

# **Ambulatory Care Pharmaceutical Services**

Pharmacy 492

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**Katie Lai, PharmD., BCPS**

# QUESTIONS

- Where: Is my practice site?
- What: Is my job description?
- Why: Is it important?
- Fun: Is it interesting and stimulating?
- Not fun: What are the challenges?

# Where

- Senior Care Clinic (SCC) is located on the 4<sup>th</sup> floor of Harborview Medical Center (HMC) Hospital ambulatory care tower
- The setting is an outpatient clinical practice
- The site is both primary care (SCC) and specialty care services (cardiology and neurology)

# Living facilities

Independent Living/  
Homes

Assisted Living

LTC

# Health Care Facilities

Ambulatory  
Clinics

Hospital

Inpatient  
Clinical

**Outpatient  
Clinical**

Inpatient  
Dispense

Outpatient  
Dispense

Retail  
Pharmacy

Rehab

**Primary Care Clinics**

**Vs.**

**Ambulatory Care Clinics**

**Vs.**

**Specialty Care Clinics**

# HMC Ambulatory Care Clinics

## Primary Care Clinics

- Senior Care
- Family Medicine
- Adult Medicine
- Pioneer Square
- International Medicine

## Specialty Clinics

- Cardiology
- Neurology
- Ophthalmology
- Renal
- Diabetes
- HIV
- Rheumatology
- Podiatry
- Orthopedics

# Clinical Versus Distribution

## ■ Distribution

- Dispensing medications
- Retrospective evaluation—Fix problems
- Clarification of orders

## ■ Clinical

- Monitoring medications—labs, side effects
- Prospective evaluation—Anticipate problems
- Writing the orders—prescriptive authority

# What

- Clinical services development in Senior Care Clinic
  - See 4-12 patients per day, each for 30-60 minutes
- Pharmacy staff development
- Provide educational services
  - Interns, medical + pharmacy residents
  - Support UW Pharmacy School: didactic and rotations
  - Drug information to 4west clinics staff



# Clinical Services

- Disease States Management in SCC
  - Diabetes
  - Hypertension
  - Hyperlipidemia
  - Congestive heart failure
- Anticoagulation management
- Glucometer Education
- Coordination of Care
- Medication Evaluation—poly-pharmacy

# Why Is It Important?

- Assist in medication adjustments
- Assess how pt is using the medications
- Evaluate appropriate medication prescribing
- Educate patient on various disease states
- Monitor lab values
- Individualize therapy for patients
- Problem solve medication issues

# FUN

- Direct patient care
- Ability to tailor medications and individualize therapy for patients
- Plenty of opportunities for patient education
- Prevent problems—anticipate meds that could cause falls and side effects
- Pharmaceutical care: allows follow-up and outcome evaluations

# NOT FUN

- Documentation of interactions
  - Time consuming
  - Paperwork
  - Billing
- Multi-tasking
- Constant interruptions
- Liability
- Must keep up with current drug studies

The background of the slide features a pattern of stylized autumn leaves in various shades of orange and brown, set against a darker orange gradient background. The leaves are scattered across the frame, with some showing detailed vein structures.

# **Typical day in Senior Care Clinic**

# 71 Year Old Female

- Was hospitalized 6 times in 2005
- Recently discharged from HMC Hospital
- Has rapid heart rate—was prescribed warfarin
- Seeing pharmacists for:
  - Warfarin management
  - Medication monitoring
  - Asthma and diabetes education & management
  - Medication assessment of appropriate prescribing

# Medication Assessment: 27 Meds

## Medical Problems

- Asthma
- Hypertension
- Hx of heart attack 2002
- Atrial Fibrillation
- Hyperlipidemia
- Diabetes
- Anxiety & depression
- Insomnia
- Osteoporosis
- Gout
- Osteoarthritis—pain
- Psoriatic dermatitis
- Decreased hearing
- Right eye cataract surgery 2005

## Medications

- 4 different breathing inhalers
- Montelukast
- Nasal spray
- Lisinopril
- Diltiazem
- Bumetamide
- Digoxin
- Warfarin
- Atorvastatin
- Lispro insulin
- Diazepam, Trazodone
- Venlafaxine
- Pantoprazole
- Alendronate, Tylenol
- Calcium carbonate
- Docusate, multivitamin, Senna
- Prednisone

# What Do You Do First?

- Geriatric considerations?
  - Falls assessment
  - Sleep regimen
- Does disease states match with medication list?
- Compliance issues: caregivers?
- Can we minimize the number of meds needed?
- Level of education needed?
  - Consider pt's hearing and cognition ability















# Questions