

Orange County

In~Home Supportive Services



Public Authority



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PARTNERSHIP FOR SUCCESSFUL PROVIDERS *Training*



MEDICATION MANAGEMENT

Working hand in hand with the community to serve IHSS Consumers so they may remain safe and independent in their own home.

Overview



- **Objective**
- **Statistics**
- **Factors Contributing Toward Ineffective Treatment**
 - Affordability
 - Inaccurate Use of Medicine:
 - Vision Impairment, Memory Loss, Difficulty Swallowing, Difficulty Opening, Hearing Loss, Social Isolation
 - Interaction with Other Medications
 - Polypharmacy, Food and Herbs
 - Allergies
 - Adverse Reaction
 - Side Effects
- **What to Consider for Proper Medication Management**
 - Safety
 - Lighting
 - Administration
- **How You Can Help**

Objective



- To recognize the importance of medication management
 - To recognize the factors that contribute to ineffective treatment
 - To learn steps that must be taken to help in the management of medications
- in order achieve, as best possible, the medical health professional's objective for his/her patient.

Statistics



“It is estimated that more than 700,000 individuals are seen in hospital emergency departments for adverse drug events each year in the United States. Nearly 120,000 of these patients need to be hospitalized for further treatment. This is an important patient safety problem, but many of these adverse drug events are preventable.”

Centers for Disease Control and Prevention

Statistics

MEDICATION MANAGEMENT STATS

MEDICATION ERRORS ARE FREQUENT



of adverse drug events (ADEs) are preventable



of all seniors make some kind of error when taking their medications



ADE occurrence rate among older individuals

40% enter nursing homes because they can't self-medicate in their own homes

30% of all hospital admissions for seniors are directly attributable to missed or overdoses of medication

over **21%** of all drug-related health complications are caused by patients failing to adhere to their medication regimens

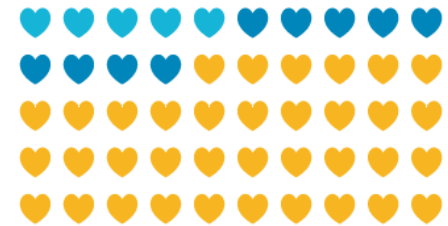
20% OF THE AGING POPULATION AVERAGE:

5 CHRONIC CONDITIONS

14 PHYSICIANS SEEN ANNUALLY

50 PRESCRIPTIONS FILLED ANNUALLY

ELDERLY PATIENTS



33%

Of adverse drug events are preventable

7,000

Deaths per year due to adverse drug events

\$120 BILLION

Cost of drug-related mortality for seniors

THE AVERAGE SENIOR IS ON BETWEEN 8-15 MEDICATIONS

Factors Contributing Toward Ineffective Treatment

55% of older adult patients are “non-compliant” with their prescription drug orders - medications are not taken as prescribed.

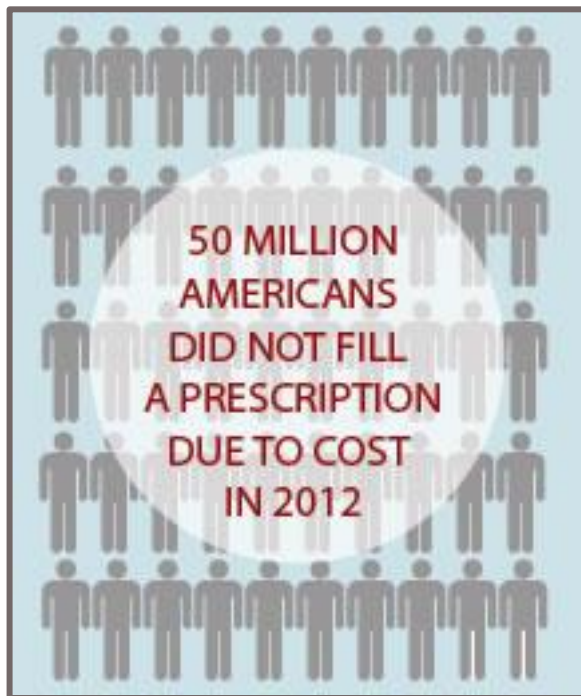
These are some of the most common reasons that contribute to inaccurate use of medications.

- Affordability
- Inaccurate Use of Medicine
 - Vision Impairment
 - Memory Loss
 - Difficulty Swallowing
 - Difficulty Opening
 - Hearing Loss
 - Social Isolation
- Interaction With Other Medications
 - Polypharmacy
 - Food and Herbs
- Allergies
- Adverse Reaction
- Side effects

Factors Contributing Toward Ineffective Treatment: **Affordability of Medications**

COST OF MEDICATION vs. INCOME

Individuals with low or fixed income may not have sufficient funds to purchase the medications they require.



The 50 million Americans who did not fill a prescription due to cost is an increase of 2 million from 2011.

The study did not include older adults therefore, the number of individuals who do not-adhere to health care professional orders due to cost would be much greater.

Factors Contributing Toward Ineffective Treatment:

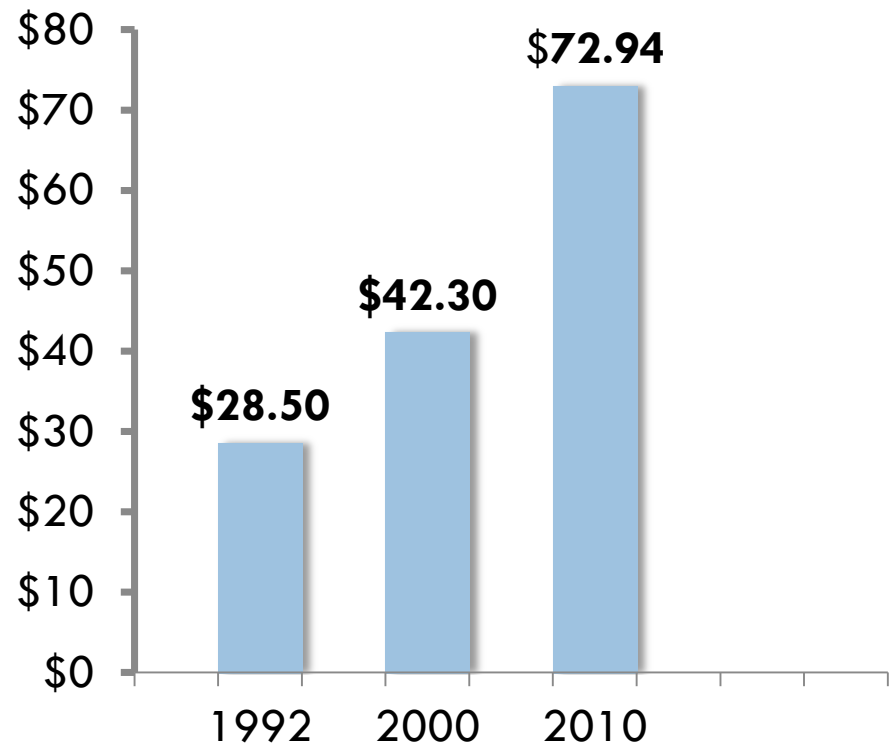
Affordability of Medications

The increasing cost of medication impacts the ability of many seniors to purchase needed medication.

SUGGESTED SOLUTIONS:

- Ask the prescribing professional if there is a generic or over-the-counter form of that medication.
- Ask for samples.
- Ask for senior discounts.
- Shop the internet for possible savings. Consider only sites with the Verified Internet Pharmacy Practice Sites (VIPPS) seal of approval. These sites are properly licensed and have been reviewed and inspected by the National Association of Boards of Pharmacy (www.nabp.net)

Spending on Prescription Drugs for the Elderly 1992 - 2010 (in billions)



Source: Families USA

Factors Contributing Toward Ineffective Treatment: Inaccurate Use of Medications Due to Vision Problems

VISION PROBLEMS

- Unable to read the labels
- Unable to distinguish between the pills



SUGGESTED SOLUTIONS

- Large-print labels
- Color Coded packaging
- Audio Label
- Make sure lighting is adequate



Factors Contributing Toward Ineffective Treatment:

Inaccurate Use of Medications Due to Memory Loss

MEMORY LOSS

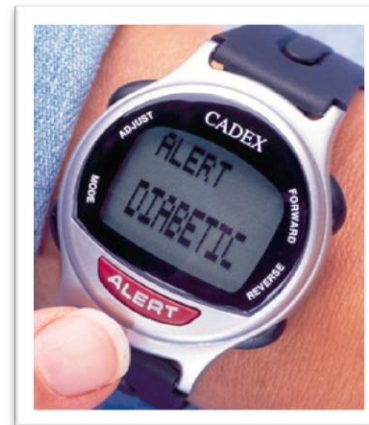
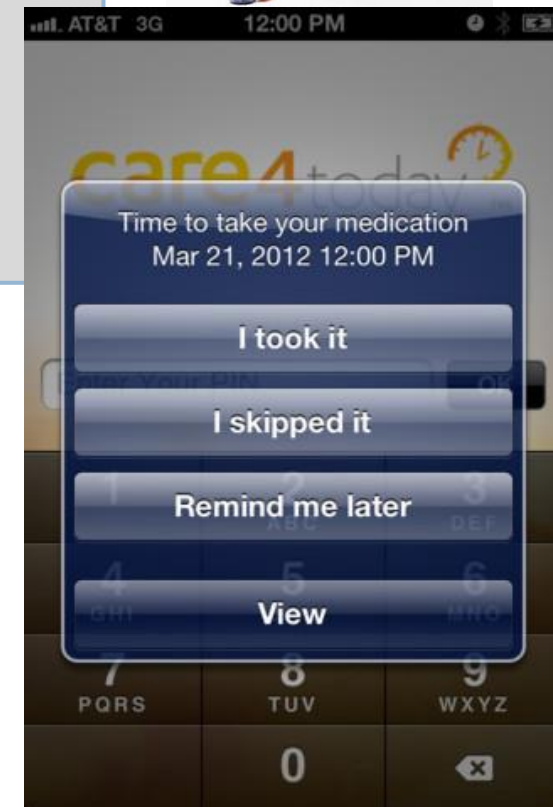
- Elders who have Alzheimer's or another form of dementia are at great risk of not taking their medications as directed.
 - Doses are skipped.
 - The person may have forgotten they already took their medication and take an additional dose.
 - They may take the wrong medication.
 - Medications labeled "take as directed" are confusing – directions must be clear and precise.



Factors Contributing Toward Ineffective Treatment: Inaccurate Use of Medications Due to Memory Loss

SUGGESTED SOLUTION for helping individuals with Memory Loss

- Old fashioned alarm clock
- Watch alarm
- Phone application designed for medication reminders
- Manual chart



Factors Contributing Toward Ineffective Treatment:

Inaccurate Use of Medications Due to Difficulty Swallowing



Difficulty Swallowing

Difficulty swallowing is common and occurs for a variety of reasons. **ALWAYS FOLLOW DIRECTIONS** and **DO NOT** alter the composition of the medication without first consulting the prescribing professional and/or pharmacist first.

SUGGESTED SOLUTIONS

Consult with the pharmacist. Ask if:

- The medication can be placed in applesauce or other food
- The medication is available in liquid form
- Crushing the medication is possible
- The medication can be coated
- The medication can be dissolved in a liquid



Factors Contributing Toward Ineffective Treatment:

Inaccurate Use of Medications Due to Difficulty Opening Containers



Difficulty Opening Containers

Individuals who are unable to grip the container properly or who experience difficulty opening the container may not be able to take medications as prescribed.

SUGGESTED SOLUTIONS

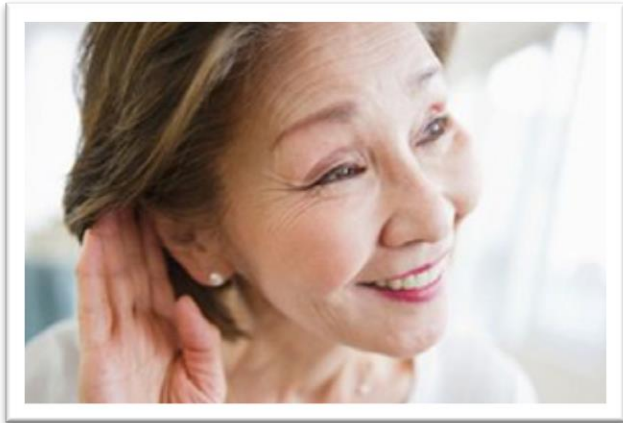
- Ask the pharmacist for “easy open” lids.
- Ask the pharmacist for flip-top containers.
- Consider the use of devices designed to open containers.



PLEASE NOTE: It is important to remember that easy-to-open containers must be kept out of the reach of children and pets. Please call 911 if medications have been accidentally ingested.

Factors Contributing Toward Ineffective Treatment:

Inaccurate Use of Medications Due to Hearing Loss



Hearing Loss

Sometimes individuals are unable to clearly understand or hear directions from the prescribing medical professional or pharmacist and are embarrassed to admit they can't hear well.

SUGGESTED SOLUTIONS

- Ask for directions to be repeated. It's better to ask than to deal with the consequences of taking the medication incorrectly.
- Consider having another individual accompany you/the Consumer to appointments or the pharmacy.
- Ask for clear, written directions.

Factors Contributing Toward Ineffective Treatment:

Inaccurate Use of Medications Due to Social Isolation

Social Isolation

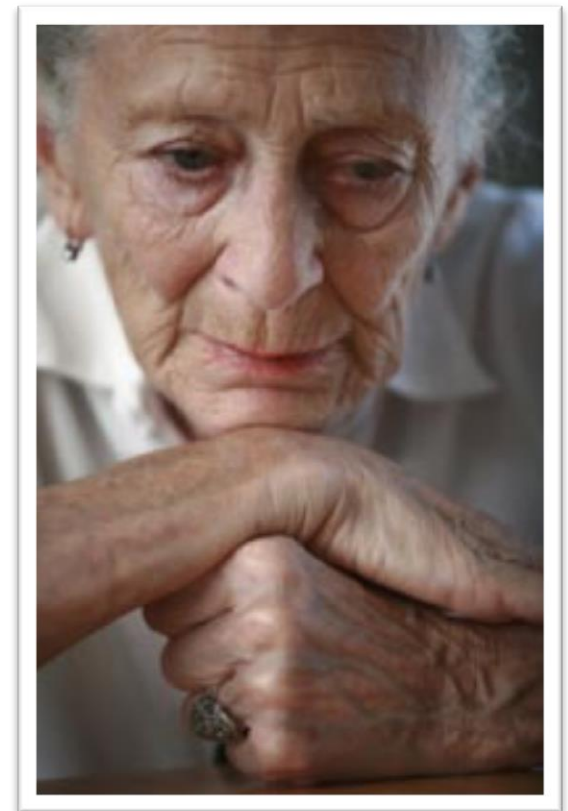
Individuals who lack social interactions or connectedness with their peers, family, and/or friends, are at greater risk of developing apathy and depression.

Individuals who are isolated:

- Often ignore medical professional directives
- Do not follow medication regimen
- Do not follow proper diet

SUGGESTED SOLUTIONS

- Support from a homecare provider
- Encouragement to develop a network of peers
- Involvement in social activities
- If the individual's behavior does not improve, please notify the individual's family, authorized representative, medical professional caring for the individual, and/or social worker if applicable. The individual may have other conditions that need to be addressed.



Contributing Factors Toward Ineffective Treatment:

Interactions With Other Medications

Listed below are a few of the many symptoms associated with polypharmacy, the use of multiple medications by one individual.

- Tiredness, sleepiness or decreased alertness
- Constipation, diarrhea or incontinence
- Loss of appetite; confusion, either continuous or episodic
- Falls
- Depression or general lack of interest
- Weakness
- Tremors
- Hallucinations
- Anxiety or excitability
- Dizziness
- Decreased sexual behavior
- Skin rashes

SUGGESTIONS OF HOW TO REDUCE THE RISK POLYPHARMACY

- Make every physician involved in the treatment, aware of every medication, multivitamin and over the counter (OTC) medication being used.
- Become familiar with the side effects and possible conflicts with other medications.
 - Consult with the physician and pharmacist.
 - Read the package inserts.
 - Use the same pharmacist to fill all medications and refills prescribed.
 - Request from the pharmacist a database analysis of each drug combination which will identify side effects and conflicts, if any, of the medications.



Certain food
and herbs
interact with
and affect
medications.



Contributing Factors Toward Ineffective Treatment:

Interactions With Other Medications

The interaction of medications, due to polypharmacy and interaction with certain food and herbs, increases the risk of an ineffective treatment or the risk of dangerous side effects.

The following is a list of some of the most common interactions. ***Please contact the prescribing medical health professional or pharmacist for information related to your or the Consumer's medications.***

- The use of aspirin and foods high in vitamin K have an affect on blood thinners such as Coumadin/Warfarin, affecting the anticoagulation properties of these medications.
 - This can result in hemorrhaging or blood clotting.
- Grapefruit can interfere with important intestinal enzymes, making it easier for about 85 different medications to absorb into the blood stream, increasing the risk of side effects.
- Cranberry juice can dangerously amplify the effect of Lipitor and other statin medications.
“Statin” is a type of drug prescribed to lower cholesterol.



Contributing Factors Toward Ineffective Treatment: Interactions With Other Medications

- Bananas or foods high in potassium can be problematic for individuals taking medications to reduce blood pressure.
- High-fiber foods can slow the rate at which certain medications, such as antibiotics, are absorbed into the blood stream.
- St. John's Wort decreases the concentration or effect of medications, such as but not limited to, anticoagulants, oral contraceptives, medications used to treat respiratory diseases, heart conditions, and HIV.



Contributing Factors Toward Ineffective Treatment: **Allergies**

Allergy symptoms are the result of a chain reaction that starts in the immune system, which controls how the body defends itself.

The immune system identifies the drug/food as an “invader” or allergen.

The immune system reacts by producing antibodies to the drug.

The antibodies attacks the drug, causing an allergic reaction.

Contributing Factors Toward Ineffective Treatment: **Allergies**

Individuals who experience an allergic reaction to a certain medication will have to discontinue the use of the prescribed medication.

Allergic reactions vary by individual and his/her reaction to the medication.

- Allergic reactions cause symptoms in the nose, lungs, throat, sinuses, ears, lining of the stomach or on the skin.
- Most allergic reactions occur within hours to two weeks after taking the medication.
- Rashes may develop up to six weeks after starting certain types of medications.
- One of the most severe allergic reactions is anaphylaxis (an-a-fi-LAK-sis).
 - Symptoms of anaphylaxis include hives, facial or throat swelling, wheezing, light-headedness, vomiting and shock.
 - Severe symptoms include loss of consciousness, severe breathing problems, rapid or weak pulse, rapid drop of blood pressure.

Anaphylaxis can result in death.

If an individual is experiencing a serious allergic reaction they must receive immediate medical attention.



Contributing Factors Toward Ineffective Treatment: **Adverse Reactions**

CDC stated that adults 65 years and older are twice as likely as others to come to emergency departments for adverse drug events - over 177,000 emergency visits each year.

Older adults are nearly seven times more likely to be hospitalized after an emergency visit, but most of these hospitalizations are due to just a few drugs known to require careful monitoring to prevent problems.

- **Blood thinners**
 - Increased risk of bleeding, unusual bruising, dizziness, weakness, a cut that doesn't stop bleeding
- **Diabetes medications**
 - Inadequate glycemic control
- **Seizure medications**
 - Problems with the liver or pancreas
 - A serious drop in the number of white blood (needed to fight infection) cells or platelets (needed to control bleeding)
 - Severe damage to bone marrow
 - Liver failure
- **Heart Medication**
 - Swelling of the face, throat, tongue, lips, eyes, hands, feet, ankles, or lower legs, hoarseness
 - Difficulty breathing or swallowing
 - Lightheadedness, fainting, chest pain
 - Rash, yellowing of the skin or eyes
 - Fever, sore throat, chills, and other signs of infection

Contributing Factors Toward Ineffective Treatment: **Side Effects**

Side effects are unexpected symptoms or feelings that patients can experience from the use of certain medications.

For example, in a study of patients who were prescribed a statin, a medication used to manage cholesterol, 62% of the participants said they discontinued using the statin due to the side effects.

Due to side effects individuals may:

- Discontinue using their medication(s)
- Take medication to treat the side effects, increasing their risk of other complications, side effects, or adverse effects

Side-effects of Statin Medications



What to Consider for Proper Medication Management

Safety

- Prescription medications must be consumed only by the person it has been prescribed to.
- Follow the prescribing healthcare professional's directives.
- Never use another person's medications.
- Never share or sell your medications with others.
- Properly discard of unused and expired medications.
- Store medications safely and out of the reach of children.

Lighting

- Ensure the area where medications are organized and consumed/applied has adequate lighting.

Administration

- Encourage the use of medication organizers and a reminder system to help avoid missed doses.



How You Can Help

- Help the Consumer take medications as prescribed. **Consistency is important!**
 - Use a wall calendar.
 - Develop a routine.
 - Take evening medications after dinner or after brushing their teeth. This is important for Consumers who are alone when medication must be taken.
 - Use an alarm system for reminders.
 - Ask the healthcare professional or pharmacist what to do if a dose is missed.
- Assist the Consumer in the organization of his/her medication in pill boxes or other method the Consumer prefers.
- Assure that the medication is properly stored.
 - Should the medications be refrigerated or stored at room temperature?
- Ask the doctor to add the purpose of the medication on the prescription label.
- Ask the pharmacist to help identify possible interactions with other medications.
 - Important when adding a new medication to an existing regimen
 - Important when multiple physicians prescribe medications for one individual

How You Can Help



- Prepare meals with consideration of the Consumer's health and possible interactions with the medications.
- Encourage a "Brown Bag Checkup" of medications during every visit with a health care professional. Include supplements, medicinal herbs, vitamins, and over the counter medications.
 - Is each medication still needed?
 - Should any changes be made?
 - Ask if there are any interactions with other medications being taken.
- Help the Consumer go through medications to check for expiration dates and discard all medications no longer needed or expired.
 - A list of locations where medications can be discarded properly is attached.
 - Ask your local pharmacist if they will take the medications.
- Keep an updated list of medications, including over the counter medications, doses, and directives – update every time a medication is added, removed, or changed.

How You Can Help

Encourage the Consumer to Practice the 5 Rights

- Is it the right medication?
- Is the medication for the right patient/Consumer?
- Is the patient/Consumer taking the right dose?
 - Use a measuring device, NOT spoons from the kitchen
- Is the medication being taken using the right route?
 - By mouth, topically, intravenously, suppository, etc.
- Is it the right time to take the medication?
 - Does 3 times/day mean breakfast, lunch, and dinner or 8 hours apart?
 - Is there a time limit on the use of the medication
 - 7 days, 30 days, long term use, etc.?



Resources



Aging Care

<http://www.agingcare.com/Articles/Polypharmacy-Dangerous-Drug-Interactions>

Aging in Stride (12-page guide)

http://aginginstride.org/emergencyprep/docs/Just_in_Case.pdf

Center for Disease Control and Prevention

www.cdc.gov/MedicationSafety

Epilepsy Foundation

<https://www.epilepsy.com>

Families USA

www.familiesusa.org

Federal Drug Administration

www.fda.gov

Red Cross

www.redcross.org



Thank you for attending

Any Questions ?