

## Winter 2011-2012 issue of Generations

### Medications and the Aging Population

August 2011

Draft list of topics:

#### 1. Introduction

- Explain why this issue is important now and needs to be addressed*
- Medicines are beneficial, prolong and improve life, support functional status when used properly.*
- Recent reports (e.g. AHRQ) indicate that medications are a major cause of emergency department visits and hospitalizations among older adults, so medication use has significant potential for harm in older adults also.*
- Need for medicines increases with age, as co-morbidities increase*
- A variety of factors contribute to potential overuse of medicines*
- Ultimately, individualized assessment is needed to determine "appropriate" number of meds; based on patient preferences, values, goals of therapy*

#### 2. Medication use in older adults: a primer for the non-clinician

- Key issue is evaluation of benefits versus risks of medicines*
- Benefit/risk evaluation may be different for older adults versus younger*
- Difficult to evaluate in older adults – lack of older adults in clinical research trials*
- Evaluation of benefit: relative risk, absolute risk, number needed to treat*
- Evaluation of potential risks: difficult to determine for variety of reasons*
- Males and females may not respond the same to medicines, cite examples*
- Goals of therapy may be different in older adult (e.g. quality of life, functional status); need for periodic re-evaluation of benefit and risk*
- Potentially inappropriate medications (e.g. Beers)*
- Discuss role of generic medications versus brand; usually comparable but caution may be needed with antiepileptic drugs, levothyroxine, narrow therapeutic index drugs*
- Sidebar: What questions should patient ask physician about medications (adapt from CMHA Web site list)?*
- Include box or inset about disposal of unwanted medications (see #8 below)*
- Glossary of terms (e.g. adverse drug reaction, adverse drug event, etc.) – includes terms used throughout this issue of the journal*

#### 3. Role of medications in older adults: Quality of care or quality of life?

- Traditional focus of clinician is on disease and disease indicators, e.g. blood pressure, cholesterol, A1C for diabetes, etc.*

- For some older adults, traditional quality of care goals may be inappropriate or may need to be modified to avoid negative impact on quality of life.*
- Quality indicators used by CMS, insurance, may drive more use of medications, which could be inappropriate for many older adults*
- Pay for performance programs may also be based on traditional quality of care measures rather than on issues of importance to older adults, like falls, nutrition, etc.*
- Example: Tinetti article in JAGS on balancing blood pressure goals with risk of falls in community-dwelling older adults*
- Clinical practice guidelines are generally disease-based and do not incorporate patient values, priorities, quality of life issues, etc. Boyd article illustrates this and can be cited.*

#### **4. Transitions of care: A source of medication problems**

- Confusion related to medications after hospital discharge or other transitions*
- Continuation of medications after discharge when no longer needed*
- Different drug formularies in hospital versus outpatient setting (managed care or insurance coverage) lead to drug confusion*
- Need for reconciliation at time of transition*
- The Joint Commission and other standards pertinent to issue*
- Include case scenarios (good/bad) to illustrate potential problems with transitions*
- Include table or chart showing common problems during transitions and possible strategies to prevent or address?*

#### **5. New symptoms in older adults – the disease or the drug?**

- Any symptom in an older adult should be considered drug side effect until proved otherwise*
- Symptoms often attributed to underlying disease or “old age”*
- Prescribing cascade, give examples*
- Patient case studies to illustrate*

#### **6. Medication use at the end of life**

- Medications can be used for preventive care (e.g. antihypertensive, cholesterol) or for palliative care (treat specific symptoms)*
- Lack of research to guide medication therapy in those over age 80, difficult to quantify benefits and risks; therapy often based on assumptions*
- Hospice philosophy; traditional practice is to evaluate benefit versus risk of meds at hospice admission, usually discontinue many meds at that time*
- Most older adults today die after a long, slow spiraling downward. Death often preceded by dementia, frailty. Benefit versus risk of meds is often never reconsidered since there is no equivalent of the “admission to hospice” point that triggers the re-evaluation.*

*--Difficult to predict date of death, but meds often produce more harm than benefit at some point.*

*--When and how to shift from “preventive/fast medicine” approach to “palliative/slow medicine” approach to care in frail older adults*

*--Medicine use in nursing facility, assisted living*

## **7. Self-medication: over-the-counter medicines and herbal supplements**

*--Statistics on use of herbals, supplements, etc.*

*--Are the perceived benefits real? Which products are potentially useful? Do elders use these products as a way to save money on prescription drugs?*

*--Lack of oversight of products by FDA, not tested for safety and efficacy, may not be manufactured to consistent standards*

*--Limited data on benefits, and studies hard to apply to real world due to lack of knowledge of specific products available in U.S.*

*--Harms (e.g. adverse effects and drug interactions) have been documented with a number of these products – include specific examples, patient cases or summary table of potential problems*

*--OTC medicines regulated by FDA, but benefits and risks in older adults often not highlighted; focus on acetaminophen, NSAIDs, diphenhydramine in particular*

*--Products that are generally safe for younger adults may not be safe or appropriate for older adults, especially long-term use*

## **8. The quandary of disposal for unwanted medications**

*--Traditional method of disposal (flushing) has been recognized as contributor to drinking water contamination*

*--Teenagers (e.g. grandkids) can obtain medications from home of older adult (known as “pharming”) for abuse, especially controlled drugs*

*--Use of mail-order Rx (90 day supplies) can facilitate “pharming” and make it harder to detect*

*--Recommendations for disposal of medications, including community “takeback” programs, etc. Mention Maine program to mail in unwanted meds.*

**NOTE: Instead of being a separate article, make this topic(#8) a sidebar or inset to another article.**

## **9. Interdisciplinary care of the older adult – role of the pharmacist**

*--Geriatrics is inherently interdisciplinary due to nature of problems encountered by many older adults.*

*--Pharmacist has been traditionally viewed as having primary role related to dispensing of medicine, perhaps also encouraging compliance*

*--Most older adults see multiple prescribers with little coordination*

*--Most prescribers focused on disease rather than total patient*

*--Few prescribers trained in geriatrics, may lack expertise*

- Economics of physician payment do not support lengthy office visits with older adults*
- Medication therapy management services becoming available, in both Medicare Part D and commercial insurance*
- Emerging role for pharmacists outside the traditional pharmacy setting, working in ambulatory clinic or physician office (including “medical home model”), or having independent office-based practice; focus on advising prescribers and patients on appropriate use of medications, coordinating among multiple prescribers*
- Emerging need for more pharmacists to fill this role as baby boomers age; usually involves extended visit with patient and caregiver(s) for comprehensive review of medications, patient education, recommendations to prescriber(s) on drug therapy, etc.*
- Certified Geriatric Pharmacist – pharmacist with board-certification in geriatric pharmacy practice, with expertise in use of medications in older adults*
- Include scenarios to illustrate problems and potential strategies to address; patient case studies with polypharmacy, medication-related problems*

### **10. Adherence: Challenges and solutions for the older adult**

- Terminology – adherence versus compliance*
- Barriers to adherence in older adults: multiple medicines, low health literacy, cognitive impairment, visual impairment, etc.*
- Address cultural and ethnic diversity issues*
- Challenges with access to pain medicines (controlled substances)*
- Strategies to improve compliance, including use of automated technology with reminders, etc.*
- Who can help administer or manage meds for senior at home? Legal/regulatory considerations. Recent study on paid caregivers, lack of health literacy and skills in medication management.*
- Key point to include: recent Health Affairs article reported that only 26% of medication-related problems are due to adherence. Important to address indication of drug, effectiveness, and safety before focusing on adherence. Otherwise, elder may be adhering to a drug that is inappropriate.*

### **11. The economics of medication use**

- Medications are developed by pharmaceutical companies, which are for-profit entities. They make more revenue and profits by selling more medications.*
- Very expensive to get new drug developed and approved, manufacturers also face challenges with payers due to formularies, etc.*
- Marketing messages often focus on benefits of meds, downplay risks. Television advertising creates culture that views medicines as beneficial, low risk.*
- Over 90% or 95% of prescription meds are covered by third parties, with varying levels of patient co-pays. Cost has become less of an issue in making decisions about medicine use.*

*--But medicines account for the largest portion of out-of-pocket health care expenses, even though accounting for only about 10 percent of total health care costs.*

*--Focusing on some medication issues, such as adherence, reinforces the business model of pharmaceutical manufacturers and pharmacies. No major players have economic incentives to reduce polypharmacy, inappropriate medication use.*

*--Pharma companies put resources into products that can maximize revenue and profits, such as pills that are taken daily for years or decades by large numbers of people. This is appropriate response to expectations to maximize return on investment to investors. Very little incentive to produce socially needed products, like new antibiotics, when return on investment is very low.*

*--Multiple books have been written exploring these issues in great detail. It will be necessary to crystallize a few key issues and summarize them for this article.*

## **12. Pharmacist practice case studies (“program spots”)**

*--Program spots are up to 1,000 words long and are articles that feature work-in-action around the featured topic. These can be submitted as complements to key chapters above. Including a patient case study would be good, to illustrate a problem such as polypharmacy, adherence, prescribing cascade, etc.*

## **13. List of resources**

## **14. Summary and strategies for change**

*--Suggested policy changes*

*--What aging professionals can do*

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