGHT

The individual's weight will be important for the health care professional to know to prescribe the proper dosage of medication. Generally, the thinner or smaller the individual, the less medication will be required for the desired effect. When a individual loses a great deal of weight the

dose that was appropriate before may now create a negative effect. Or if the individual gains a great deal of weight, the previous dose of medication may not be enough for the desired effect.

3. GENERAL PHYSICAL CONDITION

A individual's general physical condition may affect the response to a medication. The presence of a chronic illness may alter the body's response to medication.

4. ROUTE OF ADMINISTRATION

An individual's response to medication also varies by the route of administration. Absorption of medication is fast or slow depending on how it is administered. Listed below are the routes used:

FASTEST: intravenous (into the vein)
sublingual (under the tongue)
intramuscular (into the muscle)
subcutaneous (under the skin)
oral (by mouth)
vaginal/rectal (by insertion)
topical (apply directly to the skin)

SLOWEST: patches (apply directly to skin)

The most common routes of administration by which you will be administering medication are oral and topical. If needed, you may also be taught how to give subcutaneous injections, such as insulin. Each time you have a different individual who requires an injection, you must receive special training by the registered nurse. No two Individuals are the same in what is needed from you in giving the medications safely.

Other specialized procedures for the administration of medication which are less common will be taught on an individual basis by your registered nurse case manager/delegating nurse.

You are responsible for administering oral and topical medications. These medications are available in different forms.

FORMS OF MEDICATION

Medication is available in different forms based on:

- the reason it is prescribed
- the desired action of the medication
- the individual

Your instructor will review forms of medications with which you may come in contact.

ORAL ROUTE

Tablets/Caplets

- Tablets and Caplets are powdered medications compressed into disks.
- If the tablets or caplets have been "scored" and need to be broken in half, have the pharmacist or delegating nurse do this. You may not break them. If a tablet needs to be broken due to a change in the prescription, let the delegating registered nurse or the pharmacist know so that the tablet can be prepared for the individual.
- Tablets may have a hard shell, called enteric coating, that prevents the medication from dissolving until it is in the intestines.
- Do not crush these tablets or mix them into food or liquids without a health care provider's directions.

Capsules

- Capsules are small, gelatin containers that hold a powder or liquid medication.
- Capsules are often used to administer a medication that may have an unpleasant odor or taste.
- Capsules may have special coatings and contain several doses of medication that dissolve at different rates and allows the medication to be released gradually. These are time-released capsules and may not be crushed or opened and mixed with food or liquid. This could cause an overdose.

Always check with the pharmacist or the delegating registered nurse before opening a capsule

to administer to the individual who may not be able to swallow the capsule. For some medications it may be safe to open the capsule and for others it is not safe. The pharmacist and the delegating nurse can assist in obtaining the medications which may be available in other forms which may make it easier for the individual to swallow.

Liquids

- suspensions are solid particles mixed with liquids; they stay mixed but after a while separate. They must be shaken well before use.
- Syrups are liquid medications that are often mixed with a sugar/water solution. This makes the medication taste better.
- Elixirs are liquid medications mixed with alcohol, sugar, and flavoring. They are mixed this way to improve taste.

Lozenges

- Lozenges are flat disks that have had the medication mixed with a flavored base. The medication is slowly released when it is dissolved in the mouth.
- Lozenges are usually used when providing a soothing effect to mouth and throat.

TOPICAL ROUTE

Creams/Ointments

- Creams are oily preparations used to treat dry skin, rashes and other skin conditions.
- Wear gloves when applying creams.
- Ointments are semi-solid, petroleum-based medications that come in a tube
- Wear gloves when applying ointments

Lotions

- Lotions have either a "protective" action that relieves rashes and dry skin; a "cleansing" action which washes the skin; or a "drying" action.
- Lotions should be patted on the skin, not rubbed.
- Wear gloves when applying lotions.

Sprays/Aerosols

- Sprays and aerosols are topical preparations that are used in hard to reach places (i.e., the throat) or when avoiding touching the skin.
- Read the label and ask the pharmacist for application directions.

Patches

- Skin patches are called transdermal applications and are available for medications that must be affixed to the skin for extended absorption.
- "Patch" application directions from the health care professional must be precise and include where it is to be placed and how to rotate the placement so that the skin does not become irritated.
- Patches must be removed as ordered.
- Wear gloves when applying/removing patches

Eye Drops

- always wash your hands before placing eye drops or eye ointment
- never drop the eye medication on the cornea
- avoid touching the eyelid or lash with the dropper
never use one individual's eye medication for another
- wear gloves when administering eye drops
- use a separate tissue for each eye

Medication Actions

In general, there are two actions expected of medications: local and general.

- local action means that the effect is limited to where the medication is applied.
- general (or systemic action) means that the effect will occur as long as the medication remains in the bloodstream. Many medications are not effective unless a certain level is maintained in the blood. If the blood level rises above the "therapeutic range", the medication can be toxic, and if it is below the "therapeutic range", the medication may be ineffective. The blood levels of many medications are monitored on a regular basis.

CATEGORIES OF MEDICATION

Prescription medications are usually divided into two categories, controlled drugs and non-controlled drugs.

Controlled drugs

Controlled drugs are medications which have been legally designated as "controlled substances" by drug control agencies. The drugs in this category are considered to have a high potential for abuse and have been divided into five schedules accordingly. The controlled drugs you may come in contact with include: Darvocet, Percocet, Tylenol with Codeine, Valium, Ativan, and Xanax, etc. Sleeping agents such as Restoril are also controlled drugs. Ask your pharmacist or registered nurse for more information. The law requires that your agency follow special reporting, storage, and disposal procedures for all controlled drugs. You will learn about these procedures in later Sections. Your pharmacy will have its own way of identifying controlled drugs on the pharmacy label. A list of controlled drugs may be obtained from the pharmacy.

Non-controlled drugs

Non-controlled drugs include all medications which do not appear on the list of controlled substances which may be obtained from the pharmacy. NOTE: This does not mean that all drugs on the non-controlled medication list have been determined free from the potential for abuse. All medications need to be used with caution and according to directions of the prescribing health care professional.

POSSIBLE MEDICATION INTERACTIONS

In CHAPTER I of this Manual, three possible effects of medication were presented:

- a desired effect;
- a negative effect; and
- no apparent effect.

Important points to remember concerning medication interactions include:

- The health care professional must be aware of all medications an individual is taking in order to prescribe a new medication which has the least chance of interaction;
- The more medications an individual takes, the greater the possibility that a medication interaction will occur.

When individuals are receiving more than one medication there is the chance for possible medication interactions. The interaction may be that:

- one medication will increase the effects of another medication;
- one medication will decrease the effects of another medication.
- an undesired effect or unanticipated effect

POSSIBLE MEDICATION/FOOD INTERACTIONS

When medications are combined with food or drink, there may be certain interactions. Some medications may not be given with certain foods. Some medications must be given with certain foods in order for the medication to take effect. Your instructor will review specific examples with you. There may be specific instructions on the pharmacy label informing you of possible medication, food and fluid interactions. For example, some medications must be given on an empty stomach such as the hour before a meal or two hours after a meal.

POSSIBLE UNWANTED EFFECTS OF MEDICATION

- Medication allergy - A response which may be immediate and life threatening, or delayed and slow to appear.
- Cumulative -A condition in which the body does not eliminate one dose of the medication before another dose is given.
- Tolerance - Resistance to the effect of medication that has built-up over the time of its use.
- Addiction - The physical or emotional dependence on certain medications.
- Other unwanted effects - Medications can also have unwanted effects on body systems such as bleeding from Motrin or irregular heart beats from potassium. This is why you must read the patient information sheets/prescription information inserts.

Your instructor will review these terms with you and provide you with examples.

REMEMBER! Because you are the person in closest contact with the individual taking medications, you are responsible to observe for any possible effects and report these to your designated supervisor, according to your agency policy.

MDICATION ELIMINATION

The effects of any medication stop only after the medicine has been deactivated (or metabolized) but not yet eliminated from the body by the lungs, kidneys, intestines, skin, and saliva. The elimination of medication is very important. If a individual's body systems are not functioning correctly, there could be a cumulative effect of the medication. As each new dose is added to the remains of the previous dose which has not been eliminated, the risks for increased health problems grow. If medication is not eliminated as expected, it can lead to an accumulation until it reaches toxic levels. Even after a medication is stopped, the effects may last for several days, until it is totally eliminated from the body. Once the drug has been eliminated from the body, the drug may be reordered at lower dosage or on a less frequent basis. (Complete Feedback Exercise J)

**CHAPTER II
SECTION 2**

**STORAGE OF MEDICATION AND
PREPARATION FOR
ADMINISTRATION**

OBJECTIVES

1. List the type of forms for recording medication administration.
2. Prepare a Medication Administration Record from a Physician's Medication Order Form (PMOF) and a pharmacy medication label.
3. Describe how you would obtain information about a medication.
4. Describe procedures for storing medications for a individual unable to self administer medications.
5. Describe procedures for storing controlled substance drugs .
6. Describe procedures for disposing of unused medications.

Student Guide

After you have obtained the medication from the pharmacist and returned to the Assisted Living Facility, you must record specific information on certain forms and store the medication correctly. You will be using the information you received from the health care professional. Storing the medication correctly and recording the information on appropriate forms are an important part of administering drugs safely.

Before you begin to complete the paperwork and store the medication you and the individual you work with should have the following:

- the medication in the container supplied by the pharmacist
- a correct and legible label on the container
- a written Physician's Medication Order Form (PMOF) for the medication
- answers to the following questions:
 1. purpose and desired effect of the drug?
 2. time limit for desired effect to appear?
 3. any significant negative effects?
 4. any known interactions with medications the individual is currently taking?
 5. any special instructions?
 6. is it a controlled substance?

This information can then be transcribed onto required forms.

FORMS REQUIRED FOR DOCUMENTING MEDICATION ADMINISTRATION

1. THE MEDICATION ADMINISTRATION RECORD (MAR)

Agencies may have various forms for documentation. However, basic to any agency will be the Medication Administration Record (MAR). The MAR is a form that documents that medications **HAVE BEEN TAKEN AS ORDERED**. Specific information must be recorded on the MAR as soon as you and the individual you work with return from the pharmacist with the medication.

The following information must be recorded on this individual's MAR before you enter any information about specific medications prescribed. Each month start a new MAR and enter all this information before listing the medications.

- the individual's name, sex, birth date the physician's name
- any allergies of individual, if individual has no allergies write "none" in this space

diagnosis of individual

- individual's diet and list any special restrictions
- name of delegating registered nurse responsible for follow-up and monitoring
- today's date
- at top of MAR under agency write name of agency
- then write the month and year for which this MAR is to be used

The following information about the medications are next added to the MAR

- the **name** of the medication
- the prescribed **dose** of the medication
- the **route** of administration
- the **times** (frequency) of administration should be documented twice (once in abbreviated form with the medication and once in the hour column). Specific hours of administrations may be specified by the physician, the pharmacist or the delegating nurse.
- the **date** the medication was **ordered** needs to be clearly marked on the MAR. To do this draw an arrow from the left margin of the first day of that month to the day and time the medication is to begin. For example, Tylenol was ordered to start on the 10th of the month (see sample MAR).
- if the medication has been ordered for a specific time period only, then indicate the time period in the block where the medications is written.

If a new medication is ordered in the middle of a month for a individual who already has a MAR filled out, (meaning that other medications are already being given this month) then a new MAR does not have to be started.

This information **MUST** be recorded in blue or black permanent ink. **THE MAR IS A LEGAL DOCUMENT. DO NOT ERASE. DO NOT USE WHITE OUT. DO NOT USE PENCIL. DO NOT SCRATCH OUT.** Be sure to enter all this information **BEFORE YOU** store the medication. Compare the PMOF, Pharmacy Label, and MAR. Make sure they all match. A sample MAR is in the appendix.

2. CONTROL SHEETS FOR CONTROLLED SUBSTANCES

In addition to documenting on the MAR, there are requirements for documenting controlled substances. The documentation is similar to keeping a list. These medications must be counted at

regular intervals. Each time the controlled substance is given to a individual, a separate control sheet is signed. Your employer will have copies of the control sheet to use if any of your individuals are receiving controlled substances. See the appendix for a sample of a control sheet filled out for a individual receiving one tablet of Percocet from a supply of 15 tablets.

Reminder:

When you administer medications, you are responsible for knowing:

- what the medication is intended to do;
- possible negative effects that may occur which prompt you to report to the health care professional; and
- any specific precautions.

Information specific to the medications being taken by each individual you work with must be available to you. Most of the information will be provided to you by the prescribing health care professional on the PMOF and/or your delegating nurse or pharmacist. In addition, information may be obtained from printed material such as patient information sheets, prescription information inserts and drug resource manuals.

MEDICATION STORAGE

Once you have completed all of the documentation required, you must correctly store the medication. Medication **MUST** be stored using the following guidelines:

- All medications must be stored in the **ORIGINAL CONTAINERS** in which they were dispensed by the pharmacist.
- The pharmacy labels must **NEVER BE ALTERED**.
- All medications must be grouped for each individual and stored in one place that is locked. There is no one specific type of locked area that must be used. Each Assisted

Living Program is different and the locked area must work best for that Program. The storage area **MUST** be locked when not in use.

- Lotions and ointments used on the skin should be kept separately from medications that are taken orally. Medications should be separated so a lotion is not mistaken for an oral liquid medication and given in error. There is no one specific way to separate medications. Different shelves/drawers in a cabinet can be designated for oral and

non-oral drugs . For example, "zip-locked baggies" may also be used to separate oral and non-oral medications.

- The **KEY** to the locked medicine cabinet (area) must only be available to those individuals authorized to administer medications.
- Refrigerated medications must be kept in a locked storage container in the refrigerator or a locked refrigerator.

Storing Controlled Substances

Controlled substances must be kept under double lock, with two separate keys. As an example, a medication could be stored in a locked box which opens with one key and then stored again in a locked cabinet/drawer which opens with another key.

Disposing of Medications

At times you may be responsible for disposing of medications. This may occur when:

- medication is discontinued before all of it is used;
- the individual refuses to take the medication after it has been poured;
- medication is dropped on the floor or becomes unusable in some other way; or
- the expiration date of the medication has been reached.

The medication does not have to be disposed of each time the health care professional writes a new prescription as long as the medication's name, dosage, times, and route remain the same. Continue giving until you run out of medication or until it expires. If the medication is reordered (the name stays the same) but the dosage or times change, or special instructions are added, get the pharmacy to put a new label on the medication container that matches the PMOF.

When you need to dispose of a non-controlled medication because it is no longer needed by the individual, obtain proper disposal procedures from the pharmacist. Never save medication once it has been discontinued. Please note: Before disposing of any medication check with your supervisor regarding the agency policy for disposing medication.

When you need to dispose of a controlled substance, contact the registered nurse and continue counting and documenting in the control sheet. The registered nurse must verify the amount of medication left and sign the control sheet. Both of you will dispose of the medication according to established procedures and document this disposal. You must keep the bottle of

medication in the double locked area until the nurse makes a visit. (Complete Feedback Exercise K).

**CHAPTER II
SECTION 3**

**ADMINISTERING
MEDICATION**

OBJECTIVES

1. List and describe the six (6) rights of medication administration.
2. State the conditions under which medications must not be administered.
3. Identify the four (4) basic principles (when and why) you wash your hands.
4. List five (5) of the 18 safety principles in administering medications.
5. Determine when a medication error has occurred.
6. Describe your responsibilities when you identify that a medication error has occurred.
7. Describe PRN orders and list your responsibilities when administering these medications.

Student Guide

So far in this Course you have learned about:

- observing behavioral and physical changes; reporting changes;
- assisting the individual you work with to visit the health care professional and pharmacist; and
- storing the medication correctly.

You have also learned about the possible effects of medication and general guidelines that must be addressed when someone takes more than one medication. Now you will learn about the actual administration of the medication and how to document it following exact and correct procedures. You will practice both of these tasks in class with your instructor.

Any time a staff person gives a medication to a individual, this is considered to be administration of medication(s) and the procedures in this section must be followed. Before we present the steps of medication administration, basic principles in the use of medication will be reviewed. For situations that are unclear, unusual or need further clarification, the Assisted Living Manager and the delegating nurse will develop policies and procedures to follow for notifying both the manager and the delegating nurse.

Principles in the Use of Medications

- Each individual should be involved in the decision to receive medication, and should be given an explanation of the medication's actions and effects. In those instances where the individual does not understand, one should involve the individual's family member(s).
- Only medications which have been prescribed by a health care professional for a specific individual can be given to the individual.
- Medications can only be given for the benefit of that individual - not for the convenience of staff or as a substitute for socialization.
- A positive approach should be taken when giving medications. The use of physical force to administer medication is prohibited.
- Each individual has the right to refuse medication.

The Six Rights of Medication Administration

There are procedures that have been established for medication administration. By using this

approach each time you administer medication, you protect yourself from making medication errors. This procedure will ensure that:

1. the **RIGHT PERSON**
2. receives the **RIGHT MEDICATION**
- 3 in the **RIGHT DOSE**
- 4 at the **RIGHT TIME**
5. via the **RIGHT METHOD/ROUTE**
6. followed by the **RIGHT CHARTING** procedures.

In this Training Program, these principles are known as the six rights.

Each time you administer any medication to any individual, you must carefully check your procedures using these six rights. There is always the possibility that some change has been ordered or that you accidentally picked up the wrong container. You must check for all six rights each time you administer any medication to any individual.

RIGHT PERSON

Make sure you know each individual with whom you are working. **If you are not sure who the individual is, STOP!** Your agency should have a means for identifying each individual.

RIGHT MEDICATION

To assure the right medication is administered to the right individual, the Physician Medication Order Form (PMOF), the Medication Administration Record (MAR), and the Pharmacy Medication Label must be compared to each other to assure all three of these all say the very same. The facility must have a written policy that identifies how and by whom new medication orders, changed medication orders and deleted medication orders are checked, compared, and recorded on the MAR. The delegating nurse must participate in the development and also approve this written policy. Each time medication is administered to an individual the medication technician must compare the pharmacy label to the MAR. Be sure to read each carefully. Triple check each item and make sure they all agree. **If they do not agree, STOP!** Notify the manager and your delegating nurse to get directions. If they do agree, continue. Always check the expiration date on the label. **If the medication has expired, STOP!**

THE RIGHT DOSE

Be sure you give the right dose of medication. Follow the facility's written policy to check for the correct dose. Triple check each item and make sure they all agree. Carefully measure the prescribed amount of liquid or count the right number of tablets/caplets. If the directions seem unclear and you have questions, **STOP!** Notify the manager and your delegating nurse to get directions.

THE RIGHT TIME

When the health care professional prescribes a medication, he/she will specify how often the medication is to be taken. Triple check each item and make sure they all agree. **If the directions disagree or are unclear, STOP!** If specific times are not designated (i.e., if the label or MAR says "once a day" or "in the morning") notify the manager and your delegating nurse to get clarification.

In order to comply with regulations, all drugs should be administered **WITHIN ONE HOUR BEFORE OR ONE HOUR AFTER THE PRESCRIBED TIME.** For example, a medication prescribed for 4:00 p.m. can be given anywhere from 3:00 p.m. to 5:00 p.m. If it is before 3:00 p.m. or after 5:00 p.m., **STOP!** Notify the manager and your delegating nurse to get directions.

RIGHT METHOD/ROUTE

When the health care professional prescribes a medication, she/he will specify the route (or method) of medication administration. Triple check each item and make sure they all agree. **If they do not match, STOP!** Notify the manager and your delegating nurse to get directions.

RIGHT CHARTING

Immediately after administering the medication, chart the medications by initialing the correct block on the MAR using ink. Do not use White Out. These procedures will be reviewed in greater detail in the next section.

ÿ **BEYOND THE "6" RIGHTS:** ÿ

ADDITIONAL SAFETY PRINCIPLES IN MEDICATION ADMINISTRATION

In addition to following the procedures associated with the "Six Rights" the following principles will help with:

- maintaining the safety of the environment during administration, and
- reducing the risk of a medication error.

These principles are:

WASH	hands before administering medication to each individual.
ALWAYS	give your full attention to the task of medication administration.
PREPARE	and administer medication for only one individual at a time. This is very important to remember.
ADMINISTER	medications that only YOU have prepared (and poured).
CHART	only medications that you have given.
CHART	immediately after you have given each individual the dose of medication.
BE SURE	all documents per facility policy (i.e. the PMOF, MAR, and pharmacy's medication label) match exactly.
DO NOT	touch medications with hands. Pour the required number into the bottle cap and then transfer into a cup.
READ	each medication label three (3) times before administering.
NEVER	return unused medications to the bottle.
NEVER	leave medication for the individual to take later.
BE SURE	the medication is swallowed with an adequate amount of liquid. Stay with the individual the entire time.
AVOID	distractions and interruptions while preparing and administering medications.
NEVER	leave medications unattended.
DO NOT	give outdated medications.
DO NOT	give medications that have changed color or been contaminated.
ADMINISTER	only those medications that you have taken from a properly labeled container.
ALWAYS	chart a medication error when it occurs.

Hand Washing Procedures

Thorough and frequent hand washing is one of the most effective ways to prevent the spread of infection.

1. Use very warm water that is continuously running.
2. Use plenty of soap and apply vigorously, on all surfaces, for a minimum of one minute.
3. Rinse thoroughly and dry well.
4. Wash your hands prior to administering medication to each individual.

You may also use antibacterial sanitizer when administering oral medications. This must be utilized according to the manufacturer directions. **The antibacterial sanitizer may not be utilized when administering eye drops, injections, and gastrostomy tube feedings i.e. any procedure requiring the use of gloves.**

HAND WASHING TECHNIQUES

OBJECTIVE: Demonstrate appropriate handwashing techniques.

The single most important factor in preventing and controlling infections is handwashing. You will be using your hands continuously throughout your work-day. You will be touching the individuals you work with and their personal items as well as handling equipment and supplies. You will get germs on your hands.

Why do you wash your hands

1. Handwashing is the single most important means of preventing the spread of infections.
2. Handwashing prevents the spread of germs from one part of the body to another.
3. Handwashing prevents the spread of germs from one person to another.

Washing Your Hands - When To Wash

The most important part of handwashing is not the soap and water, but scrubbing the hands under running water. Germs not only grow on the hands, but under fingernails. You should keep your fingernails trimmed and clean at all times. Your hands should be washed:

Upon reporting on and off duty;

1. Before and after the administration of medication;
2. Before and after the administration of any treatments;
3. Before and after the use of gloves;

A) contact with any bodily excretions (feces, urine or material soiled with them) or

secretions from wounds, skin infections, etc., and before touching any other individuals;
B) touching wounds, changing dressings, obtaining specimen collections and providing catheter care;

4. Before serving food;
5. After personal bathroom use, eating, coughing and sneezing;
6. After handling the individual's belongings;
7. Before and after leaving for and returning from break periods;
8. Whenever hands are obviously soiled; and
9. When in doubt wash!

Equipment And Supplies Needed to Wash Your Hands

The following equipment and supplies are normally used when washing your hands:

1. Hot and cold running water;
2. Liquid Soap
3. Antiseptic solution;
4. Orangesticks (optional);
5. Individual paper towels;
6. Hand lotion (optional); and
7. Wastepaper basket.

Recommend Handwashing Techniques

1. Gather supplies.
2. Stand away from the sink to prevent splashing and cross contamination.
3. Take the next paper towel and turn the water on to a comfortable temperature. Do not touch the controls with your hands.
4. Regulate the flow of water.
5. Put your hands and wrists under the running water. Allow water to flow gently. Keep your fingertips pointed upward. Avoid touching the sides of the basin.
6. Once your hands and wrists are completely wet, apply soap.
7. Bring hands together and create a heavy lather. Wash at least 2-3 inches above the wrists. Get soap under your fingernails and between your fingers.

6. Wash well for at least one (1) minute. Hold hands up so that the flow of water is from the fingertips to wrists.
9. With the fingertips of your opposite hands, circle each finger on the other hand with a rotary motion from base to tip. Pay particular attention to the area between your fingers, around the nail and across the palms of your hands.
10. Clean under your fingernails by rubbing your nails across the palms of your hand or use an orangestick to clean your fingernails.
11. Rinse hands well under running water. Hold hands up so that the direction of the water flow is from the fingertips to your wrist.
12. Starting from your fingertips to the wrist, pat hands dry with a clean paper towel. Discard it.
13. Take a dry paper towel and turn off the water with the paper towel. Discard the paper towel into the wastepaper receptacle. Do not touch the wastepaper receptacle.

The Medication Administration Process

Once you have identified the right person, the following procedures for administration of medications are to be followed:

1. Wash hands before preparing and administering medication
2. Locate all documents PMOF, MAR and Pharmacy medication label. Make sure these documents all agree and that the medication has not expired.
3. Check for allergies on the MAR. Be certain individual is not allergic to a medication that has been prescribed.
4. Gather needed supplies. The MAR, drinking glasses, straws, water, paper towels, cups. Work alone, prevent distractions or interruptions, have good lighting, and ensure that the work area is clean.
5. For each dose of medication, read the label three times:
 - a. upon removing the container from the storage area;
 - b. immediately before pouring the medication; and
 - c. after pouring and before administering the medication.
6. Pour the accurate dose of medication
 - a. Tablets or Capsules in Container/Bottle
 - (1) Read the label carefully to assure proper dosage

- (2) Pour correct number into cap of container
 - (3) Empty cap into cup.
- b. Unit Dose/Blister Pack Tablets or Capsules:
- (1) Read the label carefully to assure proper dosage.
 - (2) Open packet as indicated and pour the medication into cup.
 - (3) Do not touch medication with hands.
 - (4) For a unit-dose medication: Place the unwrapped dose of medication directly into the cup. The wrapper keeps the medication clean and allows for identification.
- c. Liquids: If directions indicate, shake liquids well.
- (1) Remove the cap and place it upside down on counter top to keep it clean.
 - (2) Hold the label side of bottle next to your palm and pour medication away from label so that medication will not drip on the label.
 - (3) If medication is ordered for a teaspoon or tablespoon amount, pour the medication into the pharmacy supplied measuring “spoon” and then put it into a cup.
 - (4) If medication is ordered for an ounce or two, use a pharmacy or manufacturer supplied “measuring cup” and hold cup at eye level, with your thumbnail placed on the cup at the level you wish to pour.
 - (5) Wipe the rim of the bottle with paper towel before replacing the cap.
- Unit Dose Liquids: Shake contents, if necessary, and peel off cover.
- d. (1) if the amount of medication in the container is the prescribed amount, administer directly from the container.
- (2) if the amount of medication in the container is more than the prescribed dose read pharmacy label for exact amount to be given. If this information is not provided, **STOP!** and call your delegating nurse for direction.
 - (3) Any excess medication should be discarded according to procedures. Do not save the medication until the next dose.
 - (4) Discard empty Unit dose container in trash.

Actual Administration of Medications to the Individual

- Never leave medication cabinet unlocked and unattended.
- Identify the individual and if there is any special way that he/she takes medication. Read the information on the (MAR).
- Check route and time.
- Explain the procedure to the individual. Use a calm, positive approach. Encourage the individual to participate as much as possible.
- The person should always be in an upright position to help in swallowing.
- If the individual is capable, give him/her the cup with the medicine in it and a glass of water. Unless otherwise noted, each individual should be given a full glass of water each time medications are administered.
- If the individual has difficulty swallowing medication, contact your delegating nurse or health care provider for instructions. **Some pills may be crushed. Some may not.** If you have approval to crush the tablets you may do so by following the directions from the delegating nurse or health care provider. Mix the medication powder you have made with a small amount of soft food (e.g. applesauce). An additional amount of soft food or liquid may be necessary to give to the individual to assure no medication residue is left in the individual's mouth.
- Remain with the individual until the medication is swallowed. If there is a problem with a specific individual you may need to ask them to open the mouth and move tongue so that you can check that medication was swallowed.
- Chart the medications that you have given on the MAR. You will learn how to do this in the next section.

When Not To Give Medications

On certain occasions when it is time to administer medications, unusual conditions may occur that require you to stop in your procedures. STOP administration if:

- any of the PMOF, MAR, legible pharmacy labels are missing.
- the medication has expired
- the individual exhibits behavioral and/or physical changes—follow earlier instructions for observing and reporting changes

- any of the six rights are violated - if there is a problem with the RIGHT individual, medication, dose, time, method or charting
- the individual refuses to take medication - explain why the medication should be taken and encourage the individual to participate. If she or he still refuses, do not force him or her to take the medication. Call your delegating nurse, follow instructions and document the situation.
- If the medication has changed color or been contaminated - if it is dropped, spilled or touched by you or someone other than the individual for whom it is prescribed.

Medication Errors

A medication error occurs when any one or more of the six rights of medication administration are violated. Medication errors may include

- the medication was given to the WRONG Individual
- the WRONG MEDICATION was given to a individual
- the medication was given in the WRONG DOSAGE
- the medication was given at the WRONG TIME, or was not given at all
- a medication was given by the WRONG ROUTE
- the individual was given medication when there is a documented allergy to the medication (WRONG MEDICATION)
- the medication given was EXPIRED
- the medication was NOT GIVEN
- administration of the medication was NOT DOCUMENTED appropriately

If a Medication Error occurs, or if you identify that a Medication Error has occurred, you must

IMMEDIATELY REPORT AND RECORD THE ERROR.

To REPORT the error, you must notify your manager and the delegating nurse.

To RECORD the error, document it on the individual's MAR. and the facility's incident report.

P.R.N. ORDERS

Some medications will be prescribed by the health care professional to be given "as needed". The medication may be prescribed for pain, cough, restlessness, etc. This is called a p.r.n " order (An example is to give two Tylenol for a temperature over 101:) It is important to remember that Individuals who have difficulty communicating, such as those with dementia, after a stroke, or speech disability, may be unable to ask for medication when they need it. You may have to observe behaviors to determine that a p.r.n. medication is indicated.

P.R.N. medications should be used only if the order is current and if the following information is available in the individual's record:

- The condition or specific symptom for which a medication is to be used.
- The name of the medication, dose to be administered, and the method/route of administration.
- The frequency with which it may be administered (i.e. the minimum length of time between doses).

STAT Medications

STAT medications are those which must be given immediately and for one dose only. Usually this order occurs because there has been a sudden (but not emergency) change in the individual's condition. Contact the delegating nurse who will give you instructions. Documenting STAT medication orders is discussed in Chapter II. You are reminded that you may not accept verbal orders or phone orders from authorized prescribers. All orders must be written or faxed. All new orders are recorded on the individual's MAR per the facility's written policy.

Procedures for Administering Medications Away From the Individual's Assisted Living Program.

From time to time medication may have to be administered somewhere other than in the individual's Assisted Living Program. It is very important that you know in advance when a individual will leave the Assisted Living Program for a visit. A separate supply for the leave of absence can be prepared by the delegating nurse or the pharmacist. Check with your employer regarding specific policies. If the individual must take medications routinely when away from the

Assisted Living Program special arrangement should be made for the prescription to be available at the other site (Complete Feedback Exercise L).

CHAPTER II
SECTION 4
DOCUMENTING MEDICATION
ADMINISTRATION

OBJECTIVES

Given a prepared Medication Administration Record (MAR) with all information entered the medication technician will:

1. Chart the administration of a medication.
2. Chart an order to discontinue a medication.
3. Correctly chart a medication error.
4. Chart on the MAR the information needed for a individual who is away at medication time.
5. Chart on the MAR for a individual who is refusing his or her medication.
6. Enter an order for a medication.
7. Enter an order for a p.r.n. medication.
8. Chart the administration of a p.r.n. medication.
9. Chart a STAT/one time order.
10. Chart a change in an existing medication order.
11. Chart a medication prescribed for a limited number of days.
12. Chart a prescribed omission.
13. Chart a medication administered outside of the prescribed time frame.
14. Chart a mistake in documenting on the MAR.

Student Guide

The documentation or charting of prescribed medication has been referred to several times throughout this training manual (Medication & Related Issues, Storage of Medication & Preparation for Administration and Administering Medications). You have also had an opportunity to practice some basic charting procedures. In this Section of the Manual and in class, you will learn how to chart a medication when it has been discontinued, chart a medication error, chart when a individual is away from your Assisted Living Program, chart a medication refusal, and chart the administration of a medication when needed (p.r.n.) medication. You will also learn how to enter medication orders on the MAR. Each time you administer a medication you are responsible for charting that it has been administered.

- **YOU CAN NOT HAVE SOMEONE ELSE CHART MEDICATION THAT YOU HAVE ADMINISTERED**
- **YOU OR SOMEONE ELSE CANNOT CHART A MEDICATION BEFORE GIVING IT.**
- **ONLY THE PERSON WHO HAS ADMINISTERED THE MEDICATION MAY CHART IT.**

Reviewing the Medication Administration Record (MAR)

Basic information required for each individual receiving medication on a MAR includes:

- Name of the individual receiving medication, sex and birth date.
- Name of individual's primary physician (or nurse practitioner).
- Any allergies of individual (to medicines, food, etc.)
- The individual's diagnosis (may be more than one). A diagnosis should be listed that pertains to the medications prescribed.
- The individual's diet: either regular or if special indicate how.
- Delegating registered nurse who is responsible for teaching, monitoring and following up. State regulations by the Maryland Board of Nursing require that Individuals receiving medication administered by unlicensed persons like you must be taught and

monitored by a registered nurse. The registered nurse listed on the MAR is the nurse responsible for delegation to you at your Assisted Living Program.

- Date form is being filled out.
- Agency is the Assisted Living Program(at top of page)
- Month and Year are for the time period the MAR is intended to be used (e.g. February 2000)

The following information is recorded on the back of each individual's MAR:

- Staff Signature and Initial. To identify you and anyone else in your Assisted Living Program authorized to administer medications, you must record your names and initials once per month. You should do this the first time you administer medication to the individual each month.
- Nurse Review, Initial, and Date Reviewed. Your Assisted Living Program will occasionally receive visits from a registered nurse, mandated as part of the Nurse Delegation Regulations. The nurse will review the MAR as part of the visit. When an MAR review has been done, the Nurse's signature, initials, and the date of review is entered by the nurse.
- Also on the back of the form are places to record PRN orders, STAT orders, medication errors and medication omissions/changes. These will be discussed later.

Entering A New Medication Order:

The following information must be recorded on the MAR for each separate medication prescribed. Only one medication should be entered in each block, as follows:

- Date Start- Under the "Date Start" column. print the month/date/year the medication was ordered by the health care professional. When entering a medication after the first date of the month, draw a horizontal line with an arrow to the first date the medication is to be given that month.
- Medication - Under the "Medication Column", print the following information exactly as ordered by the health care professional:
 - medication name (generic or brand)
 - dosage
 - route or method
 - how many times a day
 - any specific instructions

- Remember, the information you record here must match the PMOF and the pharmacy label.
- Hour Column-Under the "Hour Column", print the exact times as ordered the health care professional.
 - Indicate "a.m." or "p.m."
 - If the times of administration are not indicated, contact the prescriber or the
 - Delegating nurse for guidance
- Date (D/C) - Under the D/C.. Date, print the date the medication was discontinued by the health care professional. Enter this date after the medication has been discontinued, not before.
- Special Instructions-When entering an order, an "X" is put in the block if the medication is not to be given at a specific time (e.g. a medication is to be given every other day at 8 AM; you would put an "X" in the block for the days when this medication is not to be given). This procedure reduces the chance for medication errors.

Medications That Have Been Reordered

The MAR should reflect both the date the medication was originally prescribed by the health care professional and the most recent reorder date, (the reorder date is not the refill date).

Charting Medications on a Prepared MAR

The front of the MAR mostly consists of a series of small blocks, listed under numbered columns. Each numbered column represents a day of the month. When you administer a dose of medication you will place your initials in the block corresponding to the correct date and time. This indicates that the medication was given and it was given by you.

Charting Procedures:

- Gather all documents specified per the facility's written policies required to administer medication.
- Review the MAR for any specific instructions regarding administration.
- Compare all documents to the pharmacy label on medication containers to be sure everything matches.
- Administer medications.
- If this is the first time you have administered medications to this individual this month, enter legibly your initials, name, and job title under "Staff Name" on the back of each

page of the MAR. This is done at least once a month with an original signature on each page of the individual's MAR.

- Locate the correct blocks to initial. To do this, locate the medication you have administered in the left column. Next locate the row with the correct time of administration. Find the empty block under the correct date. Enter your initials. Repeat this process after you administer each medication. (Complete Feedback Exercise M)

Discontinuing a Medication

The health care professional may decide to prescribe a medication for a limited period of time or to discontinue an individual's medication.

IMPORTANT: Only the prescribing healthcare professional can discontinue the prescribed medication. **You must not discontinue a medication without an order from the health care professional. The order must be in writing** and can be faxed to the Assisted Living Program. A written order signed by the health care professional, giving the instruction to discontinue, must be obtained. This written order is not required for a time limited prescription.

Charting Procedures for Discontinuing

- Administer the last dose of medication according to the prescribing health care professional's order. Documents on the MAR the last dose given.
- If there were other doses to be administered the same day the medication was discontinued enter a slash (/) in the box for each dose of medication recorded on the MAR.
- Bracket the boxes that have been slashed (/), enter/write the word "Discontinue" and your full signature, including the date and time.
- Next locate the "D/C Date" column for this medication. Enter the complete date (month/date/year) of the last day the medication is given.
- You may use highlighter to emphasize that the medication has been discontinued. (Complete Feedback N).

If Medication is Being Refilled

If you return from a visit to the pharmacist with a prescription that has been refilled (because the individual is running out of medication), the PMOF, the pharmacy label and the MAR must match in order to administer medications. The MAR should remain the same. In this case, you DO NOT need to discontinue the medication.

Charting Procedures to Follow When Receiving Refilled Prescriptions:

- When you return from the pharmacy, compare the PMOF, MAR and pharmacy label.
- If these three items continue to match, administer and document the medication as before.
- If these three items do not match exactly, do not give medications. Notify the delegating nurse. (Complete Feedback Exercise O).

Charting a Medication Error

If a medication error has occurred, you must report this to your supervisor and delegating nurse. The error must be charted on the MAR. Charting the error informs others that something happened. There are several types of medication errors. Medication errors include:

- when it is administered at the wrong time
- in the wrong dose, or
- using the wrong method
- error or omission (when the individual does not get the medication)
- medication given to the wrong person
- charting errors when someone charts incorrectly

Procedures for Charting a Medication Error

- As soon as you discover a medication error notify your designated supervisor and delegating nurse
- Follow the directions in completing the “Medication Error” section of the MAR.
- When you have a medication error in dosage, date time of day, or route, follow the procedures listed below.
 - a. Locate the medication that was given incorrectly on the MAR.
 - b. Your initials will be in the block because you have already administered the medication.
 - c. Circle your initials.
 - d. Turn MAR to the back.

- e. Document on the MAR, the medication error including the name of the medication, the date and hour and a description of the error. Be sure to include who was notified, what actions were taken, and your full signature or initial per facility policy.
- f. Follow the instruction of the delegating nurse regarding the necessity of an incident report/medication error report.
 - When you have an error in omission - (e.g. did not give the medication) enter your initials in the block, circle your initials and followed the steps d, e, and f in above. (Complete Feedback Exercise P).

Charting When an Individual Vomits the Medication

If an individual vomits within one hour of taking his or her medication, or if some of the medication is visible in the vomitus, notify your supervisor or manager and delegating nurse immediately.

Procedures for Charting When a Medication is Vomited

- Locate on the MAR, medication(s) that were administered within the previous hours.
- Your initials will be in the blocks.
- Circle initials.
- Turn to the back of the MAR.
- Enter the medication, the date and how the individual vomited. Enter who was notified, what action was ordered and what action was implemented. Enter your initials or full signature per MAR format. Complete Feedback Exercise Q).

Charting When the Individual is Away at Medication Time

The individual may not always be there when it is time to receive medication. There are times when people are at the doctor's or perhaps a family event. When the individual is not there for his or her medication, you must enter your initials, circle your initials and document on the MAR that you did not give the medication.

Procedures for Charting When the Individual is Away at Medication Time

- At the prescribed medication time, review and examine the individual's MAR.
- On the MAR, locate the medication(s) which are to be given at that time.
- In the block for that appropriate date and time, enter your initials and circle your initials.
- Remember, a circle is an instruction to see the other side of the MAR. Turn MAR to the back.

- According to the MAR format, enter the date and time you were to administer the medications to the individual
- Enter a comment stating why the medications were not given, where the individual was, and what arrangements were made for another party to administer the medication. Enter your initials or full signature per MAR format. (Complete Feedback Exercise R).

Charting a Medication When Administered Outside of Acceptable Time Frames

There are times when medications cannot be administered one hour before or after the prescribed time. If this situation occurs you must call your delegating nurse. The nurse will provide you with directions on how to proceed. (Complete Feedback Exercise S)

Charting when the Medication is Refused

The refusal of any medication must be reported (if unable to give within specified time) and should be reported immediately to your supervisor or delegating nurse.

Charting the refusal of medication is very similar to charting when a individual is away during the regular time that medication is administered. The front of the MAR is charted exactly the same in both instances. You still, however, need to explain what happened.

Procedures for Charting When Medication is Refused

- Locate the medication, correct date and time on the MAR.
- Locate the correct block that corresponds with the medication, date, and time.
- Initial and circle the block..
- Remember, a circle means to turn over the MAR and read the comment. Turn over your MAR.
- Under "Medication Omission - Medication Changes", enter the date, time, and your initials.
- In the Medication column. note the name/dosage of the medication refused.
- In the Reason column enter the corresponding comments related to the medication refused: Note what happened and why it was refused.
- In the Action Taken column note your response, who you called, and their instructions. Make sure your comments are complete. (Complete Feedback Exercise T).

Entering and Charting a P.R.N. Order

The administration of P.R.N. medications was discussed in the previous section. P.R.N. medications are given, "as needed". The manager and the delegating nurse will develop a procedure for notification of the nurse when P.R.N. medication are given. Be sure that the manager is aware that the individual requires a P.R.N. medication. Due to their specific nature, P.R.N. medications require specific charting instructions.

Procedures for Entering and Charting a P.R.N. Medication

- To enter a P.R.N. medication, enter, under "Date Started", the date the medication was most recently ordered by the health care professional.
- Under the "Medication" column, print the following information exactly as ordered by the health care professional: the name of the medication (include both the Brand name and the generic name if they are both included on the pharmacy label), dosage, route, how often to be given, under what circumstances to be given, and any special instructions.
- Leave the column "D/C Date" blank until medication is discontinued by health care professional.
- Under the "Hour" column, print P.R.N.
- When administering the P.R.N. medication initial the front of the MAR.
- Turn to the back of the MAR.
- Locate, at the top section of the MAR, "PRN/STAT ORDERS".
- **Enter the date and hour you administered the P.R.N. medication. Enter your initials in the appropriate block**
- Under the "Medication" column, enter the name and dosage of the P.R.N. medication administered.
- Under the "Reason" column. enter a comment describing why the medication was needed (complaint of individual or describe symptoms). Include a comment regarding the notification of the delegating nurse, time of notification and any instructions received.
- Under the "Result" column enter a comment which describes the effect the medication had on the individual's symptoms. This statement should be related to the individual's earlier complaint. If you received any instructions from your supervisor or the delegating nurse include any actions you may have taken.

- Each time a P.R.N. medication is administered, make a new notation on the back of the MAR, under the previous entry. Be sure to include the time administered.
- Do not discontinue the P.R.N. until you receive a written order from the health care professional, instructing you to do so.

After receiving an order to discontinue the medication, enter a diagonal line (\) in the block with your signature, date, and time. Write the word "Discontinued" and draw a line to the end of the month. You may highlight to emphasize that the medication was discontinued.

- Enter the date the p.r.n. medication was discontinued by the health care professional in the "D/C Date" column (Complete Feedback Exercise U).

Entering and Charting a STAT/One Time Dose of Medication

A STAT dosage of medication is an immediate, One Time dose. The manager and delegating nurse will develop a procedure for notifying the nurse when a STAT dose of medication is given. Be sure the manager is aware that a STAT dose has been ordered before administering the medication. Similar to P.R.N. orders, STAT medication orders require specific charting instructions.

Procedures for Entering and Charting STAT Orders

- Enter under the "Date Start" column, the date the STAT order was given by the health care professional.
- Under the "Medication" column, print the following information exactly as ordered by the health care professional: the name of the medication, dosage, route, any special instructions, and the word "STAT".
- Under the "Hour" column print the time that you administer the medication.
- Draw an arrow to the day that you administer the medication.(- >)
- Enter your initials in the block.
- Discontinue the order by placing a diagonal line in the block after your initials, write the word "Discontinued" and continue the line through the end of the month.
- Under the "D/C Date" column enter the date (the "Date Start", "D/C Date", and date of block initialed should all match).
- Turn to the back of the MAR.
- Locate the PRN/STAT ORDER Section.
- Enter the date, the time medication was administered and your initials in appropriate blocks.

- Under the "Medication" column, print the name of the Medication, dosage, and the word "STAT"
- Under the "Reason" column, enter a comment describing why the STAT order was requested. Notification of supervisors and health care professionals should be included. Note any instructions received. (Complete Feedback Exercise V).

Charting a Change in the PMOF

If a medication order is changed in any way, the previous order must be discontinued and the new order entered. Discontinue the previous order and then enter the new order so both orders are not charted at the same time.

Procedures in Charting a Medication Change

- Locate the medication being changed on the MAR.
- Discontinue the medication as previously instructed.
- Enter the new medication order. Be sure to enter, under the "Date Start" column, the day the new order begins. Enter the new order, enter the hours of the new order and draw a narrow to the first day at each dosage time is to be given.

(Complete Feedback Exercise W)

Charting a Prescribed Omission of Medication

Occasionally a health care professional may order the omission of a medication dose(s). If this occurs, specific charting procedures must be followed.

Procedures for Charting a Prescribed Omission of Medication

- Locate the medication with the prescribed order for omission on the front of the MAR.
- Your initials and circle at the prescribed hour/dosage of omission.
- Turn the MAR to the back.
- Under the "Medication Omission - Medication Changes" Section enter the date and hour of dose omitted and your initials.
- Under the "Medication" column enter the Medication/dosage omitted.
- Enter the reason for the ordered omission under the "Reason" column. Be sure to note the time frame (date and time) of the prescribed omission.
- Include any further instructions in the "Action Taken" column. (Complete Feedback Exercise X)

Charting for a Limited Number of Days

Occasionally a medication is only for a limited number of days. When charting this type of order it is very important that the time lines are appropriately followed. Observations must be noted and communicated to the supervisor or delegating nurse, and health care professional who wrote the prescription.

Procedures for Charting for a Limited Number of Days

Once the medication has been received in the facility:

- Enter the date the medication was ordered in the "Date Start" column.
- Enter the medication as ordered by the health care professional. If the orders specify a time limit, copy the order on the MAR.
- Write the hours of administration in the "Hour" column.
- From each hour, draw an arrow to the first day that each dosage time will be given.
- From each arrow, count the number of blocks for the number of days the medication is to be given.
- Enter the date the medication is actually discontinued in the "D/C Date" after the last dose is given. (Example: if a medication is ordered for 10 days there should be 10 empty blocks from the arrow to the diagonal line for each time).
- After the last dose is given discontinue as previously instructed.. (Complete Feedback Exercise Y).

Errors in Documenting on the Mar

There are times when the medication technician may incorrectly document on the MAR. If this situation occurs **DO NOT PANIC**.

Procedure for when initials are entered incorrectly

- Circle the incorrectly entered initials
- Turn to the back of the MAR
- Enter in the appropriate space the day, time, your initials, medication, name and what was in error i.e. 2/11/03, 10 AM, AZ, ERYTHROMYCIN, signed wrong box - med not given

The following are examples of how an individual's initials could be entered incorrectly:

- signed on the wrong MAR - Med given.(or)
- signed in the wrong box - med given (or)
- signed for the wrong med - med not given

Procedures for when the Medication box is filled in

When administering the medication and the medication technician finds the medication box already taken and the initials are circled - turn the MAR over to determine if the error was documented. If an error was documented as not given proceed to:

- give the medication
- enter date, time, medication name, and the administration in appropriate area on the back of the MAR.

If however, when the medication is to be administered and the initial box is already taken **BUT** not circled, turn the MAR over to see if the medication error was documented.

A) If documentation was not noted on the back of the MAR notify the assisted living manager or delegating nurse prior to administering the medication per facility policy.

B) If documentation error is noted - circle the incorrect initials on the front of the MAR and proceed with

- administering the medication
- enter the date, time, medication name and the administration of the appropriate area on the MAR.

Mistake in The Entry of Medication Order On The MAR

There are times when the medication technician may enter a medication order incorrectly.

If this situation occurs **DO NOT PANIC.**

- Identify the incorrect entry
- Draw one line through the incorrect entry (so the entry is still readable).
- In the Box for initials write “ERROR” provide your initials and the date.

(Complete Feedback Exercise Z).

CHAPTER III

**ABBREVIATIONS AND
TABLE OF APPROXIMATE
EQUIVALENTS AND
COMMON TERMINOLOGY**

Objectives

1. Identify those abbreviations commonly utilized by the authorized health care prescriber to prescribe medications.
2. Identify abbreviations commonly utilized by the pharmacist in dispensing medications.
3. Identify those abbreviations commonly utilized in medication administration.
4. Identify common household measurements and the equivalent measurement used in delivery of health care.

The following has been provided in order to familiarize the medication technician with the terminology, abbreviations and approximate equivalents which are essential in order to safely administer medication.

MEDICATIONS ARE PRESCRIBED TO BE TAKEN IN A CERTAIN FORM AND BY A CERTAIN ROUTE. THE FOLLOWING ARE ROUTES OF ADMINISTRATION.

ROUTES

ORAL _____	BY MOUTH
OPHTHALMIC _____	INTO EYE
OTIC _____	INTO EAR
NASAL _____	INTO NOSE
INHALANT _____	INTO LUNGS THROUGH MOUTH
TOPICAL _____	ONTO SKIN
TRANSDERMAL _____	ONTO/THROUGH SKIN (PATCH)
RECTAL _____	INTO RECTUM
VAGINAL _____	INTO VAGINA
SUBLINGUAL _____	UNDER THE TONGUE
SUBCUTANEOUS (SQ) _____	INJECTION - UNDER THE SKIN

INTRAMUSCULAR (IM) INJECTION MAY ONLY BE GIVEN BY LICENSED NURSES

INTRAVENOUS (IV) INJECTION MAY ONLY BE GIVEN BY LICENSED NURSES

COMMON TERMINOLOGY AND ABBREVIATIONS

A. TIMES A DAY:

Every	q
Every hour	qlh
Every 4 hours	q4h
Every other day	qod
Once a day	qd
Twice a day	Bid
Three times a day	Tid
Four times a day	qid
Hours of Sleep	hs
When necessary	PRN (As needed)
Immediately	STAT
Before meals	ac
After meals	pc

B. FORMS OF MEDICATION:

Capsule	cap
Tablet	tab
Elixir	elix, or El.
Solution	sol
Ointment	oint.

Suppository	supp.
Suspension	susp.

C. WAYS TO GIVE:

By mouth	po
Subcutaneous	sc or sq
Intramuscular	IM
Gastrostomy tube	gt or peg
Per rectum	pr
Topical	top
Intravenous	IV
Sublingual	sl
Vaginal	vag.

D. GIVING EYE MEDICATIONS:

Drop	gtt
Right eye	od
Left eye	os
Both eyes	ou

E. GIVING EAR MEDICATIONS

Drop	gtt
Right Ear	ad
Left Ear	as
Both Ears	au

F. VITAL SIGNS:

Vital signs	v/s or vs
Blood pressure	bp or BP
Temperature	Temp
Respiration	Resp
Temperature, pulse, respiration	tpr or TPR
Weight	wt
Apical pulse	AP
Centigrade	C°
Fahrenheit	F°

G. MISCELLANEOUS

With	-
Without	^c Ÿ
By or through	per
Label	sig
Shortness of Breath	SOB
No known allergies	NKA
One (1)	i
Two (2)	ii
Three (3)	iii
Over-the-counter	OTC
No known drug allergies	NKDA
Do Not Resuscitate	DNR
Leave of Absence	LOA
Complaints of	c/o

discontinue

D/C

H RECORDS

Intake and output record

I&O record

Medication Administration Record

MAR

Treatment Administration Record

TAR

Physicians Medication Order Form

PMOF

Physician Order Sheet

POS

I MEASUREMENT

Weight:

Gram

gm

Milli-gram

mg

Microgram

mcg

Kilogram

Kg

Milli-equivalent

mEq or meq

Pounds

lbs

Ounces

oz

Liquid:

Milli-liter

ml

Cubic centimeter

cc (equals ml)

1 quart (qt)

1000 ml

1 fluid ounce (oz)

30 ml or 2 tablespoons (Tbsp)

½ fluid ounce (½ oz)

15 ml or 1 tablespoon (Tbsp)

1 teaspoon (tsp)

5 ml or 5 cc

1 liter

1000 cc or 1 qt (Approx)

cup

8 oz or 240 ml

Abbreviations and Table of Approximate Equivalents

Abbreviations	Equivalents
c = cup	cc = ml
cc = cubic centimeter	1mg = 1000 mcg
dz = dozen	0.1 mg = 100 mcg
gm = gram	500 mg = 0.5 gm
gr = grain	1000 mg = 1 gm
kg = kilogram	1 lb = 2.2 kg
lb = pound	
mcg = microgram	
mg = milligram	
ml = milliliter	
oz = ounce	
qt = quart	
T or Tbs or Tbls = tablespoon	
t or tsp = teaspoon	

<u>Household</u>	<u>Metric</u>	<u>Apothecary</u>
<u>Dry</u>	15 mg	1/4 gr
	60 mg	1 gr
	80 or 81 mg	1 1/4 gr
	300 or 324 or 325 mg	5 gr
<u>Liquid</u>		
1 tsp	5cc	
3 tsp = 1 Tbs or Tbls	15 cc	1/2 fluid ounce
6 tsp or 2 Tbs	30cc	1 fluid ounce
1 cup	240cc	8 fluid ounces
2 cups	480cc	1 pint
4 cups	960cc	1 quart

(Complete feedback exercise AA)

CHAPTER IV
INTRODUCTION AND
OBJECTIVES

This chapter has been developed to serve as a resource for caregivers and staff to identify some of the common diseases and problems which affect the assisted living population. It contains an overview of “at a glance” information about the diseases/problems and the types of medication used in their treatment.

OBJECTIVES

1. Briefly describe the disease/illness.
2. Identify at least two (2) reasons why the disease/illness may occur.
3. Identify at least two (2) things that the individual might complain of or that you should look for.
4. Identify medications that are often used to treat the disease/illness.
5. Describe how to determine if the medication is effective.
6. Identify what to look for in a person who is taking a particular medication to treat a disease/illness.
7. Identify responsibilities of the individual taking a medication to treat a disease/illness.
8. Identify the responsibilities of the care giver administering the medication to treat the disease/illness.

The different diseases and problems included in the training manual are:

- Angina
- Arthritis
- Arrhythmia
- Bipolar disorder
- Cholesterol (elevated)
- Congestive heart failure
- Tuberculosis
- Dementia/Alzheimer's
- Diabetes
- Digestion
- HIV/AIDS
- Hypertension
- Insomnia
- Parkinson's Disease
- Respiratory Disease
- Schizophrenia
- Urinary incontinence
- Urinary tract infections
- Depression
- Eye problems

..... **REPORTING CHANGES IN THE Individual**

DUE TO MEDICATION AND/OR DISEASE

It is up to you to observe and report any and all changes that occur in the individual. By doing so you will better ensure the health and safety of the individual.

There are three categories of changes that **MUST** be reported: (Refer to Chapter I, Section 3 for more information about the reporting sequence).

1. Emergency medical conditions
2. Non-emergency medical conditions
3. Other physical or behavioral changes

**CHAPTER IV
SECTION 1**

ANGINA

OBJECTIVES

1. Briefly describe angina.
2. Identify at least two (2) reasons why angina may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with angina.
4. Identify medications that are used to treat angina.
5. Describe how to determine if the medication is effective in treating angina
6. Identify what to look for when a person who is taking medication to treat angina.
7. Identify the responsibilities of the individual who is taking medication to treat angina.
8. Identify the responsibilities of the caregiver who administers medication to treat a

Angina

What is it

Chest pain can occur when there is not enough blood and oxygen going to the heart muscle and this is called angina. Lack of oxygen causes pain that can feel dull crushing.

Sometimes the pain spreads down the arms, or to the back, neck or jaw. An electrocardiogram(EKG) taken during this painful episode would show changes typical of angina. Anginal chest pain can occur during physical activity, from stress, or even when resting.

If the lack of oxygen lasts too long during an episode, the person can have a heart attack.

Why does it occur

Angina occurs when the arteries are unable to carry sufficient blood to the heart muscle. Most often this is the result of deposits inside the walls of the coronary arteries which narrow and harden the inside of the artery walls. This narrowing due to deposits is called atherosclerotic heart disease, or coronary artery disease.

The chest or back pain, neck, or jaw pain experienced during physical activity usually goes away with rest or with the use of certain medications. If the pain does not go away with rest it is a medical emergency since it could be a heart attack.

Angina may also occur if the arteries narrow due to a sudden spasm of the artery wall. In such cases, persons may feel pain during rest or sleep.

What the person might complain about/What to look for.

The most common symptom of angina is pain due to physical activity or stress. Pain is relieved by resting or by taking nitroglycerin medication.

Other episodes of chest pain, such as during sleep or resting times or even an increase in the number of pain episodes, may indicate that the disease is getting worse. Most important, chest pain can be caused by other problems, such as indigestion, peptic ulcer, strain of muscles or chest wall, inflammation of the lung or heart. If chest pain occurs, it must be properly diagnosed, since the condition can be life-threatening.

Also it is important to recognize that older people may have angina but experience less severe chest pain than younger adults. Sometimes the older person will complain of dizziness, shortness of breath, or stomach pain. Often an EKG or other laboratory tests are needed to help the doctor diagnose the problem.

What medications are used

Three classes of medications are used to treat angina: nitrates, beta blockers, and calcium channel blockers.

I. Nitrates

For immediate relief:

- sublingual nitroglycerin (Nitrostat)
- nitroglycerin spray (Nitrogard) given by mouth

Both of these types of nitroglycerin will give relief of pain within 3-5 minutes. As soon as the person feels pain, he/she should sit down, allow one tablet to dissolve under the tongue (or spray). This may be repeated up to 3 times within 15 minutes. If the pain does not stop, contact the health care provider (or 911) for help immediately!

Medications used to prevent angina attacks:

- Amiodipine
- nitroglycerin patches (Nitro-Dur, Tranderm-Nitro)
- Diltiazem (Cardizen, Tiazac)
- Isosorbide dinitrate (Isordil)
- Nifedepine (Procardia, Adalat)
- Verapamil HCL
- Corgard (Nadolo)
- Nicardipine (Cardene)

How to determine if the medication is working

Relief of angina pain is the best guide. However, the health care provider may wish to be sure that the heart is receiving enough oxygen. In this case an EKG reading may be needed.

What to look for while the person is taking the medication

- Dizziness
- Headache
- Stomach upset
- Constipation
- Flushing
- Rash (due to ointment or patch)
- Swollen ankles
- Loss of effect of the drug (example, increased chest pain. To make certain that these medications will continue to have a good effect, the health care provider may

suggest no nitrate therapy for several hours each day, usually during the night. In this way, the medication retains its effect.

- Always keep nitroglycerin in the original container given by the pharmacist. Never remove the tablets from the original bottle. Check the expiration date on nitroglycerin sublingual tablets since they will lose potency over time and need to be replaced. Ask the delegating nurse or the pharmacist.

- **Beta Blockers**

- metoprolol (Lopressor)
- propranolol (Inderal)

These medications work by reducing the workload of the heart and, therefore, reduce the heart's need for oxygen.

What to look for while the person is taking the medication

- Drowsiness
- Dizziness
- Blurred vision
- Notify the health care provider immediately if the person has a new onset of:
 - Difficulty breathing
 - Night cough
 - Confusion
 - Any unusual mood change that lasts for several days

Before using these medications, tell the health care provider if the person has:

- Asthma (breathing prob)
- Diabetes
- Heart failure

2. Calcium channel blockers

- diltiazem (Cardiazem)
- nifedipine (Procardia)

verapamil (Calan, Isoptin) The medications are often used to prevent angina that occurs at night or at rest. Although all calcium channel blockers relieve angina, they may have very different side effects

Person/caregiver responsibility

- Chest pain that is not relieved by medication can be life- threatening.

CALL 911

- Always keep in the NI nitroglycerin in the original container
- If the person is using nitroglycerin patches, do not place over the same spot on the chest each day; it may cause skin rash or redness. Ask the delegating nurse, health care provider, or pharmacist which other areas may be used.
- The health care provider will want to see the person on a regular basis and will check the blood pressure to be sure it is not high.
- The health care provider may check the cholesterol level and advise that the person's weight be kept under control.
- If the person smokes, advise him or her to quit.
- If using a nitroglycerin patch, remove the old patch before putting on the new patch.
- Rotate and document site.
- Remember to keep the nitroglycerin tablets in the person's reach if he/she is reliable. If the person experiences chest pain, the medicine must be taken immediately.

**CHAPTER IV
SECTION 2**

ARRYTHMIAS

OBJECTIVES

1. Briefly describe arrhythmias.
2. Identify at least two (2) reasons why arrhythmias may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with arrhythmias.
4. Identify medications that are used to treat arrhythmias.
5. Describe how to determine if the medication is effective in treating arrhythmias.
6. Identify what to look for in a person who is taking medication for arrhythmias.
7. Identify the responsibilities of the individual who is taking medication for arrhythmias.
8. Identify the responsibilities of the caregiver who administers medications to treat arrhythmias.

ARRHYTHMIAS

What is it

A cardiac arrhythmia (irregular beats) occurs when the heart beats too slow, too fast, or when the heart misses beats. Depending on which section of the heart is affected, different treatment is necessary.

Why does it occur

The heart is unable to pump regularly. This may be due to heart disease, a heart attack or surgery. Medications can also cause an irregular heartbeat. A few examples of these medications are: Digoxin, beta blockers, alcohol, diuretics, caffeine.

What the person might complain about/What to look for

- Heart beating fast or palpitations
- Chest pain
- Dizziness
- Fainting

What medications are used

Many medications are used to treat arrhythmias and some may require a blood test to be certain the dose is correct.

- Coumadin
- procainamide (Procan)
- Disopyramide (Norpace)
- Digoxin (Lanoxin)

What to look for while the person is taking the medication

- Dizziness
- Difficulty urinating
- Dry mouth
- Diarrhea
- Loss of appetite (do not feel hungry)
- Stomach pain

- Nausea or vomiting
- Blurred vision
- Confusion
- Decreased sexual functions
- Constipation (with Verapamil)
- Mood changes
- Bleeding gums and/or smoky-colored urine,
- Blood in the stool and/or bruising easily.

Person/caregiver responsibility

- It is important to take these medications as directed and not stop this medication suddenly. This could be life-threatening.
- When visiting a dentist or another doctor, tell them the person is taking this medication.
- Consult with the delegating nurse, the health care provider, or pharmacist before having the person take any over-the-counter medications. Show them the MAR.
- The health care provider may do laboratory tests while the person is on these medications. It is important to be certain the dose of the medicine is correct and that it is working correctly.
- It is important to see the health care provider regularly.

CHAPTER IV
SECTION 3
ARTHRITIS

OBJECTIVES

1. Briefly describe arthritis.
2. Identify at least two (2) reasons why a person may develop arthritis.
3. Identify at least two (2) things that the individual may complain of or that you should look for with arthritis.
4. Identify medications that are used to treat arthritis.
5. Describe how to determine if the medication is effective in treating arthritis.
6. Identify what to look for in the individual who is taking medication for arthritis.
7. Identify the responsibilities of the individual who is taking medication for arthritis.
8. Identify the responsibilities of the caregiver who administers medication to treat arthritis.

ARTHRITIS

What is it

Arthritis means inflammation (swelling and pain) of a joint. Most forms of arthritis are chronic, lasting for years. In older people the two most common forms of arthritis are rheumatoid and osteoarthritis.

Rheumatoid arthritis can be crippling. Long lasting swelling and pain can cause damage to the joints. Fingers, wrists, knees, elbows, hips, and ankles are the joints most often affected. Treatment is necessary for rheumatoid arthritis.

Osteoarthritis is often mild, causing no symptoms in many people. Inflammation of the joint is usually not seen. Joint stiffness in osteoarthritis can be short and is often relieved with activity. Weight bearing joints such as the knees, hips, and spine are most often affected.

Pain is not a normal result of aging. If pain occurs, see a health care provider as soon as possible.

Why does it occur

Rheumatoid arthritis - the reason it occurs is not known. Osteoarthritis (degenerative joint disease) - the reason it occurs is not known but it does result in joints that have experienced specific wear and tear.

What the individual might complain about/What to look for

- Redness, swelling, or heat over a joint area
- Pain
- Impaired range of motion
- Stiffness after periods of rest
- Changes in the shape of a joint
- Aching at times of bad weather
- Tiredness

Note: Persons with long-standing arthritis are often depressed.

What medications are used:

	Prescription	Over-the-counter
● acetaminophen		X
● aspirin	X	X
● Celebrex	X	
● glucosamin/chondroitin	X	X
● ibuprofen (Motrin, Rufen Advil, Medipren)	X	X
● indomethacin (Indocin)	X	
● gold salts	X	
● naproxen (Naprosyn)	X	
● piroxicam (Feldene)	X	
● methotrexate	X	
● sulindac (Clinoril)	X	
● steroids (Prednisone)	X	

What to look for while the individual is taking these medications

- Stomach pain or discomfort
- Diarrhea
- Heartburn
- Nausea or vomiting
- Sudden decrease in the amount of urine
- Ringing in the ears
- Dark stools (bleeding)
- Sleepiness

While taking these medicines, the individuals should visit the health care provider regularly. This is especially so, if the individual has a heart condition or other problems that may interfere with the way this medication works. Any individual on chronic steroids (cortisone, prednisone) must be carefully monitored for signs of infection, high blood sugars, weight gain, behavior changes and soft bones, i.e. bones easily broken or a hump forming on the back etc.)

Individual/caregiver responsibility

- It is important to inform the delegating nurse and health care provider of health changes when they occur. Report these changes in your own words. Clearly explain your concerns to the health care provider.
- Make a list before the individual goes to the office visit to be sure nothing is forgotten.
- Know if the treatment is being given to relieve pain or inflammation, or both. If the treatment is for inflammation, the medication is given even when there is no longer any pain. If the treatment is just for pain, then check with the health care provider about stopping the medication once the pain is gone.
- A regular exercise routine is a must for individuals with arthritis
- The Arthritis Foundation provides multiple ongoing educational materials and workshops that are very helpful.

**CHAPTER IV
SECTION 4**

**CHOLESTEROL
(Elevated)**

OBJECTIVES

1. Briefly describe cholesterol.
2. Identify at least two (2) reasons why cholesterol problems may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with cholesterol problems.
4. Identify medications that are used to treat cholesterol problems.
5. Describe how to determine if the medication is effective in treating cholesterol problems.
6. Identify what to look for in the individual who is taking medication for cholesterol problems.
7. Identify the responsibilities of the individual who is taking medication for cholesterol problems.
8. Identify the responsibilities of the caregiver who administers medication to treat cholesterol problems.

CHOLESTEROL

What is it

Cholesterol is necessary for proper digestion, hormone balance, and healthy cell membranes. When the blood cholesterol is too high, it forms deposits inside the walls of arteries. When the deposits are large enough to decrease blood flow especially to the heart, heart disease develops.

Why does it occur

Cholesterol is made by the liver. If the liver is not working properly, it may make too much cholesterol. Cholesterol is also contained in many fatty foods. A diet high in saturated fats will cause a high blood cholesterol level. Some medications may increase or decrease special proteins called lipoprotein: LDL (the “bad cholesterol) and HDL (the “good” cholesterol). Too much LDL increases the risk of heart disease. HDL protects against heart disease. Other diseases, such as uncontrolled diabetes or hypothyroidism, may also cause an increase in cholesterol levels.

What the person might complain about/What to look for

There are no specific symptoms of high cholesterol. That is why it is recommended that everyone have a blood cholesterol test. It is a simple blood test. The “desirable” amount of cholesterol in the blood is less than 200 mg/dl. This level, if normal, should be rechecked every five years. If the cholesterol is greater than 200 mg/dl, the doctor may require that more tests be given.. High cholesterol levels increase the risk of heart disease. Other important risk factors for heart disease include:

- High blood pressure (untreated)
- Smoking
- Family history of heart disease
- Diabetes
- HDL cholesterol
- Stroke
- Overweight
- Family history of heart disease

What medications are used

- Prochol
- Zocor (siminstation)
- LipitorZo
- Tricor
- Lescol
- gemfibrozil (Lopid)
- lovastatin (Mevacor)
- Niacin (Nicobid)

What to look for while the person is taking these medications

- Nausea
- Muscle cramping
- Hives
- Rash
- Diarrhea
- Flushing
- Stomach pain

Person/caregiver responsibility

- Ask the doctor or pharmacist how to take any of these medications to reduce possible side effects.
- Some of these medications may interact with other medications the person may take. Ask the delegating nurse or pharmacist or health care provider.
- The person should exercise regularly.
- Follow a diet low in saturated fats (including “hydrogenated” fats).

**CHAPTER IV
SECTION 5
CONGESTIVE HEART
FAILURE**

OBJECTIVES

1. Briefly describe congestive heart failure.
2. Identify at least two (2) reasons why congestive heart failure may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with congestive heart failure.
4. Identify medications that are used to treat congestive heart failure.
5. Describe how to determine if the medication is effective in treating congestive heart failure.
6. Identify what to look for in the individual who is taking medication for congestive heart failure.
7. Identify the responsibilities of the individual who is taking medication for congestive heart failure.
8. Identify the responsibilities of the caregiver who administers medication to treat congestive failure.

CONGESTIVE HEART FAILURE

What is it

Congestive heart failure (CHF) occurs when the heart is unable to pump all the blood and fluids to meet the body's needs. When the heart does not pump correctly, the body begins to retain fluids that can build up in certain areas of the body.

Why does it occur

Two important factors contribute to congestive heart failure. One or both may be present. First, there is too much work for the heart. This may occur with high blood pressure, atherosclerotic disease, or damaged heart valves. The second factor causing CHF is a decreased strength in the heart's pumping action. This can happen with rheumatic heart disease or a heart attack and interfere with the heart's ability to work correctly.

What the person might complain about/What to look for

CHF symptoms depends on the amount of weakness of the heart muscle. The complaints vary.

- Weakness, tiredness
- Cough
- Shortness of breath, especially after physical activity (walking up the stairs)
- Difficulty breathing when lying flat
- Weight gain from fluid build-up
- Swelling of ankles or feet
- Frequent urination at night
- Restlessness at night

What medications are used

Diuretics

- Bumetamide
- HCTchlorothiazide)
- Triamtrene\HCTZ
- furosemide (Lasix)

See treatment for hypertension for other medications that can be prescribed

How to determine if the medication is working

- Ability to walk longer, both in time and distance
- Less difficulty breathing
- Sleep with fewer pillows
- Does not have to urinate as often during the night
- Swelling of feet or ankles decreases
- Weight loss

What to look for while the person is taking these medications

Contact the doctor as soon as possible if the person has:

- Increase in shortness of breath
- Any vision changes
- Confusion
- Nausea

Other side effects that may or may not occur include:

- Muscle aches, cramps in calves or legs
- Dizziness
- Tiredne
- Cough
- Metallic taste in mouth
- Increase in blood sugar with use of a diurectic.

Person/caregiver responsibility

- It is important to inform the doctor of any changes that occur, especially if there are more problems breathing or increased swelling of feet or ankles. Report these changes in your own words.
- Bring the MAR record when visiting the health care provider or pharmacist.
- The health care provider may order laboratory tests to check if the dose of Digoxin is correct for the person, and will also check electrolytes such as sodium and potassium.
- Have the person see the health care provider regularly.
- Monitor for allergic reactions especially when new medications are added. Monitor for allergic reactions especially when new medications are added

**CHAPTER IV
SECTION 6**

DEMENTIA/ALZHEIMER'S

OBJECTIVES

1. Briefly describe dementia and Alzheimer's Disease.
2. Identify at least two (2) reasons why dementia or Alzheimer's Disease may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with dementia/Alzheimer's Disease.
4. Identify medications that are often used to treat dementia/Alzheimer's Disease.
5. Describe how to determine if the medication is effective in treating dementia/Alzheimer's Disease.
6. Identify what to look for in a person who is taking medication to treat dementia/Alzheimer's Disease.
7. Identify the responsibilities of the individual who is taking medication for dementia/Alzheimer's Disease.
8. Identify the responsibilities of the caregiver who administers medication to treat dementia/Alzheimer's Disease.

DEMENTIA/ALZHEIMER'S DISEASE

What is it

Dementia is a generalized decline in the function of the brain, especially in the area such as thinking and memory. The two most common forms of dementia are Alzheimer's Disease (senile dementia of the Alzheimer's type) and multi-infarct dementia. There are no cures for these diseases, and the individual will become worse as time goes on.

Why does it occur

Many small strokes cause multi-infarct dementias. The cause of Alzheimer's disease is not known. The brain of an Alzheimer's individual has what are called neurofibrillary tangles (which look like hair balls) and plaques. These tangles and plaques decrease the number of working nerve cells in the brain that are needed for thinking and memory.

What the individual might complain about/What to look for

- Loss in short and long term memory
- Personality change
- Impaired judgement
- Difficulty defining words
- Unable to understand written or spoken language
- Agitation (individual is upset and cannot explain why)
- Seeing or hearing things that are not there
- Poor appetite (not eating well)
- Not walking
- Not sleeping
- Incontinence (unable to hold urine)

What medications are used

Antidepressants may be used in Alzheimer's disease. Individuals with this disease may become depressed because they are not able to do the things they used to do. For specific information see the discussion on depression.

Antipsychotics are used to treat a variety of mental health problems including dementia. Individuals with the diagnosis of Alzheimer's disease may receive medications that are thought to slow the progression of the disease. These medications are:

- Aricept
- Namenda
- Cognex
- Reminyl
- Exelon

What to look for when an individual is taking these medications

- agitation
- nausea
- vomiting
- diarrhea
- increased confusion
- weight loss

High potency anti-psychotic medications

- Haloperidol (Haldol)
- Risperdal
- Zyprexa
- Seroquel

What to look for while the individual is taking these medications

Check with the health care provider as soon as possible if the individual has:

- Tremor of finger or hands
- Difficulty talking
- Loss of balance
- Shuffling gait/walk
- Stiffness in arms or legs
- Abnormal movements of facial muscles (tongue, jaw, or neck)

Other side effects that will likely occur include:

- Dry mouth
- Blurred vision
- Constipation
- Weight gain

Other medications

- Wellbutrin
- Paxil

What to look for while the individual is taking these medications

- Dizziness (more prone to falls)
- Sleepiness
- Dry mouth
- Blurred vision
- Unable to urinate
- Constipation

Medications that may be used for relief of anxiety or agitation. It is noted that these medications should be used cautiously with the elderly.

- diazepam (Valium)
- lorazepam (Ativan)
- oxazepam (Serax)
- Xanax

What to look for while the individual is taking these medications

- Dizziness
- Drowsiness (tiredness)
- Clumsiness
- Blurred vision
- Stomach pain
- Confusion

Individual/caregiver responsibility

Details about the problem will help in the proper diagnosis:

- When visiting the health care provider know the answers to the following questions:
 - A) How did the individual specifically show signs of agitation or confusion?
 - B) What else was happening when confusion or agitation started?
 - C) Did it occur suddenly or slowly?
 - D) How long ago did it start?
- Bring along the individual's MAR as many medications may cause confusion.
- If the individual is taking a high potency antipsychotic, be careful not to allow the individual to become over-heated. Avoid hot baths while the individual is on this medication to prevent heat stroke.
- If the individual's mouth becomes dry, try sugarless candy or gum.

THE INDIVIDUALS MUST NOT STOP THESE MEDICATIONS SUDDENLY!! VERY SERIOUS SIDE EFFECTS MAY OCCUR. CHECK WITH THE DELEGATING NURSE OR THE HEALTH CARE PROVIDER.

- If the individual on an anti-psychotic medication develops a high fever, if their heart is beating very fast, they are wetting (incontinent of urine), or their muscles are stiff, go to the emergency room immediately. This is a medical emergency and can be fatal. These side effects usually occur early in treatment or after the dose of medication is increased.
- It may take weeks to see some improvement. If no improvement is seen, the health care provider may want to change the medication or increase the dose.
- If the individual develops tremors (fine shaking of the hands), see the doctor, The health care provider may prescribe a different medication to control this side effect.
- Walks and outside work can decrease the agitation and restlessness in the Alzheimer or demented individual. If wandering from home is a problem, schedule walks at a time that is good for you.
- Give the individual some jobs, such as setting the table, folding the laundry, or drying the dishes. It is important for him/her to feel useful.
- Keep the same schedule; for example, have dinner at the same time each day.

- Do not remind them of their problem. For example, if they are asked how long they have been married and they answer 17 years; do not correct them by saying, “No, you were married 18 years.
- Caregivers can attend Alzheimer’s Association support group meetings. Taking care of an Alzheimer’s individual is very difficult. Caregivers can use adult day care programs, respite care, and home health aids. The Assisted Living Agency can contact the local Alzheimer’s group for information or the local office of aging.

**CHAPTER IV
SECTION 7**

DEPRESSION

OBJECTIVES

1. Briefly describe depression.
2. Identify at least two (2) reasons why depression may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with depression.
4. Identify medications that are often used to treat depression.
5. Describe how to determine if the medication is effective in treating depression.
6. Identify what to look for in a person who is taking medication to treat depression.
7. Identify the responsibilities of the individual who is taking medication for depression.
8. Identify the responsibilities of the caregiver who administers medication to treat depression.

DEPRESSION

What is it

Depression is a feeling of sadness, or the blues that does not go away. Depression is a disease. It can be life-shortening. Depression can be a significant component of a Bipolar Disorder, (see section on Bipolar Disorder). As with other diseases, there should be an active effort to seek help if depression occurs. Depression should not be thought of as a “weakness”, and one should not feel shameful when needing help in overcoming (fighting) this disease. When the depression is reversed, life can again be enjoyable and a renewed sense of worth is established (life is worth living once again). People of any age who are depressed can be helped by treatment.

Why does it occur

There are several reasons why depression occurs. They may be personal or chemical. Regardless of the cause, depression should not be ignored.

- Loss of a loved one (husband, wife, child, pet)
- Retirement (loss of “worth” to society)
- Chronic diseases (high blood pressure, arthritis, chronic pain)
- Loss of independence
- A chemical disturbance (the balance of chemicals in the body is not right)
- Some medications (some beta blockers, for example, popranolol/Inderal that are used for heart disease).
- Recent stroke
- Hip fracture
- Any changes in life-style or living arrangements.

What the individual might complain about/What to look for

Depression may be expressed in many different ways. The list here will give some guidance.

- Lack of sleep (feeling “tired”). Early morning awakening.
- Poor eating habits
- No interest in pleasurable activities

- Not caring about physical appearance
- Not caring about loved ones
- Loss of memory
- Loss of ability to concentrate
- Bodily complaints such as headaches or backaches (for which no physical reason can be found)
- Guilt or fear
- Hopelessness and/or helplessness
- Feeling sorry for oneself
- Suicidal thoughts (this should always be taken very seriously and reported immediately).

What medications are used

- amitriptyline (Elavil) (while these two medications may be utilized on occasion,
- trazodone (Desyrel) neither is the first choice for use with the elderly).
- fluoxetine (Prozac)
- Paxil
- Zoloft
- Celexa
- Wellbutrin

What to look for while the individual is taking these medications

Improvement in sleeping patterns and in appetite should occur within the first two weeks. It takes longer to see improvement in mood and outlook. During the early weeks of treatment, individuals may have some side effects that make them feel uncomfortable. For older individuals, constipation, dry mouth, dizziness, or daytime tiredness are special problems. If these problems happen, tell the delegating nurse or the health care provider. The health care provider may change the dose or the change the medication.

Once improvement occurs, the medication may be continued for several months. If the individual has had several periods of depression during his or her lifetime, the health care provider may wish to keep the individual on the medication for a much longer period of time.

The following side effects may or may not occur with antidepressants. If the problem can not be tolerated, see the health care provider.

- Dry mouth (sugarless candy, gum, or ice chips may help)
- Constipation (fluids are very important, as well as exercise and fiber in the diet).
- Dizziness (especially when rising from a lying, sitting to standing positions). Getting up slowly may help. The individual can be instructed to arise from the bed in three stages;
 - 1) sit up in bed for one minute;
 - 2) sit on the side of the bed with legs dangling for one minute;
 - 3) stand with care, holding onto the edge of the bed or another non-movable object for one minute.
- Tremor (handshake)
- Hallucinations or paranoid behavior (seeing things that are not there, a strong feeling of being watched, followed, or harmed).
- Any other problems that began when the antidepressant was started should be reported to the delegating nurse or the health care provider.

Individual/caregiver responsibility

It is important to inform the delegating nurse or the health care provider of any changes when they occur. Report these changes in your own words.

- Before seeing any other health care provider, tell them the individual is on this medicine. Also, be sure to let them know about any other medications the individual is taking. Bring along the personal medication record (PMOF). However, do not leave this record with any health care provider. It must be retained in the individual's record.
- If the individual does not seem better after a few weeks, call the health care provider; he/she may want to change the medication.
- As a reminder, individuals with the diagnosis of depression must see his/her health care provider regularly.

- For more information on Depression, you may contact:

- The National Institute of Mental Health
Rockville, Maryland 20857

-OR-

- < Taylor Manor Hospital
College Avenue, P.O. Box 396
Ellicott City, MD 21041-0396
Booklet “What To Do When A Friend is Depressed”

CHAPTER IV
SECTION 8
DIABETES

OBJECTIVES

1. Briefly describe diabetes.
2. Identify at least two (2) reasons why diabetes may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with diabetes.
4. Identify medications that are often used to treat diabetes.
5. Describe how to determine if the medication is effective in treating diabetes.
6. Identify what to look for in a person who is taking medication to treat diabetes.
7. Identify the responsibilities of the individual who is taking medication for diabetes.
8. Identify the responsibilities of the caregiver who administers medication to treat diabetes.

DIABETES

What is it

Diabetes Mellitus (high blood sugar) is a disorder in which the body cannot change foods properly into the energy needed for daily activity. When a person eats sugars and starches (carbohydrates), the body changes them mainly into a sugar called glucose. Insulin is needed for this to happen. In diabetes, there is not enough insulin to utilize the glucose.

Glucose is a type of fuel that goes into the bloodstream for immediate use or is stored in the liver to be used later. In diabetes, the mechanism that controls the amount of glucose in the blood breaks down. The glucose then builds up to dangerous levels, causing damage to body organs.

There are two types of diabetes. One is “insulin dependent (Type I) and the other is “non-insulin dependent” (Type II). Type II is associated with being over-weight and having a family history of diabetes. This is the type often seen in the elderly.

Why does it occur

Several factors can cause diabetes in the elderly. One is a problem with insulin secretion. With this problem, there is no insulin secretion or it is very limited. Being overweight may also be responsible, or there may be a problem in the metabolism of glucose.

What the individual might complain about/What to look for

Symptoms may be mild and may be discovered only on regular examination. Which is why one should have examinations regularly. The following symptoms are considered classic symptoms of diabetes:

- Frequent urination
- Increased thirst
- Rapid weight loss
- Slow-healing bruises
- Tiredness

In the elderly individual, confusion may occur and infections can develop.

What medications are used

Insulin (only by injection). There are many different types. If the individual under your care needs insulin injections, the delegating nurse will explain the procedure to you and help you learn how to give an injection.

At times, oral medications are prescribed for the elderly diabetic individual. There are many different types:

- Actos (Pdioglitaconc)
 - chlorpropamide (Diabinese, Glucamide)
 - glyburide (DiaBeta, Micronase)
 - glipizide (Glucotrol)
 - Avandia
 - Amaryl
 - Glucophage (Metformin)
 - Paecose
- Observe the individual to assure the medications are working
 - 1) blood sugar levels are in the acceptable range as established by the health care provider
 - 2) observe for the individual's usual behavior (i.e. note unusual new/different behavior on the part of the individual)
 - Observe for changes in the individual's blood sugar level which may be described as high blood sugar (hyperglycemia) or low blood sugar (hypoglycemia). These changes can occur from eating too much or skipping meals/snacks or exercising more than usual or not exercising at all etc.

Signs of Hypoglycemia

(Low blood sugar)

- Cool clammy skin
- Sweating
- Shaking
- restlessness
- sleepy and tired
- confusion
- change in behavior

Signs of Hyperglycemia

(High blood sugar)

- urinary frequency
- dry mouth
- change in behavior
- restlessness
- sleepy and tired
- confusion

What to do for Hypoglycemia (low blood sugar)

Check the blood sugar immediately and give a glass of orange juice. Call the delegating nurse for further instructions.

What to do for hyperglycemia (high blood sugar)

Check the blood sugar immediately and notify the delegating nurse for further instructions.

Individual/caregiver responsibility

It is important to inform the delegating nurse or the health care provider of health changes when they occur. Report these changes in your own words.

- any medications for cough, cold, or asthma may cause a rise or fall in blood sugar.
- A medic alert bracelet should be encouraged for any diabetic, but especially those who are taking insulin.
- The pharmacist or the delegating nurse can provide pre-filled syringes.
- If the person you care for suddenly becomes confused and/or has signs of mental changes, this may be due to too much or too little blood sugar. Report these changes immediately to the delegating nurse and the health care provider.
- All alcohol should be avoided while on these medications. Some individuals who drink alcohol while on these medications may suffer from stomach pain, nausea, vomiting, pounding headache, or redness of the face. Alcohol may also cause low blood sugar.
- It is very important for those with diabetes to receive proper foot care. The feet should be washed daily in lukewarm water and a mild soap. Feet should be patted dry, especially between the toes, and observed for any redness or sores. Cotton socks and proper fitting shoes are recommended. Cutting of the nails should be managed by the health care provider.

CHAPTER IV
SECTION 9
INDIGESTION

OBJECTIVES

1. Briefly describe digestion problems.
2. Identify at least two (2) reasons why digestion problems may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with digestion problems.
4. Identify medications that are often used to treat digestion problems.
5. Describe how to determine if the medication is effective in treating digestion problems.
6. Identify what to look for in a person who is taking medication to treat digestion problems.
7. Identify the responsibilities of the individual who is taking medication for digestion problems.
8. Identify the responsibilities of the caregiver who administers medication to treat digestion problems.

INDIGESTION

What is it

During digestion, food is broken down into pieces small enough to be carried into the bloodstream. The blood carries these nutrients to all cells in the body to provide energy. Many body organs are involved in digestion: the esophagus, stomach, pancreas, gall bladder, liver, small intestine and colon. There are many different problems that can occur in the digestive tract: constipation, diarrhea, gall bladder disease, heartburn, stomach ulcer, indigestion, hemorrhoids, hiatal hernia, and others.

Why does it occur

Changes in lifestyle can interfere with the digestive process. These lifestyle changes include an increase in the number of medications, reduced exercise, and changes in eating habits. Digestive problems can occur due to an infection, poisons, or stress. The causes of many digestive problems are unknown.

What the individual might complain about/What to look for

The following are important warning signs; if you notice any of these, have the individual see the health care provider at once.

- Stomach pains that are severe (last a long time)
- Blood in vomit or continuous vomiting
- A sudden change in bowel habits (diarrhea or constipation)
- Blood in stool (stool is black, tarry)
- A yellowing of the skin or whites of the eyes
- Pain or difficulty swallowing food
- Loss of appetite or unexpected weight loss

HEARTBURN

Heartburn is usually a burning chest pain located behind the breastbone. The pain is usually worse when the individual lies down, there may be feeling of food coming back into the mouth. Heartburn usually occurs after meals.

Why does it occur

Fried or fatty foods, tomato products, citrus fruits and juices, chocolate, and coffee often cause heartburn. Cigarette smoking may cause heartburn.

What the individual might complain about/What to look for

- Acid or bitter taste in the mouth after eating
- Burning type chest pain (if chest pain happens, see a health care provider immediately; it could be a heart attack)

STOMACH ulcers What is it

Stomach ulcers are sores that form in the lining of the stomach. They vary in size from a small sore to 1 to 2 inches wide.

Why do they occur

The exact reason they occur is not known. Health care providers think that certain drugs, foods or infections can damage the stomach lining. The regular use of aspirin or other medications used to treat arthritis has been shown to cause stomach ulcers. It is important that the individual does not take any medications that contain aspirin if an ulcer is present.

What medications are used

- Antacids (Maalox, Mylanta, Tums, Rolaids and many others)
- Cimetidine (Tagament)
- Famotidine (Pepcid)
- Ranitidine (Zantac)
- Sucralfate (Carafate)
- Pantoprazole (protonix)
- Nezatidene (Axedatzac)
- Mesoprostol (Cytotec)
- Nexium
- Omeprazole (Prilosec)
- Rabeprazole Sodium (Aciphex)

What to look for while the individual is taking these medications

- confusion
- dizziness
- diarrhea

- constipation

Individual/caregiver responsibility

As a caregiver for an individual with a digestive disease/ problem, you should see that the individual:

- Eats a well-balanced diet that includes fresh fruits, vegetables, and whole grain breads.
- Avoids alcohol or drinks alcohol in moderation.
- Avoids large amounts of caffeine (coffee, tea, hot chocolate).
- Ask the delegating nurse, health care provider, or pharmacist for help in choosing an antacid. Bring along the MAR and PMOF. Many antacids contain sodium, this can be a problem if the individual has high blood pressure.
- If heartburn does not go away see the health care provider.

CHAPTER IV
SECTION 10
EYE PROBLEMS

OBJECTIVES

1. Briefly describe eye problems.
2. Identify at least two (2) reasons why eye problems may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with eye problems.
4. Identify medications that are used to treat eye problems.
5. Describe how to determine if the medication is effective in treating eye problems.
6. Identify what to look for in a person who is taking medication for eye problems.
7. Identify the responsibilities of the individual who is taking medication for eye problems.
8. Identify the responsibilities of the caregiver who administers medication to treat eye problems.

EYE PROBLEMS

What is it?

The most common eye problems found in older adults are cataracts, retina problems and glaucoma. A common complaint of a less serious nature is dry eyes.

Why does it occur?

Glaucoma is an increase in pressure in the eyes. There are two main types. The open angle (wide angle) is the most common. The angle closure (narrow angle) is less common, but may be worsened by certain medications. Glaucoma is usually treated with eye drops. If medications are not successful then surgery may be possible.

Cataracts occur due to changes with age, whereby the lens becomes cloudy and needs to be surgically removed.

What the person might complain about/what to look for

- Loss or dimness of vision
- Eye pain
- Excessive discharge from the eye
- Double vision
- Redness or swelling of eye or eyelid
- Halos of light and severe pain
- Floaters
- Note: any change in vision should be checked immediately.

What eye drop medications are used

- Atropine
- Xalatan
- Pilocarpine
- Timolol

What to look for while the person is taking these medications

- Blurred vision
- Change in near or distant vision
- Eye discomfort or irritation
- Headache or brow pain

What oral medications may be used

- Diamox
- Acetazolamide

Both of these medications are extended release and cannot be crushed.

What to look for when the individual is taking these medications

- polyuria
- drowsiness
- nausea and vomiting
- confusion
- seizures

Person/caregiver responsibility

Any changes in vision should be reported to the delegating nurse and health care provider as soon as possible. Report these changes in your own words. Clearly explain your concerns to the delegating nurse and health care provider. If a new medication is added, report any changes in vision to the delegating nurse and health care provider as soon as possible.

If the individual is using a medicine for glaucoma, it is most important that it is used exactly and as often as prescribed. It is needed to control high pressure, and if not used correctly, eyesight may be lost.

If the health care provider prescribes any eye drop, be sure you know exactly how long the individual is supposed to use the drops. Some eye drops are used for a few days; others are used for a long period of time. All over-the-counter eye drops must be reviewed by the health care provider.

Never share eye medications with any other individual. Eye medications contain many ingredients including preservatives. This may cause allergy in some individuals. Be sure to report any reactions to the delegating nurse/health care provider.

Be aware of the affects that poor vision has on the individual's social activities and safety. Careful and regular follow up with the eye specialist is very important and essential.

CHAPTER IV
SECTION 11
HYPERTENSION

OBJECTIVES

1. Briefly describe hypertension
2. Identify at least two (2) reasons why hypertension may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with hypertension.
4. Identify medications that are used to treat hypertension.
5. Describe how to determine if the medication is effective in treating hypertension.
6. Identify what to look for in a person who is taking medication to treat hypertension.
7. Identify the responsibilities of the individual who is taking medication for hypertension.
8. Identify the responsibilities of the caregiver who administers medication to treat Hypertension.

HYPERTENSION (High Blood Pressure)

What is it

High blood pressure usually has no symptoms, and individuals who have high blood pressure do not feel sick. As blood flows through the blood vessels, it creates a pressure against the vessel walls. Blood pressure readings measure this pressure. The delegating nurse or health care provider may take blood pressure readings while the individual is sitting, standing or both. Several different readings (on different days) are usually taken before the diagnosis of high pressure, or hypertension, is made. Several readings may be necessary since on any one occasion, blood pressure may be above normal, due to special circumstances, such as a visit to the health care provider's office.

Blood pressure readings are given in two numbers (for example, a 120/80 mm Hg). Normal blood pressure range is defined as 90/70 mm Hg to 140/90. When the blood pressure is consistently greater than 140/90 the individual may be considered to have high blood pressure. High blood pressure may be classified as "mild," "moderate," or "severe" depending on the readings and other problems that may be present. It is not high blood pressure by itself that is dangerous, but rather it is the effects of this pounding pressure, over several years, that can damage the heart, brain, kidney, and eyes. Untreated high blood pressure may, therefore, lead to heart disease, stroke, kidney disease, and blindness.

Why does it occur

In 90% of individuals, there is no known cause for high blood pressure. However, there are many factors that may contribute to the problem such as being overweight, high salt intake, alcohol use, minimal physical activity, use of certain medications (which raise blood pressure), and a family history of high blood pressure. Excessive stress may raise blood pressure as well.

In 10% of people with high blood pressure, there is a known cause for high blood pressure, such as kidney disease, diabetes mellitus, or diseases of the blood vessels.

What the individual might complain about/What to look for

High blood pressure is generally without symptoms. Having the blood pressure checked routinely is the best method for detecting the problem. If the blood pressure reading is high,

some of the following symptoms may occur. If any of the following occur, report them to the delegating nurse or health care provider immediately:

- Change in vision
- Chest pain
- Confusion
- Dizziness (blackout)
- Nausea and vomiting
- Nose bleeds
- Shortness of breath

What medications are used

There are many different types of medications that can be used to treat high blood pressure. Some medications are a combination of two to more medications. Also, and most important, it often takes more than one medication to manage moderate or severe high blood pressure.

1. Diuretics - (“water pills”)

These medications remove water from the body. These medications are:

- furosemide (Lasix)
- HCTZ
- spironolactone (Aldactone)
- Bumex

2. Some diuretics also remove Potassium. Potassium is necessary for muscles to function well (including heart muscles). Potassium may need to be replaced. Potassium supplements may include:

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3. Non-Diuretic anti-hypertensive medications

- | | | |
|-----------------------|----------|-------------|
| ● Propanolol | ● Altace | ● Cozar |
| ● Methyldopa(Aldomet) | ● Hytrin | ● Minipress |
| ● Clonidine | ● Diovan | ● Cardura |

- Lisinopril
- Accupril
- Monorpil
- Catapril
- Metropolol (topaol)
- Lotension
- Enalapril (Vasotec)
- Norvasc
- Diltiazem
- Accuprid
- Procardia
- Plendil
- Atenolol
- Coreg
- Labetatol

How to determine if the medication is working

Blood pressure should be checked regularly in order to tell if the blood pressure is within the range identified by the authorized prescriber and to tell if the medication is working. Be certain that you know exactly how to operate the blood pressure equipment. There are many differences depending on the product. Technique is very important. Misreading or inaccurate placement of the blood pressure cuff could cause unnecessary worry. Be sure your skills in taking blood pressures are checked, either at the location where the equipment is purchased or by the delegating nurse. Unless contraindicated the blood pressure should always be taken in the left arm in a sitting position.

After blood pressure returns to normal and remains normal for several months, the individual may ask the health care provider about decreasing the medications. Individuals must never stop the medication on their own!

What to look for while the individual is taking these medications

The following side effects are common to many medications used to treat high blood pressure. They often disappear after a few weeks of treatment. If they continue to be a problem, contact your delegating nurse and the health care provider! It may be necessary to reduce the dose or change the medication. Some side effects that may occur with blood pressure medications include

- Dizziness
- Mood changes
- Loss of energy
- Fatigue
- Persistent coughing
- Change in bowel habits
- Sexual impotence
- Muscle weakness

Individual/caregiver responsibility

- Individuals who are on a diuretic need to have their blood tested to be certain that their potassium, sodium, and other important electrolytes remain normal. Individuals should not buy potassium supplement on their own
- Many individuals who receive a diuretic are also on digoxin. If this is true, more careful monitoring of side effects is necessary.
- It is very important for individuals to drink plenty of fluids and limit salt intake, unless contraindicated .
- The individual should move from a sitting to standing position or from a lying to standing position slowly to avoid becoming dizzy.
- Be sure to tell the health care provider if the individual has gout or diabetes. Diuretics may interfere with the treatment of both of these diseases.
- Report any side effects to the delegating nurse or health care provider. The health care provider may decide to change the medication or reduce the dose.
- If the individual's blood pressure is checked have the equipment checked each year to be certain it is working correctly.
- The individual should not stop taking any medication suddenly. It could be life-threatening. Ask the delegating nurse, health care provider, or pharmacist.
- It is very important for individuals to drink plenty of fluids and limit salt intake unless contraindicated.

**CHAPTER IV
SECTION 12**

INSOMNIA

OBJECTIVES

1. Briefly describe insomnia.
2. Identify at least two (2) reasons why insomnia may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with insomnia.
4. Identify medications that are used to treat insomnia.
5. Describe how to determine if the medication is effective in treating insomnia.
6. Identify what to look for in a person who is taking medication to treat insomnia.
7. Identify the responsibilities of the individual who is taking medication for insomnia.
8. Identify the responsibilities of the caregiver who administers medication to treat insomnia.

INSOMNIA/SLEEP PROBLEMS

What is it

Insomnia is a “feeling” that one is not sleeping enough. It should not automatically be thought of as a disease or disorder; it could be a temporary disturbance. One of the few things that change because of age is that we do not sleep as well. Insomnia may result from natural changes taking place with age. It occurs often in healthy, elderly, showing that there may be no connection to a disease. Therefore, medications may not be necessary.

Why does it occur

The majority of cases of insomnia are probably not caused by a single problem, and that must be considered when treating insomnia. Medications can cause insomnia: diuretics, beta blockers, some urinary antiseptics, and others. Some drugs, if withdrawn rapidly, will cause a condition called “rebound” insomnia. Sedative-hypnotic medications, used to treat insomnia, are probably the worst offenders.

Among problems and diseases that may cause insomnia are anxiety, stress, depression; arthritis, angina, and any condition that causes pain; asthma, lung edema, bronchitis, or any condition causing difficulty in breathing. Urinary urgency and frequency caused by prostate problems can cause insomnia. The Restless Leg Syndrome is often the cause of insomnia. It is a creeping sensation, most often occurring in the legs but possibly (sometimes) happening in other parts of the body as well, which comes on while the individual is at rest and produces the urge to keep the legs moving. Perhaps it is due to the fact that sleep diminishes the already weakened control of the brain. Treatment is difficult and no specific medications have been identified that can help.

Sleep apnea or sleep-related breathing problems occur when the person’s breathing stops during the night, and the flow of inhaled air is less than usual. Breathing will stop completely for as much as 20 to 30 seconds, and persons will awake with a very loud sound. This can happen as many as 30 times a night. Therefore, persons may not sleep a restful night. Anatomical changes, mental status changes, depression, and high blood pressure could all cause sleep apnea. Sleep apnea must not be treated with sleep medications, either prescription or over-the counter.

What the person might complain about/What to look for:

- Difficulty in falling asleep (some people need an extra 30 minutes)
- Worry and anxiety while trying to fall asleep
- Awakening at night (all people wake several times during the night; elderly awake more often and are up longer).
- Early awakening
- Daytime irritability (cranky)
- Daytime anxiety
- Daytime fatigue
- Daytime sleepiness
- Sleep is not “satisfying” (“deep sleep,” the period in which people dream and which is most refreshing, is less frequent and shorter in elderly)
- Tiredness
- Depression

What medications are used

The following medications should be used only for short time periods. Long-term use will lead to addiction, and when the medication is withdrawn, to possibly severe withdrawal symptoms that can last up to four or five weeks. (these medications are to be used cautiously with the elderly).

- Alprazolam (Xanax)
- Diazepam (Valium)
- Clonazepam (Klonopin)
- Ambien
- Sunata
- Lorazepam (Alzapam/Ativan/Loraz)
- Temazepam (Razepam/Restoril/Temaz)
- Amitriptyline (Elavil/Emitrip/Endep)

Other medications which may be utilized include:

- Benadryl - these two medications are to be used cautiously
- Trazadodne with the elderly

What to look for while the person is taking these medications

- Clumsiness
- Confusion
- Hypotension
- Dizziness
- Drowsiness
- Daytime sleepiness
- Forgetfulness
- Dry mouth
- Headache
- Nausea

Person/caregiver responsibility

- If a new medication is added, bring the MAR, report any changes in sleep patterns or side effects to the health care provider and the delegating nurse as soon as possible.
- Remember this treatment should be for only a short period of time.
- Incontinence may occur because the person is sleeping deeply, due to the sleep medication. Coffee or tea just before bedtime may also cause incontinence during the night. If on a diuretic, it should not be taken at bedtime.
- Older people are very sensitive to the effects of benzodiazepines. Care-givers and persons should know that any change in the ability to concentrate, to think, or to perform activities could be due to the medication taken for sleep. Report these changes immediately to the health care provider.
- Provide a safe environment for the individual who may roll out of bed or who gets up at night to walk about.

**CHAPTER IV
SECTION 13
PARKINSON'S DISEASE**

OBJECTIVES

1. Briefly describe Parkinson's Disease.
2. Identify at least two (2) reasons why Parkinson's Disease may occur.
3. Identify at least two (2) things that the individual may complain of, or that you should look for with Parkinson's Disease.
4. Identify medications that are used to treat Parkinson's Disease.
5. Describe how to determine if the medication is effective in treating Parkinson's Disease.
6. Identify what to look for in a person who is taking medication to treat Parkinson's Disease.
7. Identify the responsibilities of the individual who is taking medication for Parkinson's Disease.
8. Identify the responsibilities of the caregiver who administers medication to treat Parkinson's Disease.

PARKINSON'S DISEASE

What is it

Parkinson's disease is a chronic disorder of the central nervous system. It is a chronic disease (lasting a lifetime). The onset of Parkinson's disease is slow. It becomes worse as time goes on. It is characterized by slow movement, generalized weakness, muscular rigidity and tremor. Many times there can be a slow, short, shuffling gait.

Why does it occur

Parkinson's disease occurs because of an imbalance of chemicals in the brain. There is not enough dopamine and too much acetylcholine.

What the individual might complain about/What to look for:

Any one of the following symptoms may occur individually (alone) or in combination with others and the symptoms may occur consistently or intermittently.

- Tremor (hands shake) at rest but not during sleep
- Stiffness of the muscles and difficulty starting movements
- Loss of facial expression
- Difficulty in walking and talking
- Poor handwriting
- Falling

What medications are used

Various medications are used to treat the symptoms. They improve muscle control and reduce stiffness.

- Trihexphenidyl (Artane)
- Eldepryl (Seirgiline)
- Requip
- Permax
- Miradex
- Benztropine (Cogentin)
- Levodopa (Larodopa, Dopar, Bendopa)
- Levodopa/carbidopa (Sinemet)
- Augmentation (Symmetries)

- Bromocriptine (Parlodel)

What to look for while the individual is taking these medications

- Dry mouth (use sugarless candy or gum)
- Blurred vision
- Muscle weakness
- Drowsiness
- Dizziness
- Constipation
- Hallucinations and other behavior changes
- Nausea and vomiting
- Decreased appetite
- Uncontrolled movements
- Confusion or nervousness
- Depression

Individual/caregiver responsibility

- These medications are time sensitive and must be given on time each day.
- Maintenance exercise is very important in order to lead a normal, active life and to keep muscles strong and flexible.
- Individuals should avoid other medications that may cause dry mouth, blurred vision, confusion or drowsiness such as antidepressants, antihistamines, Reglan, and some medications such as anti-psychotic, cough, and cold medications.
- Be sure to tell the health care provider or pharmacist that the individual has Parkinson's disease before the individual takes any new medications. Bring the PMOF with current medications the individual is taking.
- Report and document any changes in the individual's condition since the last medical appointment to the delegating nurse and health care provider.

- A balanced diet rich in calcium and fiber is highly recommended.
- The home environment should be adapted for the safety of the individual (replace buttons on clothing with velcro fasteners; remove throw rugs from the floor; and have hand railings in the bathroom and stairwell etc).
- Support groups should be encouraged for the individual/family/significant others.
- Remember - regular medical follow up is very important.

**CHAPTER IV
SECTION 14**

**RESPIRATORY
PROBLEMS**

OBJECTIVES

1. Briefly describe respiratory problems.
2. Identify at least two (2) reasons why respiratory problems may occur.
3. Identify at least two (2) things that the individual may complain of, or that you should look for with respiratory problems.
4. Identify medications that are used to treat respiratory problems.
5. Describe how to determine if the medication is effective in treating respiratory problems.
6. Identify what to look for in a person who is taking medication to treat respiratory problems.
7. Identify the responsibilities of the individual who is taking medication for respiratory problems.
8. Identify the responsibilities of the care giver who administers medication to treat respiratory problems.

RESPIRATORY PROBLEMS

What is it

Chronic Obstructive Pulmonary Disease (COPD) is a condition in which there is long-term obstruction of the respiratory tract due to bronchitis or emphysema. Chronic bronchitis is a condition characterized by excessive mucous production. Individuals with chronic bronchitis are often overweight and have a long history of cigarette smoking. Emphysema is also common in people with a long history of cigarette smoking. These individuals are usually thin and have a long history of difficulty in breathing. Emphysema cannot be cured. The symptoms of chronic bronchitis may be relieved. Asthma is a disease caused by the narrowing of airways and the inflammation of lung tissue.

Why does it occur

Smoking damages different areas of lung tissue and may cause bronchitis or emphysema.

What the individual might complain about/What to look for

- Cigarette smoking
- Chronic cough
- Difficulty breathing
- Abnormal sputum (when coughing or spitting)
- "Bluish" appearance in color
- Repeated respiratory infections
- Wheezing
- Swelling of the feet or ankles

What medications are used

	Tablets	Inhalers
● Serevent	X	X
● Theophylline (Theodur, Theolair)		X
● Albuterol (Ventolin, Proventil)	X	X
	Tablets	Inhalers
● Metaproterenol (Alupent, Metaprel)	X	X

● Ipratropium (Atrovent)		X
● Flovent	X	
● Pulmocort	X	X
● Advair (combination of flovent and serevent)	X	X
● Beclomethasone (Vanceril, Beclovent)	X	X
● Cromolyn (Intal)	X	X
● Opelen	X	X

What to look for while the individual is taking these medications

- Dryness of mouth or throat
- Hoarseness
- Nausea, vomiting, diarrhea
- Nervousness
- Tremor (fine shaking of the hands)

Accompanying Upper Respiratory Problems

Sore throat, runny nose, and dry cough are common problems accompanying respiratory disease. Some medications used to relieve discomfort from the runny nose (rhinitis) are:

- Flonase
- Astelin
- Rhinoecort
- Becanose

Any over-the-counter medication should be reviewed by the authorized prescriber before the individual begins use as it may be contraindicated with other medications the individual is taking.

Individual/caregiver responsibility

- Gargling and rinsing the mouth after using the inhaled medication may help reduce the dry mouth or hoarseness.
- If using more than one inhaler, be sure to use the bronchodilator first. Then wait about 5 minutes before using the second inhaled medication.
- The individual should avoid eating charbroiled (burnt) foods.
- Check with the delegating nurse and health care provider immediately if the individual develops symptoms of the flu, fever, or diarrhea while on the Theophylline or aminophylline; it can increase the chance of side effects
- The health care provider may want to take blood tests if the individual is on theophylline or aminophylline to decide if the dose of this medicine should be changed.
- Do not crush these medications without first checking with the delegating nurse, health care provider, or pharmacist. Some tablets may be long acting and crushing them may cause harm to the individual.
- If the individual is using an inhaler, ask the delegating nurse, health care provider, or pharmacist to demonstrate how to use it correctly.
- Be sure to tell the dentist that the individual is taking this medication.

CHAPTER IV
SECTION 15
TUBERCULOSIS

OBJECTIVES

1. Briefly describe tuberculosis.
2. Identify at least two (2) reasons why tuberculosis may occur.
3. Identify at least two (2) things that the individual may complain of, or that you should look for with tuberculosis.
4. Identify medications that are used to treat tuberculosis.
5. Describe how to determine if the medication is effective in treating tuberculosis.
6. Identify what to look for in a person who is taking medication to treat tuberculosis.
7. Identify the responsibilities of the individual who is taking medication for tuberculosis.
8. Identify the responsibilities of the care giver who administers medication to treat tuberculosis.

TUBERCULOSIS

What is it

Tuberculosis is a bacterial infection. The lung is the most common site of infection. However, many other areas may also become infected, such as bones, joints, or skin. Tuberculosis can be passed from one person to another. It can not be passed to others from objects such as dishes, clothing, or bedding.

Why does it occur

The bacteria are transmitted by droplets in the air coughed up by someone with tuberculosis. The droplets enter the lungs of another person who then becomes infected.

What the individual might complain about/What to look for:

- Cough
- Tiredness
- Night sweats
- Weight loss
- Weakness
- Chills

What medications are used

- Isoniazid (INH)
- Rifampin (Rifadin, Rifampicin, Rimactane)

What to look for while the individual is taking these medications

If any of the following occur, notify the delegating nurse and health care provider immediately:

- Loss of appetite
- Nausea or vomiting
- Very tired or very weak
- Blurred vision or loss of vision
- Yellow eyes or skin
- Dark urine

Other side effects that may or may not occur include

- Dizziness
- Upset stomach

- Reddish orange to reddish brown urine, saliva, sweat, or tears (Rifampin)

What other medications may be used

- Ethambutol (Myambutol)
- Streptomycin
- Pyrazinamide
- Capreomycin (Capastat)
- Kanamycin (Kantrex)
- Cycloserine (Seromycin)
- Ethionamide (Trecator-SC)
- Aminosalicyclic acid (PAS)

What to look for while the individual is taking these medications

If the individual develops a hearing problem while on this medicine, contact the delegating nurse and health care provider immediately:

Other side effects that may or may not occur include:

- Skin rash
- Headache
- Dizziness
- Nausea or vomiting
- Blurred vision

Individual/caregiver responsibility

- Know whether the individual is being treated for active disease or prevention.
- Be sure you understand how this medication is taken. Ask the delegating nurse, health care provider, or pharmacist.
- Understand that it is necessary to take this medication for a long time (may be more than one year). The individual should continue taking the medication even if feeling better.
- Know that the state health department keeps records on all individuals with tuberculosis and may check to be sure the individual is receiving the medication.
- Know that diabetes, crowded living conditions, alcohol abuse, chronic renal failure, and blood diseases increase the chances of developing tuberculosis.

- The health care provider may also want the individual to take pyridoxine (Vitamin B6) every day to help prevent or decrease the side effects of the medication (such as isoniazid, INH). If this is prescribed, it is very important that it be taken every day as directed.
- It is best not to wear soft contact lenses while taking rifampin because they may become stained. This medicine may cause saliva, tears, urine, sweat, and stool to turn a reddish orange to reddish brown.
- Keep all scheduled health care provider appointments.
- Please note - for individuals from countries other than the USA it is common practice for people to receive BCG. Skin testing for TB is not appropriate for anyone who has received BCG because of the possibility of severe allergic reactions. Instead a chest film is the appropriate diagnostic test. Be sure to inform the health care provider if the individual has taken BCG.

**CHAPTER IV
SECTION 16**

**URINARY
INCONTINENCE**

OBJECTIVES

1. Briefly describe urinary incontinence.
2. Identify at least two (2) reasons why urinary incontinence may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with urinary incontinence.
4. Identify medications that are used to treat urinary incontinence.
5. Describe how to determine if the medication is effective in treating urinary incontinence.
6. Identify what to look for in a person who is taking medication to treat urinary incontinence.
7. Identify the responsibilities of the individual who is taking medication for urinary incontinence.
8. Identify the responsibilities of the care giver who administers medication to treat urinary incontinence.

URINARY INCONTINENCE

What is it

There are several types of urinary incontinence loss of urine control: stress incontinence is the leakage of urine during exercise, coughing, sneezing, or laughing; urge incontinence is the inability to hold urine long enough to reach a toilet; overflow incontinence is the leakage of small amounts of urine from a constantly filled bladder; total incontinence is the inability to hold any urine.

Why does it occur

Incontinence may be brought on by illness that is accompanied by fatigue, confusion, or hospital admission. Incontinence is sometimes the first and only symptom of a urinary tract infection. Curing the illness will usually relieve the incontinence. Medications such as diuretics, antipsychotics, antidepressants, antihistamines, anti-Parkinsonian agents, antiarrhythmics (disopyramide), and antidiarrheal agents may cause incontinence. Structural problems with the bladder or blockage due to an enlarged prostate may cause urinary incontinence, and weak bladder muscles may also cause urinary incontinence.

What the individual might complain about/What to look for

- frequent urination
- skin breakdown
- Wet clothing
- Withdrawal from social life (to avoid embarrassment)
- Hiding of undergarments

Note often, the individual might be too embarrassed to complain.

What medications are used

- Detrol
- Flomax
- Oxybutynin Chloride (Ditropan)

What to look for while the individual is taking these medications

- Drowsiness
- Dizziness
- Dry mouth
- Blurred vision

- Sensitivity to bright sunlight (wear sunglasses)
- Constipation

Individual/care giver responsibility

- Realize that urinary incontinence can be embarrassing and provide reassurance that incontinence can be treated.
- If a new medication is added, report any changes in the control of the urinary incontinence the individual has to the delegating nurse and health care provider, as soon as possible.
- Toiletry schedules help to reduce the incidence of incontinence.
- Sleeping medications may also cause incontinence during the night.
- Keep the urinary area clean and dry to prevent skin breakdown and rashes. Report any changes in the skin.
- Incontinence may be a sign of an infection.
- Diet drinks and artificial sweeteners (each may contain Aspartame) should be avoided as they are a bladder irritant.
- Avoid drinking coffee, tea, soft drinks, or alcohol two hours before bedtime. This may be the cause of urinary incontinence during the night.
- **It would be very helpful to keep notes as to when the incontinence occurs, whether it is a large or small amount of urine, or if the individual just cannot get to the toilet fast enough.**
- **Remember urinary incontinence does not occur because of aging. Notify the delegating nurse and the health care provider whenever the individual becomes incontinent.**

**CHAPTER IV
SECTION 17**

**URINARY TRACT
INFECTION**

OBJECTIVES

1. Briefly describe urinary tract infection.
2. Identify at least two (2) reasons why urinary tract infection may occur.
3. Identify at least two (2) things that the individual may complain of, or that you should look for with urinary tract infection.
4. Identify medications that are used to treat urinary tract infection.
5. Describe how to determine if the medication is effective in treating urinary tract infection.
6. Identify what to look for in a person who is taking medication to treat urinary tract infection.
7. Identify the responsibilities of the individual who is taking medication for urinary tract infection.
8. Identify the responsibilities of the care giver who administers medication to treat urinary tract infection.

URINARY TRACT INFECTIONS

What is it

Urinary tract infection (UTIs) occur when bacteria are found in the urine. The infection may occur in any part of the urinary tract. Sometimes the urinary tract infection is given a special name depending on where the infection is located:

<u>Site of Infection</u>	<u>Name of infection</u>
Kidney (makes the urine)	Pyelonephritis
Bladder (holds the urine)	Cystitis
Urethra (carries the urine to the outside)	Urethritis
Prostate (in men only)	Prostatitis

Why does it occur

There are many reasons why some people are more likely to get urinary tract infections.

- Older people may have more illnesses, such as high blood pressure, diabetes, diseases of the nervous system, kidney disease, or hardening of the arteries. These illnesses may cause the kidneys not to work well.
- Blockage along the urinary tract may cause infection. People who are bedridden or sit in one place for a long time may have poor urine flow.
- Aging may cause changes along the urinary tract that result in poor urine flow.
- People with bowel problems or diarrhea may become infected if the area is not kept very clean.
- Certain medications may cause urinary problems. Many people get urinary tract infections again and again. These people have chronic urinary tract infections. Even with medical treatment, there may still be bacteria in the urine.

What the individual might complain about/What to look for

- Burning or pain when passing urine
- Feeling the need to pass urine very often (frequency/urgency), even at night (nocturia)
- Fever
- Incontinence

Most important, many older people may not complain of these problems. Instead, elderly individuals may show the following symptoms:

- Change in behavior (such a confusion)
- Tiredness and feeling "bad"
- Foul odor to urine
- Loss of appetite (not hungry)
- Pain in the lower abdomen (middle of the body)

What medications are used

Several classes of medications are used to treat urinary tract infections. They include:

1. Penicillin
 - levofloxacin (levaquin)
 - amoxicillin (Amoxil)
2. Sulfa Medications
 - a combination of sulfamethoxazole and trimethoprim (Bactrim or Septra) also comes double strength or DS as SMZ/TMP DS and are also used for prevention.
- 3 Other
 - cephalexin (Keflex)
 - cephadrine (Duricef)
 - cefaclor (Ceclor)
 - nitrofurantoin (Macrochantin, Macrobid)
 - phenzopyridine (pyridium) used to control pain or burning. (This drug makes the urine red in color).
 - ciprofloxacin (Cipro)

What to look for while the individual is taking these medications

Call the delegating nurse and the health care provider as soon as possible if any of the following occur:

- Severe diarrhea
- Upset stomach
- Rash, itching, hives
- Change in color of urine

- Sore throat, fever, mouth sores
- Unusual bleeding or bruising
- Difficulty breathing
- Dizziness or light headedness

Individual/care giver responsibility

Know exactly how to use the medicine Get good directions from the delegating nurse and the health care provider and pharmacist. Ask:

- exactly how often the individual should take the medication, and at what time of the day and night?
- can the medication be taken with food or liquids?
- which medications to avoid when taking antibiotics?
- exactly how long to take the medication?
- how soon the individual should begin to feel better?

Be sure all medications are taken with plenty of fluids so that the medication is washed into the urinary tract. The medication will then be able to work against the bacteria that caused the UTI.

- The individual should take all medications until they are finished.
- Be certain that the health care provider and pharmacist know of any allergy to medications or food before the individual starts taking the medication.
- If the individual has trouble swallowing the medication, ask if it is available in a liquid form. They usually are! If taking medication for chronic UTIs, do not forget to have the medication refilled.

CHAPTER IV
SECTION 18
HIV/AIDS

OBJECTIVES

1. Briefly describe the HIV/AIDS
2. Identify at least two (2) reasons why the HIV/AIDS may occur.
3. Identify at least three (3) ways HIV is not spread.
4. Identify at least two (2) things that the individual might complain of or that you should look for.
5. Identify medications that are often used to treat HIV/AIDS.
6. Identify what to look for in a person who is taking a particular medication to treat HIV/AIDS.
7. Identify at least two (2) opportunistic infections associated with HIV/AIDS.
8. Identify medication used to treat opportunistic infections associated with HIV/AIDS.
9. Identify the responsibilities of the individual/care giver who administers medications to treat HIV/AIDS.

HIV/AIDS

What is HIV

HIV stands for Human Immunodeficiency Virus. HIV is the virus that causes AIDS. HIV infection weakens the immune system, your body's natural defense against illness. HIV was first identified in 1983. HIV disease is characterized by a gradual deterioration of immune functions.

What is AIDS

AIDS stands for Acquired Immunodeficiency Syndrome. AIDS is a state of severe immune suppression brought about by infection with HIV. A diagnosis of AIDS is given to a person with HIV infection who experiences at least one condition from a list compiled by the Centers for Disease Control (CDC). That condition may be an opportunistic infection (OI) such as Pneumocystis Carinii Pneumonia (PCP) or a cancer like Kaposi' s sarcoma (KS).

The period between infection with HIV and the onset of AIDS is about 8-10 years in an untreated individual.

The syndrome called AIDS was first reported in 1981. As of 1996/1997, the United States has had the highest number of reported AIDS cases in the world.

How does it occur

HIV is spread through contact with bodily fluids that contain white blood cells (semen, vaginal fluids, breast milk, and blood). This contact can occur: (a) during vaginal, anal, or oral sex; (b) when sharing a needle or syringe with a person who has HIV, like when injecting drugs, (c) between a mother who has HIV and her baby - either before birth, during birth, or when breast feeding, (d) or other blood-to-blood contact. (Such as an accidental needle stick)

For HIV transmission to occur it takes: (1) an infected person, (2) a mode of transmission, (3) a body fluid that is capable of causing transmission, and (4) a port of entry for the virus.

How is it not spread?

HIV IS NOT SPREAD THROUGH THE AIR OR THROUGH CASUAL ACTIVITIES SUCH AS: (a) sitting next to someone who is HIV infected; (b) shaking hands, touching, or hugging a person infected with HIV; (c) sharing food, plates, cups, or utensils with someone who is HIV infected; (d) using the restroom, telephone, or watercooler after someone who is HIV infected; (e) swimming in a pool with someone who is HIV infected; (f) donating blood; or (g) being bitten by mosquitoes or other insects.

What the Individual might complain about/What to look for

The following is a list of emergent signs and symptoms of the many opportunistic infections that someone with HIV might exhibit. Notify the delegating nurse or health care provider immediately when any of the following occur:

- Fever of >103.0 F at any time,
- Fever of >101 for three (3) or more days;
- Shortness of breath;
- Productive cough;
- Persistent diarrhea;
- Unusual bleeding;
- Persistent headache
- Localized weakness, paralysis, or change in balance or sensation;
- Seizures, loss of consciousness, or change in mental status;
- Visual changes such as double vision, spots, shadows
- Mononucleosis “Like” symptoms

What medications are used to treat HIV/AIDS

There currently are fourteen (14) medications within three (3) classes of antiretrovirals used to treat HIV/AIDS. They are:

A. Protease Inhibitors:

1. Indinavir (Crixivan)
2. Nelfinavir (Viracept).
3. Ritonavir (Norvir)
4. Saquinavir (Foltovase, Invirase)

B. Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI's):

1. Delaviridine (Rescriptor)
2. Efavirenz (Sustiva)
3. Nevirapine (Viramune)

C. Nucleoside/Nucleotide Reverse Transcriptase Inhibitors (NRTI's):

1. Didanosine (Videx, ddI)
2. Lamivudine (Epivir. 3TC)
3. Zidovudine (Retrovir, AZT)

4. *Combivir (a combination of Lamivudine and Zidovudine)
5. Stavudine (Zerit, d4T)
6. Zalcitabine (HIVID, ddC)
7. Abacavir (Ziagen)

***NOTE THAT COMBIVIR IS A COMBINATION PRODUCT! IF SOMEONE IS TAKING COMBIVIR THEY SHOULD NOT ALSO BE TAKING LAMIVUDINE AND/OR ZIDOVUDINE.**

- Other:
 - Hydroxyurea (Hydrea). Hydroxyurea is approved by the FDA for the treatment of various forms of cancer, but is used in HIV because it potentiates the actions of antiretrovirals, especially didanosine.

What to look for while the individual is taking these medications.

1. Medication side effects of Protease Inhibitors include:

- | | |
|-------------|------------------|
| ■ nausea | ■ kidney stones |
| ■ vomiting | ■ diabetes. |
| ■ diarrhea | ■ headaches |
| ■ hepatitis | ■ blurred vision |

2. Side effects of NNRTI include:

- | | |
|---------------------------|-------------------------|
| ■ rash | ■ pancreatitis |
| ■ Steven Johnson syndrome | ■ peripheral neuropathy |
| ■ headaches | ■ nausea |
| ■ dizziness | ■ diarrhea |
| ■ vivid dreams | ■ fatigue |
| ■ hepatitis | ■ vomiting |

3. Side effects of NRTI include:
- | | |
|-------------------------|------------|
| ■ rash | ■ nausea |
| ■ pancreatitis | ■ vomiting |
| ■ peripheral neuropathy | ■ diarrhea |
| ■ headache | ■ fatigue |

Common Opportunistic Infections (OIs) associated with HIV/AIDs and their medications/treatments.

1. Candidiasis: Is the term for fungal infections caused by the yeast Candida. These infections can involve the mouth, throat, esophagus, vagina, or skin. Thrush refers to infections of the mouth. Thrush may cause soreness or a bad taste, burning or painful mouth areas, changes in taste sensations, sensitivity to spicy foods, and decreased appetite or it may be without symptoms altogether. It often looks like creamy white patches similar to cottage cheese on the tongue and oral mucosa.

2. Cryptococcosis: Fungal infection that is usually self-limiting, asymptomatic, and primary occurs in the lungs. Some individuals will complain of shortness of breath or cough. Individuals may also complain of fever, headaches, nausea/vomiting, and occasionally photophobia.

3. Cryptococcus Neoformans: a fungus frequently found in bird droppings and soil. The most frequent site of infection is the central nervous system (CNS). The symptoms of cryptococcal meningitis can occur slowly over a few weeks to months, and can include fever, headache, and altered mental status.

4. Cytomegalovirus is a herpes virus: That infects directly through mucous-membrane contact or via tissue transplant or blood transfusion. It is most frequently found in the retina, colon, and esophagus of HIV patients. Symptoms may include: blurred vision, blind spots, moving spots before the eyes; or intermittent or persistent diarrhea with cramping, abdominal pain, weight loss; or painful swallowing or the sense of food sticking in the throat.

5. HIV-Related Encephalopathy (also known as AIDS-Dementia Complex or ADC): It is thought to be caused by both the virus itself and damage done to the CNS from infection and altered metabolism. Individuals may display impairment in: memory, attention span, abstract thinking and judgment. The individual's personality may have changed, interfering with

relationships, and and/or no longer carrying on normal social or occupational functions. The individual may also have motor impairment such as difficulty in walking.

6. Herpes Simplex Virus (HSV) Disease: HSV is everywhere. It is primarily transmitted in direct contact with oral secretions or genital secretions. Lesions may affect the skin, the esophagus, the anus, and the lung. HSV infection usually causes painful blisters on an inflamed base which develops into ulcerated lesions frequently covered with a clear yellow crust. You can also see pain, fever, and fatigue.

7. Herpes Zoster Virus: Herpes zoster, or shingles, is a re-activation of the virus that occurs after someone has chicken-pox. These lesions typically affect the face and trunk. Symptoms include a painful, blistering rash that usually follows a nerve path. Individuals may complain of loss of vision secondary to the appearance of facial lesions

8. Histoplasmosis: A fungal infection which initially presents as a pulmonary infection. Patients complain of fever, weight loss, fatigue, cough, shortness of breath, skin lesions, CNS changes, or abdominal pain.

9. Kapos's Sarcoma (KS): KS remains the most commonly diagnosed malignancy in those that are HIV positive. KS most often involves the skin where lesions present as red to purple nodules or plaques that can appear in several parts of the body at the same time. KS can also involve the lymph nodes, the mouth, and the GI tract. Pulmonary involvement can cause severe respiratory symptoms.

10. Mycobacterium Avium-Intracellular Complex (MAC) Disease: MAC is one of the most frequent opportunistic complications of HIV disease. MAC is usually disseminated, meaning almost any organ system can be involved (but especially the liver, spleen, and bone marrow). The signs and symptoms of MAC are non-specific. They include: fever of unknown origin, night sweats, weight loss, and anorexia, You might also see diarrhea, malabsorption of food, and abdominal pain.

11. Mycobacterial Tuberculosis (TB): TB is a bacterial infection. People with HIV are particularly susceptible to TB. Symptoms include cough, weight loss, fever, night sweats, fatigue, anorexia and dyspnea. (see the module on tuberculosis).

GIVEN THE RAPID INCREASE IN CASES OF HIV-ASSOCIATED TB, Individuals WITH COUGH SHOULD BE KEPT IN RESPIRATORY ISOLATION UNTIL THE TB INFECTION IS RULED OUT.

12. Pneumocystis carinii Pneumonia (PCP): PCP is the leading cause of AIDS related mortality; the organism can affect many organ sites, the lung being the most common. PCP is the most common AIDS-defining opportunistic infection (OI). PCP develops over a period of 1-2 weeks, with shortness of breath, fever, and a non-productive cough. Patients complain of fever, dyspnea on exertion, shortness of breath, a dry cough, night sweats, and/or fatigue.

13. Toxoplasmosis: A protozoan, and one of the most prevalent causes of latent infection of the CNS. Infection occurs primarily via the mouth through ingestion of raw or undercooked meats or contact with cat excrement. Symptoms may include headache, confusion, and fever. Focal neurologic deficits occur in most patients.

14. Wasting Syndrome caused by HIV: Involuntary weight loss, or wasting, is one of the most common manifestations of HIV infection. It can occur at any stage of infection and is indicative of disease progression. Weight loss can result from reduced food intake, altered metabolism, or malabsorption and associated diarrhea.

Individual/care giver Responsibility:

- Know whether the individual is being treated for active OIs.
- Know how and why the medication is being taken. Ask the delegating nurse, health care provider or pharmacist if you or the individual have any questions. These medications may be given in combination (i.e. 2 or 3 drugs together) in order to enhance the effect of the drug. Follow the health care providers' instructions as directed without any alteration of combination or time of day.
- Many of these drugs will be taken for a very long time. The individual should keep taking these medications until told to stop by a delegating nurse or a health care provider even if the individual is feeling better.
- REMEMBER THE WAYS IN WHICH HIV IS TRANSMITTED. USE STANDARD PRECAUTIONS WITH ALL Individuals!

- Health care providers may want to see individuals frequently to take blood and to see how they are doing. Keep all health care providers' appointments, even when the individual may not feel up to it!

CHAPTER IV
SECTION 19
SCHIZOPHRENIA

OBJECTIVES

1. Briefly describe schizophrenia.
2. Describe possible causes of schizophrenia.
3. Identify at least two (2) things that the individual may complain of, or that you should look for with schizophrenia.
4. Identify the medications that are often used to treat schizophrenia.
5. Describe how to determine if the medication is effective in treating schizophrenia.
6. Identify what to look for in a person who is taking medication to treat schizophrenia.
7. Identify the responsibilities of the individual who is taking medication for schizophrenia.
8. Identify the responsibilities of the care giver who administers medication to treat schizophrenia.

SCHIZOPHRENIA

What is it?

Schizophrenia is a mental illness that interferes with the person's ability to think clearly and logically. It is not a "split personality." Because of the person's thinking problem, it may also be hard to interact with other people, so people who have this disease are sometimes viewed as antisocial. They keep their distance from others because of problems such as keeping track of conversations or feeling frightened of other people. Many people who have schizophrenia are able to manage their symptoms and function well in their communities.

Why does it occur?

No one knows exactly what causes schizophrenia. There is no one single cause of the disease. It is now believed that it is a brain disease that interferes with the sending of messages between brain cells. It is also possible that sometimes schizophrenia is hereditary. Many people who have schizophrenia first have symptoms during their teen or young adult years, but the reason for this is not known. Stress may also play a role in the development of schizophrenic symptoms in some people.

What the individual might complain about/what to look for:

This is a list of the behaviors that are most commonly seen/experienced when a person has schizophrenia.

- Difficulty concentrating
- Difficulty making choices
- Difficulty expressing feelings
- Difficulty in communicating clearly
- Having strange thoughts (delusions) paranoid delusions are a fear that someone is trying to harm you. Other delusions may be a belief that one is a famous or powerful person.
- Hearing things that no one else can hear (auditory hallucinations)
- Seeing things that no one else can see (visual hallucinations)
- Withdrawal from others
- Agitation
- Anxiety
- Refusal or forgetting to perform personal hygiene activities

- Lack of interest in work or recreational activities

What medications are used?

Medications used for the treatment of schizophrenia are called antipsychotic medications.

- Chlorpromazine (Thorazine)
- Thioridazine (Mellaril)
- Trifluoperazine (Stelazine)
- Fluphenazine (Prolixin)
- Thiothixene (Navane)
- Haloperidol (Haldol)
- Loxapine (Loxitane)
- Clozapine (Clozaril)
- Risperidone (Risperdal)
- Olanzapine (Zyprexa)
- Quetiapine (Seroquel)

What to look for when the individual is taking these medications

There should be an improvement in the individual's ability to communicate and understand communication from others. There should be a decrease in hallucinations and delusions. If the individual continues to have these symptoms, they will not interfere as much with the ability to function. These medications may decrease the person's anxiety but there may also be decreased energy and lack of motivation. Exposure to sunlight without sunscreen or for a long time should be avoided. An unusual but serious problem is having a muscle spasm in which the person's head is pulled to one side or eyes roll back. If this happens, the person should go to the emergency room.

Because schizophrenia is a chronic illness, the individual will continue to take the medicine, even if the symptoms improve. It is important to encourage the person by reminding him that the medicine is making him feel better.

The following side effects may or may not occur with these medications. If the problem cannot be tolerated the delegating nurse and health care provider should be contacted.

- Dry mouth (sugarless candy, gum or ice chips may help)
- Constipation (fluids are very important, as well as exercise and fiber in the diet)
- Dizziness (especially when rising from a lying or sitting to a standing position)
Getting up slowly may help. The individual can be instructed to arise from the bed in three stages;
 1. Sit up in bed for one minute;
 2. Sit on the side of the bed with legs dangling for one minute;
 3. Stand with care, holding onto the edge of the bed or another non-movable object for one minute.
- Tremor (hands shake)
- Unbalanced or shuffling gait
- Stiffness
- Restlessness
- Rapid pulse
- Excessive salivation and drooling especially at night.
- Runny nose
- Sudden, jerky movements of the head, neck, arms, body, tongue or eyes that cannot be controlled
- Any other problems that began when the medication was started or changed should be reported to the delegating nurse and health care provider

Individual/care giver responsibility

It is important to inform the delegating nurse and the health care provider of any changes when they occur. Report these changes in your own words.

- Before seeing any other health care providers, tell them the individual is on this medicine. Also, be sure to let them know about any other medications the individual is taking. Bring along the individual's Physician Medication Order form (PMOF). Never leave the PMOF with anyone
- If the individual is taking Clozapine it is extremely important to be sure that all appointments for blood tests are kept.

- Because schizophrenia is a chronic illness, the individual must continue to take the medicine even if the symptoms improve.
- Support groups are available in many areas. You may contact your local Commission on Aging for resources in your area.

**CHAPTER IV
SECTION 20**

**BIPOLAR DISORDER
(MANIC DEPRESSIVE
ILLNESS)**

OBJECTIVES

1. Briefly describe bipolar disorder.
2. Identify at least two (2) reasons why Bipolar may occur.
3. Identify at least two (2) things that the individual may complain of or that you should look for with Bipolar.
4. Identify the medications that are often used to treat Bipolar.
5. Describe how to determine if the medication is effective in treating Bipolar.
6. Identify what to look for in a person who is taking medication to treat Bipolar.
7. Identify the responsibilities of the individual who is taking medication for Bipolar.
8. Identify the responsibilities of the care giver who administers medication to treat Bipolar.

BIPOLAR DISORDER (MANIC DEPRESSIVE ILLNESS)

What is it?

Bipolar is a brain disease that causes the person to have mood swings from feeling extremely energetic and happy (manic) to feeling very depressed. The person is not able to control these feelings or the behavior that they cause without help. Treatment can bring the mood swings under control, allowing the person to work, play and enjoy life. When the person who has manic depression is depressed, the behavior is the same as any other depression, but the treatment may be different.

Why does it occur?

Bipolar occurs when there is a problem with the communication of messages in the brain. It seems to run in the family and often occurs along with alcoholism or drug addiction.

What the individual might complain about/what to look for

When persons with Bipolar are depressed, their complaints and behavior will be the same as persons who only have depression (see previous section on depression). The following list includes the complaints and behaviors that are related to the manic mood.

- Irritability or agitation
- Manipulative behavior
- Easily distracted
- Increased energy, activity and restlessness
- Racing thoughts, rapid speech
- Decreased need for sleep and resists going to bed
- Unrealistic beliefs in abilities and powers
- Increased sexual drive
- Abuse of drugs or alcohol
- Reckless behavior such as spending sprees, rash business decisions or unsafe driving
- Difficulty controlling anger

What medications are used to treat the Manic phase of Bipolar

The medications that are most often prescribed for the treatment phase of manic include:

- Lithium (Eskalith, Lithobid, Lithonate)
- Neurotin (used with other medications - rarely alone)
- Clonazepam (Klonopin)
- Risperidone
- Carbamazepine (Tegretol)
- Valproate (Depakene)
- Divalproex (Depakote)

The following list includes the complaints and behaviors that relate to depression.

What the individual might complain about/What to look for

Depression may be expressed in many different ways such as:

- Lack of sleep (feeling “tired”). Early morning awakening.
- Poor eating habits
- No interest in pleasurable activities
- Not caring about physical appearance
- Not caring about loved ones
- Loss of memory
- Loss of ability to concentrate
- Bodily complaints such as headaches or backaches (for which no physical reason can be found)
- Guilt or fear
- Hopelessness and/or helplessness
- Feeling sorry for oneself
- Suicidal thoughts (this should always be taken very seriously and reported immediately).

What medications are used

- amitriptyline (Elavil) (while these two medications may be utilized on occasion,
- trazodone (Desyrel) neither is the first choice for use with the elderly).
- Zoloft ● Celexa
- fluoxetine (Prozac) ● Wellbutrin
- Paxil

What to look for when the individual is taking these medications

These medications are used to make the person's moods more stable. There should be a decrease in both depression and mania. Because manic depression is a brain disease, the person will have to take the medication indefinitely. Some people miss the energy and good feelings that they have when they are manic. They should be encouraged to continue taking the medicine by pointing out their ability to function better when they are on medication.

The following side effects may occur:

- Weight gain (the individual may need help planning a healthy, low calorie diet).
- Slight shakiness
- Frequent urination
- Appetite loss
- Nausea, vomiting or diarrhea
- Intense shakiness
- Dizziness
- Drowsiness
- Ringing in ears
- Fever
- Skin rash
- Sore throat
- Dry mouth
- Constipation
- Sore throat
- Double or blurred vision

Individual/care giver responsibility

It is important to inform the delegating nurse and the health care provider of any changes when they occur. Report these changes in your own words.

- Before seeing any other health care provider, tell them the individual is on this medicine. Also, be sure to let them know about any other medications the individual is taking. Bring along the individual's PMOF. NEVER LEAVE THE PMOF WITH ANYONE.
- Make sure all medications are given at the time prescribed and assure the individual does not run out of any of their medication prescriptions.
- Be aware the individual in a manic phase may hoard his/her medications and then take them all at one time. Be sure the individual swallows all medications at time of administration.
- Suicidal thoughts should be taken seriously and reported IMMEDIATELY.
- All of these medications require regular blood testing. Be sure that the individual keeps all appointments for this. If an appointment is missed, let the health care provider know.
- You may obtain further information from community resources such as:
 - The National Mental Illness Screening Project
One Washington Street, Suite 304
Wellesley Hills, MA 02481
An available publication is: "Explaining Bipolar Disorder"
 - National Alliance for the Mentally Ill (NAMI)

CHAPTER V
HIGH RISK MEDICATIONS
& PRN MEDICATIONS

Objectives

1. Identify those medications or classification of medications that pose a high risk to clients.
2. Identify the conditions or circumstances that permit PRN medications to be administered.
3. Identify information which must be reported to the case manager/delegating nurse regarding the resident's continued consistent use of the PRN medication.

High Risk and PRN Medication

High risk medications include but are not limited to the following medication/ classification of medications as identified by the Office of Health Care Quality (the state agency that licenses assisted living programs).

1. Digoxin – digoxin toxicity (high level of the drug in the patient’s system from one high dose or an accumulation of several doses over time) can mimic someone having hallucinations. The pulse rate may drop below 60.
2. Theo-Dur (Theophylline) - toxicity can occur and symptoms of toxicity can include nausea, vomiting, anxiety, insomnia, and convulsions. This drug can enhance the effect of anti-coagulants.
3. Anti-seizure medications (example dilantin) - the patient can demonstrate gait changes (changes in how the resident walks – stumbling, lurching) or seizures when toxic or non therapeutic levels have occurred.
4. Coumadin, Plavix or any other Anti- Coagulant Medication (blood thinners) – the resident may have unexplained small bruising (spots) or large bruises or blood in the stool (black tarry stool or bright red streaks) or unexplained or unexpected bleeding when the resident has received too much of the blood thinner.
5. Over-the-Counter herbal supplements (examples may include St. Johns Wart, Kava, Valerian, Echenacea or Gingko) – these supplements can enhance the effect of other medications such as Coumadin or Aspirin. Again you can see bleeding or bruising or you can see confusion often mimicking a stroke. You may also see a change in vital signs.
6. Herbal or green teas – these teas have the potential of having a negative interaction with prescription medication..

It is important that the Case manager/delegating nurse, the authorized prescriber and the pharmacist be aware of any over-the-counter herbal supplement, herbal tea or green tea as any of these products can enhance or reduce the desired effect of prescribed medications.

PRN Medications

As stated previously PRN medications are those medications prescribed by the health care provider to be given “as needed”. The medications are to be used only if the order is current and when the following are present.

1. The specific symptom or condition for which the medication is ordered is present; and,
2. The name of the medication, dose to be administered and method/route of administration is specified; and,
3. The frequency of administration is specified (i.e. the minimum length of time between doses)

When administering PRN medications the frequency of administration (minimum length of time between doses) is of particular concern. This minimum length of time limits the number of doses to be given within a 24 hour period. **For example, if Tylenol is ordered for complaint of a headache, and you are to give two (2) tablets every 4 hours by mouth, then the maximum number of tablets that can be given in a 24 hour period is 12 tablets. The health care prescriber is limiting the number of Tylenol the individual may receive a maximum dose of 12 per each 24 hour period.**

The AL manager and the case manager/delegating nurse will develop a procedure for notification of the case manager/delegating nurse when PRN medications are to be given.

It is important to note that if a PRN medication was administered and the resident's condition or complaint worsened then the case manager/delegating nurse or physician should be notified immediately. The information to be shared would include but not limited to:

- What is the complaint
- When did it first start
- What PRN medication has been given
- How frequently has the PRN medication been given
- Has the resident's complaint continued or been reduced after receiving the PRN medication (e.g may be the headache is better but still there)
- Are there any activities that the resident has stopped doing because of the continuing symptom/condition

As you can see it is important that you as the Medication Technician be detailed and accurate in your observation of the resident, so you can report accurately and timely to the case manager/delegating nurse (Complete feedback exercise BB).

CHAPTER VI

Required Clinical Update for the Medication Technician Every Two years

REQUIRED CLINICAL UPDATE

The regulations require that the medication technician to complete a Clinical Update every two years. The Clinical Update must be completed prior to renewal of the medication technician certificate. The medication technician certificate expires on the birth month of the individual and the renewal is based on birth year. An individual who is born in an even year e.g. born in 0,2,4,6,8 would renew in an even year. An individual born in year ending in an odd number 1,3,5,7,9 would renew in an odd year.

When the medication technician receives initial certification, the certification may not be for a full two year period as the renewal time will occur based on that specific individual's birth month, birth year.

The required Clinical Update must be completed prior to the medication technician certificate expiring. If you do not complete the Clinical Update prior to the expiration of the medication technician certificate or if you fail the Clinical Update you must complete the entire twenty (20) hour training program.

It is your responsibility to maintain a current active medication technician certificate. The medication technician Clinical Update may only be taught by a registered nurse, case manager/delegating nurse who has completed the training program a Board approved facility/agency. The assisted living employer will help you obtain this required Clinical Update.

CHAPTER VII SPECIAL PROCEDURES

OBJECTIVES

1. Demonstrate the administration of nose drops.
2. Demonstrate administration of nasal spray.
3. Demonstrate the administration of eye drops.
4. Demonstrate the administration of eye ointment.
5. Demonstrate applying an eye patch/shield.
6. Demonstrate the administration of ear drops.
7. Demonstrate the use of a hand-held inhaler.
8. Demonstrate nebulizer procedure.
9. Demonstrate the insertion of vaginal suppositories, vaginal creams and vaginal douche.
10. Demonstrate the insertion of rectal suppositories.
11. Demonstrate the administration of enemas including pre-packaged enemas.
12. Demonstrate the administration of topical and topical patch medications.
13. Demonstrate gastrostomy tube care and administration of feedings.
14. Demonstrate blood glucose monitoring by one step accu-check.
15. Demonstrate Insulin injection.
16. Demonstrate oxygen administration.

INTRODUCTION

The following are a resource for the registered nurse, case manager/delegating nurse who is delegating the procedure and for the medication technician who will perform the delegated procedure. Prior to the medication technician performing any of the identified procedures, the medication technician must receive one on one instruction specific to the individual resident from the registered nurse, case manager/delegating nurse for the assisted living facility. To be considered competent, the medication technician must provide a return demonstration of the specific procedure with 100% accuracy.

As with all nursing procedures, the privacy, dignity and safety of each individual is to be assured during the performance of the procedure. Safety specifically includes the care provider, medication technician, maintain short clean finger nails.

Objective 1: Demonstrate the administration of nose drops.

ADMINISTRATION OF NOSE DROPS

1. Read the Health Care Providers's order form, (PMOF), pharmacy label and the MAR.
2. Instruct the person to gently blow the nose and explain the procedure to the individual.
3. Assemble necessary equipment.
4. Wash hands and utilize gloves per facility policy.
5. Have the person lie down and tilt the head backward by elevating the shoulders.
6. Draw the medicine into the dropper if the dropper is calibrated, draw only the amount to be administered.
7. Insert the dropper $\frac{1}{3}$ inch into the nasal passage and administer the medicine. If the dropper is **NOT** calibrated, hold the dropper close to the nostril (outside of the nasal passage) and count the number of drops as administered.
8. Wipe the dropper off with a clean gauze pad to remove mucus if inserted into the nasal passage.
9. Have the person remain in this position for several minutes to allow the medication to be absorbed.
10. Instruct the person not to blow his or her nose unless absolutely necessary for first 10 minutes.
11. Document administration and note the individual's response.
12. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 2: Demonstrate Administration of Nasal Sprays

ADMINISTRATION OF NASAL SPRAYS

1. Read the health care provider's order form, (PMOF) the MAR, the pharmacy label and the package instruction for use.
2. Wash hands and wear gloves if indicated.
3. Have individual in sitting position.
4. Have individual blow nose gently.
5. Have individual sniff briskly while squeezing bottle quickly and firmly. Spray once or twice into nostrils according to MAR directions.
6. Rinse tip of spray bottle in hot water and dry with a tissue.
7. Wash hands when completed.
8. Document administration and note any individual response.

Objective 3: Demonstrate the administration of eye drops

ADMINISTRATION OF EYE DROPS

1. Read the health care provider's order form, the pharmacy label and the MAR. Read the instructions carefully.

Be certain you know which eye is to be treated.

2. Assemble the necessary equipment.
3. Wash hands and utilize gloves per facility policy.
4. Explain the procedure and instruct the person that vision may be blurred temporarily after applying this medication.
5. Have the person assume a comfortable position, either lying in bed or sitting in a chair with support for the neck.
6. Gently wipe the area around the eye(s) to be treated with a gauze pad that has been moistened with normal saline to remove drainage. Use a clean pad for each wipe and stroke from the nose outward.
7. Ask the person to tilt the head back and to look up at the ceiling.
8. Gently pull the lower lid of the affected eye down and out, to form a pocket near the center of the eye.
9. Holding the dropper near the lid, gently drop the prescribed number of drops into the pocket. There must be one minute between each drop of the same medication. If more than one medication is given at one time then consult the delegating nurse. To prevent the dropper from being thrust into the individual's eye, it is good practice to support your hand by placing a finger on the individuals forehead.

10. Press the inner corner (where the eyelids meet) to prevent medication from entering the respiratory system.
11. Ask the person to close the eye, blink several times but not to rub the eye.
12. Document administration and note any individual response.
13. Report any negative effects to the assisted living manager and the delegating nurse.

Note: Avoid touching the eyelid or lashes with the dropper. Avoid dropping the solution on the sensitive cornea.

Objective 4: Demonstrate the administration of eye ointment.

ADMINISTRATION OF EYE OINTMENT

1. Read the health care provider's order form (PMOF), the pharmacy label and the MAR.
Read the instructions carefully. **Be certain you know which eye is to be treated.**
2. Assemble the necessary equipment.
3. Wash hands and use gloves per facility policy.
4. Explain the procedure and instruct the person that vision may be blurred temporarily after applying this medication.
5. Have the person assume a comfortable position, either lying in bed or sitting in a chair with support for the neck.
6. Gently wipe the area around the eye(s) to be treated with a gauze pad that has been moistened with normal saline to remove drainage. Use a clean pad for each wipe and stroke from the nose outward.
7. Ask the person to tilt the head back and to look up at the ceiling.
8. Gently roll the tube of medication between the palms of both hands. This aids in warming the ointment so it can cover the eye evenly.
9. Gently pull the lower lid of the affected eye down and out, to form a pocket near the center of the eye.
10. Administer approximately ½ inch of the ointment into the pocket by gently squeezing a thin ribbon of the medication on the surface of the lower lid. To prevent the tube from being thrust into the individual's eye, it is good practice to support your hand by placing a finger on the individual's forehead.

Note: Avoid touching the eye or the eyelid with the tube. If you miss administering into the lower lid, wipe the misplaced ointment off and start the procedure over.

11. Have the individual close the eye(s) and instruct the individual to move the closed eye in a circle spreading the ointment over the entire eye.
12. Document administration and note any response of the individual's eye.
13. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 5: Demonstrate applying an eye patch/shield

APPLYING EYE PATCH/SHIELD

1. Read the health care provider order form (PMOF), the pharmacy label and the MAR. Read the instructions carefully. **Be certain you know which eye is to be patched.**
2. Assemble necessary equipment.
3. Wash your hands.
4. Explain the procedure to the individual.
5. Use an eye pad which fits the individual's face (The eye pad is available in more than one size).
6. Place it gently over the individual's closed eye. **DO NOT TOUCH THE SIDE OF PAD THAT LIES** on the individual's eye.
7. Apply two or three strips of paper tape from the mid forehead to under the cheek bone.
8. Document administration and note any individual response.
9. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 6: Demonstrate the administration of ear drops.

ADMINISTRATION OF EAR DROPS

1. Read the health care provider's order form (PMOF), the pharmacy label and the MAR. Read the instructions carefully. **Be certain you know which ear(s) is to be treated.**
2. Assemble the necessary equipment.
3. Wash your hands and use gloves per facility policy.
4. Explain the procedure to the individual.
5. Warm the medication to body temperature by holding it in your hands for several minutes or by placing the unopened container in a dish with a small amount of water.
NOTE: DO NOT immerse the medication container in the water if the label will be affected in any way.
6. Ask the person to lie on one side with the ear to be treated facing upward or, if sitting, tilt the head away from the affected ear.
7. Clean the outer ear carefully and thoroughly with cotton.
8. If the medication is a suspension, shake well. Draw the medication into the dropper.
9. For the adult individual, pull the cartilage part of the outer ear **BACK AND UP**. Place the prescribed number of drops into the ear canal without touching the dropper to the ear. If more than one ear drop medication is prescribed at the same time then consult the delegating nurse.
10. Advise the person to remain in the same position for a few minutes following administration to avoid leakage of drops from the ear, then cleanse the external ear with dry cotton balls.
11. Document administration and note the response of the individual.
12. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 7: Demonstrate the use of a hand held inhaler.

USE OF HAND HELD INHALERS (PUFF INHALERS/METERED DOSE INHALERS AND AERO CHAMBER)

1. Read the health care provider's order form (PMOF), the pharmacy label and the MAR.
Read the instructions carefully.
2. Assemble the inhaler properly.
3. Instruct the individual to be sitting up and to remove loose upper dentures before using inhaler. Loose dentures can fall down and block the sprayed medication.
4. Remind the individual to keep the tongue flat in the mouth. Otherwise, the medication will spray directly on the tongue.
5. Shake the cartridge to mix the medication.
6. Remove the cap and hold the inhaler upright.
7. Place the cartridge to the person's lips and tell the individual to exhale through the nose. Remind the person to exhale only enough to get the stale air out of the lungs (so that the medication can get in. Forcing air out of the lungs will collapse the airways even further).
 - A. Press the cartridge when the person starts to inhale. Timing is important. Do not press hard-the dose is predetermined, so only one dose will be released, regardless of the pressure applied
 - B. Tell the person to breathe slowly and deeply. Rapid or shallow breaths will not carry the medication into the lungs.
 - C. Remove the inhaler and tell the person to hold his or her breath and count to ten. This will let the medication settle on the surface of the airways and prevent the person from exhaling it immediately.
 - D. Tell the person to exhale slowly with the lips pursed. If more than one puff, the individual must wait one minute between puffs. If there is more than one metered dose inhaler to be administered at one time, there must be five minutes between each medication.

8. Document administration and note the individual's response.
9. After the treatment, clean the inhaler thoroughly by removing the metal canister, then rinsing the plastic container under warm water and drying it thoroughly. Encourage the individual to rinse their mouth after using the inhaler. This helps remove the lingering taste and to prevent infection.
10. Report any negative effects to the assisted living manager and the delegating nurse.

Note: If the person takes more than one or a combination of medications by inhaler there must be directions to indicate which medication is to be taken in what order. The directions should be provided by your pharmacist or the Health Care Professional. (Please note, there are newer forms of inhalers such as Diskus, etc or the use of spacers which would require education on appropriate administration. Contact the delegating nurse for any form unfamiliar to you.

Objective 8: **Demonstrate the Nebulizer Procedure**

Use of Nebulizer Procedure

1. Read the health care provider's order form, the MAR and the pharmacy label.
2. Gather the equipment:
 - compression unit
 - tubing
 - nebulizer cup
 - mouth piece or mask
 - medication
 - measuring instrument if medication is not pre-measured
 - gloves
3. Position the individual in a sitting position that will allow the individual to take a deep breath.
4. Take the individual's resting pulse rate for one full minute to establish baseline rate..
5. Wash hands and put on gloves if indicated.
6. Assemble equipment per manufacturer's guide.
7. Add prescribed amount of medications to the nebulizer cup.
8. If using mouthpiece or mask turn machine on and check for steady mist, then apply the mouthpiece or mask, to the resident.
9. Instruct the individual to breathe normally through their mouth.
10. Continue treatment, stopping when there is no longer any mist visible.
11. During the course of the nebulizer treatment remain with resident and monitor for negative effects such as:
 - A. increase in pulse by 20 beats per minute
 - B. palpitations (noticeable heart beat)
 - C. dizziness
 - D. shakiness
 - E. nausea
 - F. chest pain

G. uncontrollable coughing

Notify the delegating nurse and assisted living manager of any negative effect during the treatment.

12. Document administration and note the individual's response.
13. When the treatment is complete, turn compressor off, disassemble equipment, and clean according to manufacturer's guidelines.
14. Encourage the individual to cough several times to loosen and bring up any mucus. Remind the individual to practice appropriate infection control procedures i.e. use tissue to spit into, dispose of tissue immediately into trash receptible, wash hands, etc.

Objective 9: Demonstrate Administration of Vaginal Douche

VAGINAL DOUCHE

ONLY A FEMALE MEDICATION TECHNICIAN MAY ASSIST AN INDIVIDUAL IN THE INSERTION OF A VAGINAL DOUCHE.

1. Read the health care provider's order form (PMOF), the pharmacy label and the MAR.
2. Assemble all the douche equipment including any over-the-counter or prescriptive medications.
3. Read the instructions on the vaginal douche package container on how to use. Compare to PMOF if do not match completely. Call case manager.
4. The individual may douche in the shower, the bathtub or while sitting on the toilet
5. Wash hands and put on gloves.
6. Assemble and connect all the equipment. Note - solution to be used must be room temperature.
7. If over-the-counter medication or prescriptive medication is added to the solution in the douche bag, gently shake the solution and the medication together to mix.
8. Expel all air from the tubing before inserting the douche pipe/applicator.
9. Lubricate the tip with the solution or with a water soluble lubricant like K-Y jelly. Vaseline is not a water soluble lubricant.
10. Separate the labia with one hand; insert douche pipe/applicator into the vagina and hold the pipe/applicator in place.
11. Allow the douche solution to flow gently into the vagina; **DO NOT** use force when instilling the irrigation.
12. Rotate the pipe-applicator 2 or 3 times during the douche. This irrigates the entire vagina

DO NOT USE THE VAGINAL APPLICATOR FOR ANY OTHER IRRIGATION.

1. If the applicator is to be reused, clean with hot soapy water, rinse thoroughly and dry well.
2. Discard gloves and wash hands thoroughly.
3. Record by all pertinent information as soon as possible after the treatment.
4. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 10: Demonstrate the insertion of vaginal suppositories and creams

INSERTION OF VAGINAL SUPPOSITORIES/CREAMS

Only a female medication technician may assist an individual in the insertion of a vaginal suppository/cream. Most suppositories and creams are supplied with their own special applicators. Follow the manufacturer's directions in the manner of preparation.

1. Read the health care provider's order form (PMOF), the MAR, and the pharmacy label and the instructions carefully.
2. If the medication is refrigerated, remove 10 minutes before use.
3. Wash hands and apply gloves.
4. Explain the procedure to the individual.
5. Ask the individual to empty her bladder **BEFORE** beginning treatment.
6. Remove any wrapping from the suppository.
7. Use the applicator assigned to the specific individual. Use a water soluble lubricant such as K-Y jelly to lubricate the suppository if necessary. Vaseline is not a water soluble lubricant.
8. Position the individual properly.
9. Separate the labia with one hand; insert the applicator with medication into the vagina with the other hand. Insert the applicator at least two (2) inches into the vaginal canal.
10. Encourage the individual to remain in this position for 15 minutes.
11. Remove gloves and wash hands thoroughly.
12. Cleanse and store the applicator according to manufacturer's direction.
13. Record completely all pertinent information as soon as possible after treatment.
14. Report any negative effects to the Assisted Living Manager and the delegating nurse.

Objective 11: Demonstrate the insertion of rectal suppositories.

INSERTION OF RECTAL SUPPOSITORIES

ONLY A FEMALE MEDICATION TECHNICIAN MAY ADMINISTER A RECTAL SUPPOSITORY TO A FEMALE RESIDENT.

1. Read the health care provider's order form (PMOF), the pharmacy label and the MAR. Read the instructions on how to use.
2. If the suppository is refrigerated, remove from the refrigerator 10 minutes before use.
3. If suppositories are not refrigerated and are soft and unmanageable, hold the foil-wrapped suppository under cold water to harden prior to insertion.
4. Wash hands.
5. Put on disposable glove to protect the finger used for insertion (index finger for adults).
6. Explain the procedure to the individual.
7. Ask the person to lie on his/her left side and draw the right leg toward the waist.
8. Remove any wrapping from the suppository.
9. Lubricate the suppository with a water-soluble lubricant such as K-Y jelly (**DO NOT USE MINERAL OIL OR VASELINE**). If a lubricant is not available, wet the suppository with tap water.
10. **GENTLY PLACE THE TIP (THE POINTED OR ROUND END) OF THE SUPPOSITORY AT THE RECTAL ENTRANCE AND ASK THE PERSON TO TAKE A DEEP BREATH AND EXHALE THROUGH THE MOUTH (MANY PEOPLE WILL HAVE AN INVOLUNTARY RECTAL GRIPPING WHEN THE SUPPOSITORY IS PRESSED AGAINST THE RECTUM). GENTLY INSERT THE SUPPOSITORY ABOUT AN INCH BEYOND THE ENTRANCE AGAINST THE RECTAL WALL AND PAST THE INTERNAL SPHINCTER.**
11. For administration of the rectal cream, use the applicator assigned to the individual. Use a water soluble lubricant such as K-Y Jelly to lubricate the applicator. Vaseline is not a water soluble lubricant.
12. Insert the applicator at least two inches past the rectal sphincter. Insert the medication.
13. Ask person to remain lying on his/her left side for 15-20 minutes to allow for melting and

absorption of the medication.

14. Discard used materials, remove gloves and wash your hands thoroughly.
15. Document administration and note any response of the individual.
16. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 12: Demonstrate the administration of enemas.

ADMINISTRATION OF ENEMAS

RETENTION ENEMAS

1. Read the health care provider's order form (PMOF), pharmacy label and the MAR. Read the instructions carefully.
2. For maximum absorption, the bladder should be emptied **PRIOR** to administering the enema.
3. Collect all of the materials and mix the solution **PRIOR** to preparing the person. Note the temperature of the solution to be administered.
4. Wash your hands and put on gloves.
5. Explain the procedure to the individual.
6. Ask the individual to lie on his/her left side and draw the right leg toward the waist.
7. Depending on the environment and the individual's ability to retain the enema, place a protective device (chux or rubber sheet or bedpan) under the individual.
8. Remove the protective cap and lubricate the catheter tip with the appropriate lubricant.
9. Place the tip of the catheter at the rectal entrance and ask the individual to take a deep breath and exhale through the mouth. This process will help relax the rectal sphincter.
10. **GENTLY** insert the catheter tip past the internal sphincter approximately one inch and administer the enema **SLOWLY**, using no more than the prescribed amount of solution to prevent the body from expelling the solution.
11. After instillation remove the catheter and ask the individual to retain the solution as long as possible or as ordered.
12. Discard used materials, remove gloves and wash hands thoroughly.
13. Document administration and note any response of the individual to the procedure.
14. Record any stool(s) the individual may have by date, time, amount, and color.
15. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 13: Demonstrate the Administration of Enemas

PRE-PACKAGED ENEMAS

1. Read the health care provider's order form (PMOF), pharmacy label and the MAR. Read the instructions carefully.
2. For maximum absorption the bladder should be emptied **PRIOR** to the enema.
3. Collect all of the apparatus **PRIOR** to preparing the person. Note the temperature of the solution to be administered.
4. Wash hands and put on gloves.
5. Explain the procedure to the individual.
6. Ask the individual to lie on his/her left side and draw his/her right leg toward the waist. (See instruction page that accompany's the pre-packaged enema)
7. Depending on the environment **AND** the person's ability to retain the enema, place chux or a rubber sheet or bedpan under the person.
8. Remove protective covering from rectal tube and lubricate tube with a water soluble lubricant such as K-Y Jelly. Vaseline is not a water soluble lubricant.
9. Insert lubricated tip into rectum approximately one inch past rectal sphincter. Insert solution slowly by compressing plastic container.
10. After installation, remove the tip and ask the individual to retain the solution as long as possible or as ordered.
11. Replace used container in its original package for disposal.
12. Remove gloves and wash hands.
13. Document administration and any response of the individual to the procedure.
14. Record any stool(s) the individual may have by date, time amount and color.
15. Report any negative effects to the assisted living manager and the delegating nurse.

Objective 14: Demonstrate the application of a Topical-Patch

ADMINISTRATION OF A TOPICAL-PATCH MEDICATION

Patch Medications

1. Read the health care provider's order form (PMOF), pharmacy label and the MAR and any package instructions for how to use.
2. Wash hands and apply gloves
3. Remove any wrapping or packaging.
4. If a patch is in place:
 - a. Remove the old patch, observe for any redness; irritation, etc. Dispose of old patches per facility written policy.
Clean the skin where the old patch was removed;
 - b. Apply the new patch to a new area of the individual's body according to the instructions.
 - c. Remove gloves and wash hands.
5. Record where you placed the new patch on the client's body in the medication record.
6. Document administration and note any response of the individual to the procedure.
7. Report any changes in the skin such as redness or discoloration to the Assisted Living Manager and the delegating nurse.

(Please note: Topical medication can be prescribed for internal (systemic) effect.

All topicals (creams, ointments, salves) just as all other special routes of administration, should be reviewed with the delegating nurse prior to administration.

Objective 15: Demonstrate gastrostomy tube care and administration of feedings.

GASTROSTOMY TUBE FEEDINGS

WHAT IS IT:

A gastrostomy is an opening made in the individual's stomach near the belly button. A tube is inserted into the opening that goes into the individual's stomach. The feeding is inserted into the tube and the food goes into the stomach.

WHY IS IT USED:

The individual has a gastrostomy tube because he/she cannot suck or swallow or because he/she cannot get enough food to maintain nutrition. Sometimes an individual can swallow but when he/she does swallow they choke. Therefore, a gastrostomy tube is placed by the physician so the person can get enough nutrition without choking.

DESCRIPTION OF GASTROSTOMY TUBES

The gastrostomy tube comes in a wide variety of sizes and shapes ranging from small to large (the numbers get bigger as the size goes up). The tubes are held in place mechanically either by a bulge in the tube or by a balloon that is inflated after insertion.

GASTROSTOMY FEEDING SYSTEMS

Feedings can be done in two (2) ways:

1. **GRAVITY DRIP BAGS** - Using one of the various commercial sets, the flow is controlled by the size of the tube, the height of the feeding bag and the thickness of the solution being given. It can be regulated by changing the diameter of the tube with a clamp. This method is used if there are large amounts to be given over a long period of time, or if the amount must be given very slowly to prevent vomiting.
2. **PUMPS** - A feeding pump may be indicated where very precise amounts of fluid need to be given over an extended period of time, such as continuous feedings. **Use of the feeding pump requires awake staff supervision.**

Guidelines For the Care of the Gastrostomy Tube Insertion Site

PURPOSE

To decrease the potential for infection.

EQUIPMENT AND SUPPLIES

Soap, water and washcloth

PROCEDURE

1. During the daily bath, cleanse the gastrostomy site with soap and water.
2. Allow the site to air dry before placing clothing over the site.
3. **If the site becomes coated or crusted:** call your delegating nurse.
4. **If the site becomes reddened:** call your delegating nurse.
5. **If the site becomes infected:** call your delegating nurse.

Miscellaneous:

1. Gastrostomy tube site care must be provided at least once daily.
2. Care must be taken to maintain a clean insertion site and clean administration equipment.
3. Do not use dressings, tape, gauze, ointments and creams over the site unless ordered by Health Care Provider.

What to Report and When

If you see any of the following contact your delegating nurse as soon as possible.

1. An increase in redness.
2. Secretions from the stomach irritating the skin.
3. A lot of movement of the tube, “the tube has been pulled out”, some bleeding.
4. Pieces of tissue rising above the skin around the tube (granulation).
5. The tube being pulled into the stomach by tugging of the stomach (peristalsis).
6. Hissing or flow of liquid around the tube.
7. Continuous flow of liquid around the tube on the outside of the individual’s stomach.
8. Clogging with medicines, etc.

Covering the Gastrostomy Site

1. If the site is well-healed then covering is a matter of personal preference
2. If there is drainage then follow your delegating nurse’s instruction

HOW TO DO A RESIDUAL CHECK

If the individual's physician does not want the gastric fluids aspirated, he/she must write a physician's order. If no order is given check with your delegating nurse.

EQUIPMENT NEEDED

1. Feeding syringe
2. Stethoscope
3. Cup with tap water

How to check for residual

1. Explain the procedure to the individual.
2. If not contraindicated, elevate the head of the bed 45/.
3. Wash hands and put on gloves.
4. Draw up syringe to 30cc mark and connect syringe to feeding tube.
5. Place stethoscope over the stomach.
6. Instill 30cc of air into the tube-listen for sound of air rushing into the stomach.
7. Release pressure on feeding syringe - allow syringe to fill with stomach contents.
8. If there is over 1oz (30 cc), or other amount specified by the health care provider, of undigested formula in the stomach when you aspirate, reinstill it slowly and wait from ½ to 1 hour to allow time for this amount to be digested.
9. If after waiting, there remains a large amount of curdled formula in the stomach it can indicate a slight stomach upset. Rather than give the scheduled amount of formula, call your delegating nurse.
10. If there are streaks of bright red or coffee-colored or black liquid and you have not been aware of a nose bleed, or something happening in the mouth to cause bleeding, immediately notify your delegating nurse, the assisted living manager and the individual's physician.
Save a small amount of the aspirate for the nurse or physician to see.

COMMON TUBE FEEDING PROBLEMS (When any of these problems are observed notify your delegating nurse)

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>
1. DIARRHEA-----	too rapid feeding too concentrated formula intolerance to formula medications the individual is receiving
2. CRAMPING-----	cold formula tube in wrong place too rapid feeding
3. CONSTIPATION-----	inadequate fluid low fiber diet lack of activity
4. NAUSEA -----	during feeding this may indicate delayed gastric emptying
5. REFLUX -----	large residual in stomach (physiologic problem)
6. VOMITING-----	too rapid feedings tube too large improper tube placement large residual in stomach formula too concentrated medication given with feeding
7. ASPIRATION-----	prolonged choking and coughing with difficulty breathing during or immediately following feeding, change in skin color or elevated temperature. Possible causes include vomiting, improper tube placement, choking and coughing or improper positioning.

IF THERE IS VOMITING DURING THE FEEDING, STOP THE FEEDING IMMEDIATELY AND NOTIFY YOUR DELEGATING NURSE. IF THERE IS VOMITING BETWEEN FEEDINGS, NOTIFY THE DELEGATING NURSE IMMEDIATELY.

GENERAL GUIDELINES FOR GASTROSTOMY TUBE FEEDINGS

PURPOSE

To provide guidelines for the safe administration of tube feedings.

EQUIPMENT AND SUPPLIES

1. Feeding syringe
2. Stethoscope
3. Cup with water
4. Feeding solution
5. Tube feeding administration tubing and bag (as indicated)

Procedure

1. Read the health care provider's order form, the MAR, the pharmacy label and any other instructions.
2. Assemble all equipment, wash hands and put on gloves.
3. Check for residual.
4. Place feeding solution in feeding bag. Attach administration tubing. Allow solution to run through to end of tubing. Clamp and hold for further use.
5. Remove the syringe and fill feeding syringe with 30 cc fresh tap water, being careful to remove air bubbles.
6. Using the feeding syringe filled with water, instill water into feeding tube. If no untoward effects are noted, connect the administration set. Unclamp.
7. Allow feeding solution to infuse as ordered, refilling feeding bag with formula as necessary. (Note: to avoid instilling more air into the stomach, do not allow feeding bag to completely empty before adding more solution).

8. After feeding solution has been fully administered, clamp administration tubing and the gastrostomy feeding tube.
9. Disconnect administration tubing.
10. Fill the feeding syringe with 30cc fresh tap water or the amount designated by the health care provider and instill the water into the feeding tube. (This flushes the feeding solution out of the gastrostomy tube into the stomach).
11. Clamp the gastrostomy tube.
12. Discard feeding bag and administration set every twenty-four (24) hours or per manufacturer's guidelines..
13. Remove any feeding solution from skin and feeding tube. Provide site care as indicated. (See procedure entitled "Gastrostomy Site Care" located in this Module).
14. Discard gloves and wash hands.
15. Document administration of the feeding and the individual's response.
16. Allow the individual to remain with head elevated 45°/for one (1) hour after completion of feeding cycle.

General Tips

1. If there is over 30 cc, or the amount specified by the health care provider, of secretions in the stomach when you begin to give a feeding, reinstill it slowly and wait from ½ to 1 hour to allow time for this amount to be digested.
2. Make sure that the solution/feeding/water you are giving is at room temperature or barely warmed.
3. If there is any sign of gastric discomfort, stop the feeding. Wait until the individual seems more calm and comfortable before slowly resuming the feeding.
4. If there is vomiting or prolonged coughing or choking, or continuing gastric discomfort, **STOP IMMEDIATELY** and call your delegating nurse.
5. The amount of feeding will depend on the individual's need for nourishment and liquids, the feeding schedule, and his/her ability to tolerate amounts at one time.

Miscellaneous

1. Hands must be washed before and after all contact with feeding tubes.
2. Proper placement of the tube must be checked by observation and auscultation before the instillation of any liquid into it. Contact the delegating nurse if any deviations are noted.
3. All feeding tubes must be irrigated before and after administration of all feedings and medication.
4. Remember each medication must be administered separately and followed by 5 to 10 cc of tap water.
5. Gastrostomy tubes should be anchored so as not to be dislodged. Site care must be provided daily or per health care provider's order.
6. Care must be taken to observe for aspiration. The individual must have head elevated to 45/ during feedings and for one (1) hour after administration if not contraindicated.
7. Syringes used for administration of medications, water and to check patency, should be marked with the individual's name and date. Clean and dry the syringe after each use. Disinfect per facility policy or discard every twenty-four (24) hours.
8. Open syringes should be stored in the plastic sleeve they are packaged or other protective covering.
9. Administration bag and tubing must be marked with the individual's name and the date.
10. **Staff persons with signs and symptoms of gastrointestinal illness (nausea, vomiting, or diarrhea) MAY NOT be involved with preparation or handling of any gastrostomy feedings or medication administration.**
11. Care must be taken when opening formula cans. Tops should be washed off prior to opening.
12. Any increase in the number of stools the individual has daily must be documented. Three (3) liquid stools in a twenty-four (24) hour period **MUST** be reported to the delegating nurse.
13. The plastic cap on the end of the administration set may be saved and used to cap the end of the tubing should interruption of the administration be necessary.
14. If a portion of the canned feeding is used, the remainder must be sealed and labeled with the

following information: individual's name, date and time of opening. After opening, store per manufacturer's guidelines.

15. Feeding syringes or formula may not be shared between patients.

Objective 15: Demonstrate blood glucose monitoring

1. Check the health care provider order form, the MAR and the instruction for the glucometer.
2. Assemble the equipment:
 - a) glucometer;
 - b) non-sterile gloves;
 - c) auto click with lancet; or safety lancet;
 - d) alcohol swipes;
 - e) cotton balls or tissue;
 - f) test strips;
 - g) sharps container.
3. Perform as ordered by the health care provider **AND** in an emergency to determine if hypoglycemic or hyperglycemic.
4. Explain the procedure.
5. Wash hands and put on gloves.
6. Follow manufacturer guidelines for the specific glucometer machine.
7. Dispose of Lancet in sharps container, remove gloves and wash hands.
8. Record and report results to the designated person.
9. Perform control tests on the glucometer per facility policy and manufacturer directions.

Objective 16: Demonstrate Insulin Injection

Insulin Administration

Procedure:

1. Check the health care provider order form (PMOF), the MAR, and the pharmacy label for instruction.
2. Assemble the equipment:
 - Sterile syringe and needle
 - resident's insulin
 - Alcohol swab or cotton ball
 - moistened with 70% alcohol
 - Sharps container
3. Wash your hands and put on gloves.
4. Match the syringe size with the concentration of insulin. U-100 syringes must be used with U-100 insulin.
5. Gently roll and warm the insulin bottle several times to mix insulin. Be sure it is completely mixed. DO NOT shake bottle.
6. Wipe top of bottle with alcohol swab.
7. Remove needle cover and draw air into the syringe by pulling back on the plunger. The amount of air should be equal to the insulin dose.
8. Put needle through rubber top of insulin bottle and push plunger in.
9. Turn bottle and syringe upside down in one hand. Be sure tip of needle is in insulin. Your other hand will be free to move the plunger. Pull back on the plunger 5 units beyond the prescribed dose.
10. Check for air bubbles. To remove air bubbles tap syringe to allow air bubbles to rise toward the needle. Push plunger toward needle to prescribed dose.
11. Double check the dose and pharmacy label with another staff member. Pull bottle off needle. Cover needle with guard.
12. Cleanse the individual's skin with alcohol swab.
13. Pick up the syringe as you would a pencil and remove the cap. Stabilize the skin by

spreading it by pinching a large area of skin together.

14. Insert the needle straight into the skin all the way to the hub. Release the skin and inject insulin by pushing plunger all the way down.
15. Hold alcohol swab near the needle and pull needle straight out of skin. Press alcohol swab over injection site for several seconds.
16. Remove gloves, wash hands and record administration of insulin.
17. Use disposable syringe only once to insure sterility of syringe and needle and accuracy of dose.
18. Dispose of syringe and needle in sharps container immediately.

General Tips

1. Site of injection should be changed each time the individual receives insulin.
2. A record of sites of injection should be kept (obtain from delegating nurse).
3. Avoid injecting near joints, groin area, the navel or the abdominal midline.
4. Do not inject into skin that is bruised or open.
5. The medication technician may **NOT** mix two kinds of insulins together in one syringe.
6. Syringes, needles and insulin may not be shared from one individual to another.
7. If there is an order for glucose monitoring, the glucose monitoring must be done **PRIOR** to insulin injection.
8. Do **NOT** administer insulin, if the glucose monitoring result is outside of the parameters established by the authorized prescriber. Notify the delegating nurse or the health care provider per facility policy.

Objective 17: Demonstrate Oxygen Administration

Equipment

1. Oxygen concentrator
1. Oxygen sign
2. Nasal Cannula
3. Humidifier bottle if needed

Procedure:

1. Explain procedure to resident.
2. Place sign "Oxygen in Use, No Smoking" outside the resident's room or front door of the facility.
3. Be aware of use of electrical equipment; woolen blanket, nylon or rayon clothing. Static electricity may be generated causing an explosion.
4. Utilize a Nasal cannula: two prongs project from the tubing and are inserted a short distance into the nostrils.
 - a) Apply nasal cannula with tubing gently over the ears and under chin.
 - b) Nasal irritation is possible from the prongs if cannula is too tight.
 - c) The nasal cannula is changed at least monthly or when the cannula is soiled or kinked.
- 5) Remove and clean cannula and cleanse nares at least once every 8 hours. If profuse nasal discharge is present, cannula is cleaned more often.
- 6) If the flow of oxygen is greater than 2 liters, a humidifier bottle filled with distilled water is in use. The name of the resident, room number and date must be written on the bottle when the water is changed. There are two systems of humidifier bottles available.
 - a) Open system: The humidifier bottle is changed weekly. Humidifier bottle water is changed every 24 hours. The bottle is emptied and filled to the line indicated on the bottle.
 - b) Closed system: The humidifier bottle is in a sealed, prepackaged system. This bottle needs to be changed weekly or earlier, if empty.
- 7) Observe resident for comfort and if respiratory distress is present, notify the Case Manager/ Delegating Nurse.
- 8) Record oxygen therapy on treatment record. Chart pertinent observations.
- 9) List the resident on the Oxygen Concentrator Usage Log if applicable.

General Tips:

1. Check for redness on the tops of the ears, cheeks and nose. Notify the case manager/delegating nurse if present.
2. Check the oxygen gauge for proper liter flow as ordered by the authorized prescriber.
3. If resident is ambulatory, extension tubing may be necessary. Be aware of safety issues such as other residents tripping over the tubing or other residents wheeling the wheelchair over the tubing etc. Consult with the oxygen or respiratory therapy company for alternative equipment.
4. Perform thorough, frequent mouth care as oxygen dries out the mucus membrane.
5. Check frequently to assure tubing is always connected to the oxygen.

APPENDIX

SAMPLE MARS

SAMPLE MAR ALICE ADAMS

SAMPLE MAR BOB BROWN

CDS DRUG CONTROL FORM

NON-CONTROLLED DRUG DISTRUCTION LOG

OFFICE OF HEALTH CARE QUALITY-ASSISTED LIVING PROGRAM

MEDICATION ADMINISTRATION RECORD

AGENCY		MO	YR																																				
Start Date	Medication Dosage	D/C DATE	HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
DIAGNOSIS:																																							
ALLERGIES:			DIET:																																				
PHYSICIAN:			DELEGATING REGISTERED NURSE																	DATE:																			
NAME:																	SEX:				BIRTHDATE:				Page:														

AGENCY	MO	YR
GSAH	2	03

MEDICATION ADMINISTRATION RECORD

Start Date	Medication Dosage	D/C DATE	HOUR																																				
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
2/5/03	Digoxin 0.25 mg. Give 1 tablet daily by mouth if pulse is 60 or over at 8am		8am																																				
2/5/03	Potassium Chloride (Klorless 10% liquid). Give 1 tablespoon by mouth twice a day, 8am, 5pm		8am 5pm																																				

DIAGNOSIS: Heart Failure		DIET: Regular, no salt added	
ALLERGIES: Penicillin, Eggs		DELEGATING REGISTERED NURSE Mary Jones RN	
PHYSICIAN: Dr. William Mays		DATE: 2/1/03	SEX: F
NAME: Alice Adams		BIRTHDATE: 9/11/1914	Page:

MEDICATION ADMINISTRATION RECORD

AGENCY		MO	YR																																			
GSAH		2	03																																			
Start Date	Medication Dosage	D/C DATE	HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
				2/1/03	Lasix 40mg tablets. Give 2 tablets (80mg) by mouth at 10 am		10am																															
2/1/03	Tetracycline 250mg 1 tablet by mouth 3 times a day. 8am, 2pm, 10pm		8am 2pm 10pm																																			
2/15/03	Milk of Magnesia. Give 2 tablespoons by mouth if no bowel movement for 3 days.		PRN see back																																			

DIAGNOSIS: <i>Diabetes, hypertension</i>	
ALLERGIES: <i>None</i>	DIET: <i>1800 Calorie Diabetic</i>
PHYSICIAN: <i>Dr. John Morgan</i>	DELEGATING REGISTERED NURSE <i>Mary Jones RN</i>
NAME: <i>Bob Brown</i>	DATE: <i>2/1/2003</i> SEX: <i>M</i> BIRTHDATE: <i>6/22/1914</i> Page:

CDS DRUG CONTROL FORM

Individual Louise Scott Date sheet started 1-9-04

Medication Percocet T Tab PO Prescription no. 2234561

Prescriber Dr. Donald Berry Directions Every 4-6 hrs Pain

DATE	AMT RECD	AMT GIVEN	NURSE SIGNATURE	AMT LEFT	OFF DUTY	ON DUTY
1-9-04	15	Rec from Pharmacy at 5 PM		14	7am	
					3pm	
					11pm	
					7am	
					3pm	
					11pm	
					7am	
					3pm	
					11pm	
					7am	
					3pm	
					11pm	
					7am	
					3pm	
					11pm	
					7am	
					3pm	
					11pm	
					7am	

Non-Controlled Distruction Log

Individual Name	Drug Name and Strength	Amount Destroyed	Date of Destruction	Method of Destruction	Signature of Two Witnesses	

OFFICE OF HEALTH CARE QUALITY
ASSISTED LIVING PROGRAM
POLICIES - MEDICATION ADMINISTRATION

1. Medication Samples dispensed by the Health Care Practitioner must be labeled in accordance with Assisted Living Regulation 10.07.14.21. This may be accomplished by either the prescriber writing the information on the medication packaging or, using a prescription form. It is recommended that all Assisted Living Managers check with their Pharmacist for possible drug interactions with other prescribed medications.

2. Residents who will be absent from the home for a period of time or for a short leave with family, or overnight leave of absence, should have their medications sent with them in either a) the original pharmacy packaging or in limited dose packaging supplied by the pharmacy or, b) in containers properly identified by the delegating Registered Nurse, filled from the original pharmacy dispensed packaging.

3. Over the Counter (OTC) Medications shall be accepted and administered only when received in the original manufactures sealed packaging. This would include any oral medication, nutritional supplements, nasal sprays or suppositories.