Consulting Pharmacy Practice

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An Introduction to Consulting Pharmacy Practice

Gerontology Pharmacy Practice
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Learning Objectives

- To understand the role of the consultant pharmacist in long-term care and community geriatric practice
- Review the responsibilities of the consultant pharmacist to their patients and facilities
- To learn the concepts of drug regimen review utilized by consultant pharmacists
- Review pertinent resources for information and enhancement of clinical practice for consulting pharmacy
Who is a consultant pharmacist?

- A consultant pharmacist is a pharmacist who is paid to provide expert advice on the use of medications within institutions or on the provision of pharmacy services in an institution.
- Consultant pharmacists practice in a variety of settings but originated in the nursing home environment.

(www.ascp.com/public/student/consider.shtml)

Consultant Pharmacy Practice

- Concept originated less than 32 years ago (mandated by OBRA regs in 1987)
- Most consultant pharmacists are employees of pharmacy provider organizations
- Independent consultant pharmacists are prevalent in certain states (NJ)

Where to we practice?

- LTC - long-term care facility (SNF)
- AL - assisted living facility
- Sub-acute - sub-acute hospital based care (TCU)
- Psychiatric Facilities/ Correctional Facilities
- Surgical Centers
- Veterans Home
- MRDD/ICFMR (Developmental Disabilities)
- Adult Day Care
- Hospice Care
- Dialysis Centers
- Pediatric Care Facilities
- Community Based Practice - Geriatric Care Management
Rx Use and Seniors

According to the American Society of Consultant Pharmacists:
- Rx use increases with age:
  - 65-69 year olds - 13.6 Rxs/year
  - 80-84 year olds - 18.2 Rxs/year

Source: AARP Issue Brief, 2003

Your Credentials

- Certain credentials are recommended to practice in long-term care pharmacy:
  - CCP (In New Jersey/ Florida)
  - CGP (Certification in Geriatric Pharmacy)
  - FASCP (Fellow of the American Society of Consultant Pharmacists)

Primary Patient Care Services

- Drug Regimen Review
- REGULATIONS!!!!!
  a) Drug interactions
  b) Drug indications for use
  c) Lab review/ recommendations/ orders
  d) Geriatric Dosages
  e) Inappropriate Medications
  f) Pharmacokinetic monitoring/dosing
  g) Therapeutic Drug Monitoring Services
Patient Primary Care Services
- Nutrition Assessment/ Support Services
- Durable Medical Equipment
- Drug Research Programs
- Quality Assurance Programs
- Medication pass review
- Drug Information
- Medication Delivery Systems
- Patient Counseling

Consultant Pharmacy Practice
- Typically, one consultant pharmacist per nursing facility
- Essential member of the interdisciplinary healthcare team
- Voting member of the Pharmacy and Therapeutics committee

FACILITY ORGANIZATIONAL CHART

Ownership
Pharmacy Consultant
Medical Director
Nursing Director
Physicians
Nurses
Specialty Services

- Pain management rounds
- Psychoactive medication rounds/meetings
- Falls committee
- Educators/ Lecturers
- Assisted Living Consultants
- Surgical Center compliance specialists
- EPIC

What you need to know.....

- "Start Low, Go Slow...But GO" - the foundation of geriatric dosing
- Regulations
- Clinical Pharmacy/ Drug Information
- Recommended Lab values/frequencies
- Article: (see handout)
  "Explicit Criteria for Determining Potentially Inappropriate Medication Use by the Elderly"
  by: Dr. Mark Beers
  Archives of Internal Medicine 1997 vol. (157)

What you need to know....

- Top 10 drug interactions in the elderly
  (Based upon the M3 committee findings- joint sponsorship between AMDA and ASHP)
  - Warfarin — NSAIDs*
  - Warfarin — Sulfa drugs
  - Warfarin — Macrolides
  - Warfarin — Quinolones**
  - Warfarin — Phenytoin
  - ACE inhibitors — Potassium supplements
  - ACE inhibitors — Nonsteriodal anti-inflammatory agents
  - Diltiazem — Quinolones
  - Theophylline — Quinolones**
Resources for your practice

- American Society of Consultant Pharmacists
  www.ascp.com
- American Medical Directors Association
  www.amda.com
- Guide to Interpretive and Regulatory Guidelines - published by ASCP, HCFA
- Article by Dr. Mark Beers - “Explicit Criteria for Determining Potentially Inappropriate Medication Use by the Elderly” - Archives of Internal Medicine 1997

Beer’s List Clinical Pearls

- Propoxyphene (Darvon®, Darvocet®) - few analgesic advantages over Acetaminophen with the side effects of narcotics
- Amitriptyline (Elavil®) - strong anti-cholinergic and sedating properties - not recommended first line for depression
- Trimethobenzamide (Tigan®) - least effective anti-emetic, increased EPS side effects in the elderly

Beer’s List Clinical Pearls

- Dipyridamole (Persantine®) causes frequent orthostatic hypotension
  (Excludes Aggenox® - Dipyridamole ER/ASA combination tablet)
- Anti-histamines used for insomnia - avoid for a period of greater than 7 days due to the increased incidence of anti-cholinergic side effects (Examples: Benadryl®)
Patient Case- a real one!!!!

* WM is an 89 year old white female who suffers from advanced dementia and Parkinson’s disease who was admitted to C. nursing home following a fall in her home which resulted in a fractured hip.

She is a new patient to your service and you are in the facility to do monthly drug review

WM continued.....

* Past medical history/Current Medical History:
  - HTN
  - Coronary Artery Disease
  - Dementia with Agitation
  - Depression
  - Osteoporosis
  - GERD
  - CHF
  - A. fib
  - Hypertension
  - Hypercholesterolemia
  - Fractured left hip

Current medication Listing

* Propoxyphene/Paracetamol 1 tablet every 4 to 6 hours as needed for pain
* Acetaminophen 325mg tablet every 4 to 6 hours as needed for pain/temperature
* Multivitamin with minerals 1 tablet daily
* Donepezil (Aricept) 10mg tablet 1 tablet PO daily
* Olanzapine (Zyprexa) 5mg tablet 1 tablet PO daily
* Lisinopril (Prinivil) 20mg 1 tablet PO daily
* Digoxin 0.25mg's 1 tablet PO daily
* Amiodarone 200mg tablet 1 tablet PO BID
* Digoxin 0.25mg's 1 tablet PO daily
* Warfarin 2mg tablet 1 tablet PO daily
* Carvediolol (Coreg) 12.5mg tablet 1 tablet PO BID
* Lansoprazole (Prevacid) 30mg capsule 1 capsule PO daily
* Propranolol (Inderal) 20mg tablet 1 tablet PO daily
* Metoprolol (Toprol XL) 100mg tablet 1 tablet PO daily
* Carvediolol (Coreg) 5mg tablet 1 tablet PO daily
* Carbidopa/Levodopa (Sinemet) 25/100mg tablet 1 tablet PO BID
* Rofecoxib 12.5mg tablet 1 tablet PO daily
* Simvastatin 20mg tablet 1 tablet PO daily
* Carbidopa/Levodopa (Sinemet) 25/100mg tablet 1 tablet PO BID
Some questions to ask yourself...

- Is CHF regimen appropriate?
- What is the Olanzapine (Zyprexa) being used for?
- Is pain control sufficient?
- Do all of the medications correspond to an appropriate diagnosis?
- Are all dosages appropriate for the geriatric patient?
- Are there signs and symptoms of adverse effects present in the patient?

Vital Signs/ Lab values

- HR 65, RR 20, BP 110/70, MMSE score 10
- What does the MMSE score of 10 indicate to you as the consultant pharmacist?

Labs: Na 131mEq/L, K 3.7mEq/L, Cl 107mEq/L, BUN 15mg/dL, uCr 1.1, Mg 2.1mg/dL, Ca 9.4mg/dL, Glucose 100mg/dL

WBC 7.2, RBC 5.2, Hgb 13g/dl, Hct 42%

MCV 90, MCH 31pg

Physical Exam: unremarkable

Drug Regimen Review 101

- Indicate what nursing recommendations you would make...

Examples:
1. What medications should be given with food?
2. What medications should be given on an empty stomach?
3. What medications should not be crushed?
4. What type of side effects/adverse event monitoring should be done?
5. Documentation issues
If I was doing chart review....

- **Nursing comments:**
  1. Donepezil- best given HS
  2. Olanzapine- anticholinergic/ CNS side effects
  3. Lansoprazole- 30 to 60 minutes AC
  4. Do not crush Metoprolol XL
  5. Monitoring for Digoxin toxicity
  6. Carvedilol with meals to decrease orthostatic hypotension
  7. Monitor for changes in BP/HR with Rofecoxib

If I was doing chart review.....

- **Physician comments:**
  1. Amiodarone/ Digoxin interaction- order Digoxin level
  2. Amiodarone/ Warfarin interaction- order PT/INR
  3. Zolpidem use 2nd to Insomnia by Fluoxetine
  4. Inappropriate use of Propoxyphene in geriatrics
  5. Evaluate use of Olanzapine- recommend Quetiapine
  6. Monitor LFT's every 3 months with Simvastatin
  7. Patient has HTN and CHF- recommend change of Rofecoxib to another COX-2 agent

Summary

- Consultant Pharmacists are paid for their cognitive services
- You need to have a strong understanding of the principles of geriatric pharmacotherapy when doing drug regimen review
- Geriatrics goes beyond textbook knowledge! (know your studies!!- i.e our patient case)
Branching out your career path

- As a consultant pharmacist, you can do so many things:
- Formulary Management
- Disease State Management
- Education Coordinator
- DUE/MUE studies
- Research studies
- Lecturer
- Specialty practices
- Medical Education Opportunities

If you are interested......

- E-mail me with your concerns/ questions
- Take a geriatric rotation
- Explore CCP certification
- Brush up on your lecturing/ presentation skills
- Check out www.ascp.com