

# Improving Medication Management in ALFs: A Pharmacist's Perspective

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# Medication Management in ALFs

- Medication management is one potential IADL that a resident may receive assistance with
  - **Approximately 85% of residents get help with their medications**

- Since ALF's are regulated by the state rather than federal government, variations of regulations exist
- In 2003, the Assisted Living Workgroup created a list of recommended policies concerning medication management in ALF's

# Recommended Policies for Medication Management

- Medication orders, including telephone orders
- Pharmacy services
- Medication packaging
- Medication ordering and receipt
- Medication storage

- Losben NL. Medication management programs: A safe investment. *Assisted Living Consult*. January/February 2005.23-25.
- Assisted Living Federation of America (ALFA). *2006 Overview of Assisted Living Facts & Trends*. Alexandria, VA:ALFA;2006

# Recommended Policies, cont'd.

- Disposal of medications and medication-related equipment
- Medication self –administration by the resident
- Medication reminders
- Medication administration

Losben NL. Medication management programs: A safe investment. *Assisted Living Consult.* January/February 2005.23-25.  
Assisted Living Federation of America (ALFA). *2006 Overview of Assisted Living Facts & Trends.* Alexandria, VA:ALFA;2006

# Recommended Policies, cont'd.

- Medication administration – specific procedures
- Documentation of medication administration
- Medication error detection and reporting

Losben NL. Medication management programs: A safe investment. *Assisted Living Consult*. January/February 2005.23-25.  
Assisted Living Federation of America (ALFA). *2006 Overview of Assisted Living Facts & Trends*. Alexandria, VA:ALFA;2006

# Recommended Policies, cont'd.

- Quality improvement system, including medication prevention and reduction
- Medication monitoring and reporting of adverse drug effects to the prescriber

# Recommended policies, cont'd.

- Review of medication
- Storage and accountability of controlled drugs
- Training, qualifications and supervision of staff involved in medication management

- Losben NL. Medication management programs: A safe investment. *Assisted Living Consult*. January/February 2005.23-25.  
Assisted Living Federation of America (ALFA). *2006 Overview of Assisted Living Facts & Trends*. Alexandria, VA:ALFA;2006



# Importance of Medication Management in Assisted Living

- The purpose of the recommended policies were to help facilities create a medication management service that would work effectively and provide correct medication to the residents.

- The staff offering administration or assistance would be knowledgeable about the medication
- Residents that needed help with their medication would get the correct drugs
- A review of the medications would decrease potentially harmful interactions or effects as well as lower costs

- Assisted Living Workgroup Report to the U.S. Senate Special Committee on Aging. Topic Group Recommendations Adopted by Two-Thirds Majority of the ALW. April 2003

# Ongoing Medication Management Challenges....

- In 2008, 5 years later, a Medication Management Symposium noted that:
  - Balancing consumer safety and autonomy with self administration is ongoing
  - Lack of trained healthcare professionals specializing in geriatrics caring for residents in ALFs

Report from an Expert Symposium on Medication Management in Assisted Living

accessed <http://www.assistedlivingconsult.com/issues/04-04/alc78-White%20Paper-728b.pdf> on October 16, 2008.

# Challenges, cont'd.

- Lack of uniformity in state regulations regarding medication management, administration and assistance
- Little training is offered to unlicensed assistive personnel who administer medications

Report from an Expert Symposium on Medication Management in Assisted Living

accessed <http://www.assistedlivingconsult.com/issues/04-04/alc78-White%20Paper-728b.pdf> on October 16, 2008.

What have we seen in ALFs?

# Increasing Numbers of Medications Used

- A study from 2001 focusing on 608 residents living in 109 assisted living facilities found:
  - Residents received an average of 6.2 (+/-3.4) regularly ordered medications

- More than half (58.4%) of these medications consisted of cardiovascular, CNS or nutritional medications
- The high number of routine prescriptions could lead to potential drug related problems that could be avoided if a consultant pharmacist performed a medication review
- Armstrong EP, Rhoads M, Meiling F. Medication usage patterns in assisted living facilities. *The Consultant Pharmacist*. 2001;16(1).

# Inappropriate Medication Use

- A study from 2003 focusing on 456 residents from 124 different assisted living facilities found:
  - 144 residents had one or more possible inappropriate routine or as needed prescriptions according to Beer's criteria for a total of 204 inappropriate orders



- 64 orders were determined to have a rating of high severity
- Oxybutynin and propoxyphene were the two most frequently prescribed drugs that could be inappropriate
- Consultant pharmacy services resulted in 16.7% of the potentially inappropriate orders being stopped and 2.5% of the orders receiving dose changes (lower)

- Rhoads M, Thai Amy. Physician acceptance rate of pharmacist recommendations to reduce use of potentially inappropriate medications in the assisted living setting. *The Consultant Pharmacist*. 2003;18(3).

# How does this impact the residents in ALFs?

- Among the elderly, 28% of hospitalizations are due to medication adverse events or medication non-adherence
- One out of every four nursing home admissions is attributed to medication mis-management

- Adverse drug events have been reported as the 4th leading cause of death among seniors and are estimated to cost \$177.4 billion dollars each year
- Medication misuse is particularly high following hospitalization, and even more so when multiple changes are made to older patient's regimen

- Each year there are more than 180,000 potentially fatal or fatal adverse drug events among Medicare recipients.
  - 50% of these adverse events could have been prevented
- Medication-related problems due to inappropriate prescribing has been deemed one of the most important quality-of-care issues for elderly patients. For over two decades.

## Citations for previous three slides

- Nanada C, Fanale JE, Kronholm P. The role of medication compliance and adverse drug reactions in hospitalizations of the elderly. *Arch Intern Med* 1990;150:841-5.
- Berg JS, et.al. Medication compliance: a health care problem. *Ann Pharmacother* 1993;27(suppl):S5-S19.
- Lazarou J et.al. Incidence of adverse drug reactions in hospitalized patients. *JAMA* 1993;279:1200-5.
- Curtis LH, Ostbye T, Sendersky V, et.al. Inappropriate prescribing for elderly Americans in a large outpatient population. *Arch Int Med* 2004;164(15):1621-5.
- Forster AJ, et.al. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med* 2003;138:161-7; Beers MH, et.al. Influence of hospitalization on drug therapy in the elderly. *J Am Geriatr Soc* 1989;37:679-83.
- Gurwitz JH, Field TS, Harrold LR, et.al. Incidence and preventability of adverse drug events among older persons in the ambulatory setting. *JAMA* 2003;289:1107-16
- Fink A. et.al. Assuring quality of health care for older persons. *JAMA* 1987;258:1905-8.

# Potential Risks of Medications and Benefits of a Pharmacist

## 1) Medication Related Problems

- One out of every 5 emergency room visits are thought to be due to medication related problems
- The identification of medication related problems by a consultant pharmacist may save the health care system around \$2,250 dollars a year per resident by preventing unnecessary trips to the ER

## 2) Medication Errors

- Correct improper dosing, administration and orders

## 3) Higher Medication Expenditures:

- Reduce the resident's medication costs by changing to generics, less expensive similar drugs, or stopping medications that are not necessary

- Clark TR. Prevention of medication-related problems in assisted living: role of the consultant pharmacist. *ASCP Issue Paper*. 2003.

What are some of the things that a  
Pharmacy and Pharmacist can do to  
help you?



# 1. Perform a Medication Regimen Review (MRR)

- What is MRR?
  - “Thorough evaluation of the medication regimen of a resident, with the goal of promoting positive outcomes and minimizing adverse consequences associated with medications; The review includes preventing, identifying, reporting, and resolving medication-related problems (MRPs), medication errors, or other irregularities and collaborating with others members of the interdisciplinary team.”

## 2. Provide Ongoing Education to Direct Care Staff, Residents and/or the Family

- Medication management is based in the care process and includes:
  - Recognition or identification of the problem/need
  - Assessment
  - Diagnosis/cause identification
  - Management/treatment
  - Monitoring
  - Revising interventions

- Centers for Medicare and Medicaid Services. State Operations Manual. Appendix PP: Guidance to Surveyors for Long Term care facilities Rev. 26 , Accessed at [www.cms.hhs.gov/manuals/downloads/som107\\_Appendicestoc.pdf](http://www.cms.hhs.gov/manuals/downloads/som107_Appendicestoc.pdf). on October 16, 2008.

# 3. Assist with Assessing Resident's ability to Self Administer Medications

Various screening and assessment tools to evaluate a resident's ability to self medicate.

e.g., MediCog: evaluates the ability to set up a pillbox

Two Part Screen

Mini-Cog: detects clinically significant cognitive impairment

Medication Transfer Screen (MTS): evaluates skills in deciphering prescriptions and ability to sequence and locate

## 3. Assessing...con'td.

- Five to ten minutes to administer
- Requires a pencil and a preprinted MTS form.

- Centers for Medicare and Medicaid Services. State Operations Manual. Appendix PP: Guidance to Surveyors for Long Term care facilities Rev. 26
- Accessed at [www.cms.hhs.gov/manuals/downloads/som107\\_Appendicestoc.pdf](http://www.cms.hhs.gov/manuals/downloads/som107_Appendicestoc.pdf). on October 16, 2008.

## 4. Assist with Pharmaceutical Services

Pharmaceutical Services” refers to:

- The process (including documentation, as applicable) of receiving and interpreting prescriber’s orders; acquiring, receiving, storing, controlling, reconciling, compounding (e.g., intravenous antibiotics), dispensing, packaging, labeling, distributing, administering, monitoring responses to, using and/or disposing of all medications, biologicals, chemicals (e.g., povidone iodine, hydrogen peroxide);

- The provision of medication-related information to health care professionals and residents;
- The process of identifying, evaluating and addressing medication-related issues including the prevention and reporting of medication errors; and
- The provision, monitoring and/or the use of medication-related devices.

What can be done to assure medication gets managed appropriately, safely and accurately?



# My thoughts...

- Advocate for clearer policies and regulations in ALFs
- Hire a consultant pharmacist to perform medication management reviews
- Ensure ongoing evaluations of medication administration
- Remember to respect the rights of the resident