Disclosure/Conflict of Interest

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Objectives

- Identify common medication related problems found in Long Term Care facilities
- Construct a pharmacy patient care strategy based on compliance with regulations
- Identify pharmacy related regulations in CMS Appendix PP - Guidance to Surveyors for Long Term Care Facilities
- Describe the role and responsibilities of the pharmacist in the many components of medication provision, management, security and assessment in Long Term Care facilities
- Develop a plan for integrated professional cooperation to enhance patient care in Long Term Care Facilities
Older Adults: The Growing Population

- By 2030, 20.3% of the US population is expected to be ≥65 years of age
  - Increase from 13.7% in 2010 and 9.8% in 1970
- By 2030, all of the baby boomers will be considered to be older adults
- The population ≥85 years will double by 2036 and triple by 2049

Ortman JM. “An Aging Nation: The Older Population in the United States.”
Dependency Ratios in the US

Adapted from: Ortman JM. “An Aging Nation: The Older Population in the United States.”
Where are older adults living?

- Long term care is provided by:
  - Home health agencies
  - Nursing homes
  - Hospices
  - Residential care communities
  - Adult day service centers
- 1.4 million people lived in nursing homes in 2012

Distribution of Age Groups in Nursing Homes

How does this apply to pharmacists?

- **Per the Centers for Medicare and Medicaid Services (CMS):**
  - “Facility”—a skilled nursing facility (SNF) or nursing facility (NF) meeting requirements as set forth by the Social Security Act
- **CMS requirement:**
  - The drug regimen of each resident must be reviewed monthly by a licensed pharmacist
  - The pharmacist must report any irregularities to the attending physician and the director of nursing AND these reports must be acted upon

State Operations Manual. Appendix PP.
Medication Regimen Review (MRR)

- A thorough evaluation of the medication regimen of the resident
- Goal to promote positive outcomes and minimizing adverse events
- Includes preventing, identifying, reporting, and resolving medication-related problems, medication errors, or other irregularities
- Collaborate with the other members of the interdisciplinary team

State Operations Manual. Appendix PP.
Information for the MRR

- **Must** be able to make an **informed decision**
- Cannot just focus on physician order sheet
- Review:
  - Medication Administration Record
  - Prescriber’s orders
  - Progress notes
  - Nursing notes
  - Consultant notes
  - Resident assessment instrument (RAI)
  - Laboratory and diagnostic tests
- Communication/interaction with staff and patient

State Operations Manual. Appendix PP.
MRR Potential for Intervention

- Diagnosis, findings to support drug use
- Untreated diagnosis
- Allergies/side effects/interactions
- Dose, frequency, route, duration appropriate?
- Documentation of progress of therapy
- Response to lab, diagnostic results
- Medication errors
- Potential medication induced disease

State Operations Manual. Appendix PP.
Reviewing of the Physician Order sheets in the patient chart is sufficient to complete an MRR.

True

False
Considerations for the MRR: Changes in the Older Adult
Pharmacotherapeutic Considerations

- Physical changes
- Pharmacokinetic changes
- Pharmacodynamic changes
- Useful tools
  - Beers Criteria
  - START criteria
  - STOPP criteria
Physical Changes

- Swallowing difficulties
- Poor nutrition
- Dependence on feeding tubes
- Visual disturbances
- Arthritis
- Sensory changes
- Decreased lung function

Pharmacokinetic Changes

- Absorption
- Distribution
- Metabolism
- Excretion
Absorption

- Reduced gastrointestinal (GI) motility
  - Possible increased drug absorption
- Reduced gastric acid secretion $\rightarrow$ increased gastric pH
  - Reduced drug absorption
- Reduced gastric blood flow
  - Reduced drug absorption
- Drugs with first-pass metabolism may have increased absorption

Miller SW. Therapeutic Drug Monitoring in the Geriatric Patient. 2011.
Distribution

- Volume of distribution (Vd) affected
  - Decreased albumin levels
    - Highly protein-bound drugs—increased concentration of drug
  - Increased proportion of body fat
    - Fat soluble drugs—increased Vd
    - Drugs distributed to muscle—decreased Vd
  - Possible decrease in total body water

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient.* 2011.
Metabolism

- Changes in the liver
  - Decreased hepatic blood flow
  - Decreased hepatic metabolism by decreased activity in oxidase system
  - Decreased liver mass

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient.* 2011.
Excretion

- Renal elimination
  - Decreased GFR
  - Decreased renal blood flow
  - Estimates of CrCl
    - Cockcroft-Gault
    - MDRD

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient.* 2011.
Equations to Estimate CrCl

**Cockcroft-Gault**
- CrCl (mL/min) = \( \frac{(140 - \text{age}) \times \text{weight (kg)}}{72 \times \text{SCr}} \) \times 0.85 (female)

**MDRD**
- GFR (mL/min/1.73 m\(^2\)) = 186 \times \text{SCr}^{-1.154} \times \text{age}^{-0.203}
  - SCr is mg/dL and age in years
  - \*0.742 if female
  - \*1.210 if African-American
CrCl Estimations

- **Weight to be used:**
  - If actual body weight (ABW) is less than ideal body weight (IBW), use ABW
  - In patients with normal ABW, use IBW
  - In obese patients, use a factor of 0.4 to calculate an adjusted body weight

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient.* 2011.
CrCl Estimations

- **IBW calculation**
  - Men: IBW = 50 + 2.3 kg (every in >5 ft)
  - Women: IBW = 45.5 + 2.3 kg (every in >5 ft)

- **Adjusted body weight calculation**
  - AdjBW = IBW + 0.4 (TBW-IBW)

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient*. 2011.
A Note about CrCl Estimations

- SCr depends on albumin
- Common practice is to “round up” SCr values for older adults
- This may not be the best estimate of CrCl in elderly patients

Miller SW. *Therapeutic Drug Monitoring in the Geriatric Patient*. 2011.
## CrCl Estimations

CrCl Estimations in Patients ≥ 65 years with SCr <0.8 mg/dL

<table>
<thead>
<tr>
<th></th>
<th>CrCl Mean ± SD (mL/min)</th>
<th>Mean Difference (95% CI) (mL/min)</th>
<th>Pearson’s Correlation (r)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-hour CrCL</td>
<td>62.7 ± 23.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual SCr CrCl</td>
<td>59.6 ± 23.2</td>
<td>-3 (-20.8-14.9)</td>
<td>0.551</td>
<td>0.063</td>
</tr>
<tr>
<td>Rounded SCr CrCl</td>
<td>46.5 ± 19.5</td>
<td>-16.2 (-31.6 to -0.8)</td>
<td>0.620</td>
<td>0.031</td>
</tr>
</tbody>
</table>

## CrCl Estimations

**CrCl Estimations in Patients $\geq$ 65 years with SCr <1 mg/dL**

<table>
<thead>
<tr>
<th></th>
<th>n=12</th>
<th>CrCl Mean ± SD (mL/min)</th>
<th>Mean Difference (95% CI) (mL/min)</th>
<th>Pearson’s Correlation (r)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-hour CrCL</td>
<td>62.7 ± 34.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual SCr CrCl</td>
<td>53.7 ± 21</td>
<td>-9 (-22.2-4.2)</td>
<td>0.629</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Rounded SCr CrCl</td>
<td>40.2 ± 16.4</td>
<td>-22.5 (-35.1 to -9.9)</td>
<td>0.711</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

A Note about CrCl Estimations

- Consider:
  - Reviewing the literature of the drug manufacturer and determine how CrCl was calculated in trials
  - Consider calculating CrCl rounded and not rounded and evaluate the patient

Miller SW. Therapeutic Drug Monitoring in the Geriatric Patient. 2011.
Pharmacodynamic Changes

- Altered
  - Number of receptors
  - Receptor affinity
  - Second messenger function
  - Cellular response
  - Cellular nuclear response
Useful Tools for MRR

• Explicit criteria
  • Beers Criteria*
  • START*
  • STOPP*

• ASCP Drug Regimen Review Checklist

*PDF versions of these will be on your flash drive

Elliott DP. PSAP. 2011;213-238.
Beers Criteria

- List of potentially inappropriate medications (PIM)
- Medications are included if there is a poor risk to benefit ratio
- Can be used in all ambulatory and institutional settings for patients ≥65 years of age
- Most recently updated in 2012

Beers Criteria

- Three tables summarizing medications and classes:
  - To avoid in older adults
  - To avoid in older adults with certain disease states
  - To be used with caution in older adults
- Provides rationale against use
  - Helpful for report of irregularities to physician
- Gives recommendation
  - May recommend complete avoidance or avoiding drug in certain circumstances
- Classifies quality of evidence
- Rates strength of recommendation

<table>
<thead>
<tr>
<th>Organ System/Therapeutic Category/ Drug</th>
<th>Rationale</th>
<th>Recommendation</th>
<th>Quality of Evidence</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-infective Nitrofurantoin</td>
<td>Potential for pulmonary toxicity; safer alternatives available; lack of efficacy in patients with CrCl &lt; 60 mL/min due to inadequate drug concentration in the urine</td>
<td>Avoid for long-term suppression Avoid if CrCl &lt; 60 mL/min</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
<tr>
<td>Cardiovascular Digoxin &gt; 0.125 mg/day</td>
<td>In heart failure, higher doses associated w/ no addn’l benefit and may increase toxicity; slow renal clearance may increase risk of toxicity</td>
<td>Avoid</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
<tr>
<td>CNS Antipsychotics—conventional and atypical</td>
<td>Increased risk of CVA (stroke) and mortality in patients with dementia</td>
<td>Avoid for behavioral problems of dementia unless non-pharm has failed and pt is threat</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
</tbody>
</table>

# PIM Use due to Disease State

<table>
<thead>
<tr>
<th>Disease or Syndrome</th>
<th>Drug</th>
<th>Rationale</th>
<th>Rec</th>
<th>Quality of Evidence</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV Heart failure</td>
<td>NSAIDs and COX-2 inhibitors</td>
<td>Potential to promote fluid retention &amp; exacerbate HF</td>
<td>Avoid</td>
<td>Mod</td>
<td>Strong</td>
</tr>
<tr>
<td>GI History of gastric or duodenal ulcers</td>
<td>Aspirin (&gt;325 mg/day) Non-COX-2 selective NSAIDs</td>
<td>May exacerbate existing ulcers or cause new/additional ulcers</td>
<td>Avoid unless alt agents are not effective and pt can take protective agents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS Chronic seizures or epilepsy</td>
<td>Bupropion Clozapine Tramadol</td>
<td>Lowers seizure threshold; may be acceptable in patients with well-controlled seizures in whom alternative agents have not been effective</td>
<td>Avoid</td>
<td>Mod</td>
<td>Strong</td>
</tr>
</tbody>
</table>

## PIM to be Used with Caution in Older Adults

<table>
<thead>
<tr>
<th>Drug</th>
<th>Rationale</th>
<th>Recommendation</th>
<th>Quality of Evidence</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin for primary prevention of CV events</td>
<td>Lack of evidence of benefit vs. risk in ≥ 80 yoa</td>
<td>Use with caution in adults ≥ 80 yoa</td>
<td>Low</td>
<td>Weak</td>
</tr>
<tr>
<td>Dabigatran</td>
<td>Greater risk of bleeding than with warfarin in adults ≥75 yoa; lack of evidence for efficacy and safety for CrCl &lt; 30 mL/min</td>
<td>Use with caution in adults ≥ 75 yoa or if CrCl &lt;30 mL/min</td>
<td>Mod</td>
<td>Weak</td>
</tr>
<tr>
<td>Prasugrel</td>
<td>Greater risk of bleeding in older adults; benefit may &gt; risk in highest-risk older adults (e.g., w/prior MI or DM)</td>
<td>Use with caution in adults ≥ 75 yoa</td>
<td>Mod</td>
<td>Weak</td>
</tr>
</tbody>
</table>

START Tool

- *Screening Tool to Alert doctors to Right Treatment*
- Designed to address errors of omission
  - Factors contraindications into recommendation
- Arranged by organ system
- Article reports 57.8% of patients had one or more medications omitted

### Selected START Criteria

<table>
<thead>
<tr>
<th>Organ System</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV System</td>
<td>Warfarin in the presence of chronic atrial fibrillation, where there is no contraindication to warfarin</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>Inhaled steroid in mod-severe asthma or COPD, where reversibility of airflow obstruction has been shown.</td>
</tr>
<tr>
<td>Locomotor system</td>
<td>Bisphosphonate in patients taking glucocorticoids for &gt;1 month (i.e. chronic corticosteroid therapy).</td>
</tr>
<tr>
<td>Endocrine System</td>
<td>Aspirin therapy in diabetes mellitus with well controlled blood pressure</td>
</tr>
</tbody>
</table>

STOPP Tool

- Similar in intent to Beers criteria
- *Screening Tool of Older Persons’ Prescriptions*
- Designed to address potentially inappropriate medications
- 65 criteria included in the tool
  - Arranged by organ system
  - Includes a recommendation and italicized rationale

## Selected STOMP Criteria

<table>
<thead>
<tr>
<th>Organ System</th>
<th>Recommendation</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV System</td>
<td>Calcium channel blockers with chronic constipation</td>
<td>May exacerbate constipation</td>
</tr>
<tr>
<td>CV System</td>
<td>Aspirin at dose &gt;150 mg/day</td>
<td>↑ bleeding risk, no increased efficacy</td>
</tr>
<tr>
<td>CNS and Psychotropics</td>
<td>TCA’s with cardiac conductive abnormalities</td>
<td>Pro-arrhythmic effects</td>
</tr>
<tr>
<td>GI System</td>
<td>Diphenoxylate, loperamide or codeine phosphate for treatment of diarrhea of unknown cause</td>
<td>May delay recovery in unrecognized gastroenteritis</td>
</tr>
</tbody>
</table>

ASCP Drug Regimen Review Checklist

• Available from:

Elliott DP. PSAP. 2011;213-238.
ASCP Drug Regimen Review Checklist

- **Drug Indications**
  - Does each prescribed medication have a current and valid indication?
  - Does the resident have conditions or indications for which medications may be appropriate or are not being used?

- **Medication effectiveness**
  - Is the medication appropriate for the indication being treated?
  - Is the dose of medication adequate?
ASCP Drug Regimen Review Checklist

- **Medication Safety**
  - Is the dose of medication excessive?
  - Is the resident experiencing signs or symptoms of adverse medication effects?
  - Is the resident experiencing a problem resulting from a drug-drug, drug-food, or drug-laboratory test interaction?

- **Medication Monitoring**
  - Are monitoring parameters in place to evaluate medication effectiveness and safety?
  - Do results of medication monitoring indicate a need for intervention?

Elliott DP. PSAP. 2011;213-238.
ASCP Drug Regimen Review Checklist

• Medication Errors
  • Is there evidence of a medication error?

• Medication Cost
  • Do any issues related to medication cost need to be addressed?

Elliott DP. PSAP. 2011;213-238.
MRR-related Policy Considerations
Appendix PP—Quality of Care

• 483.25(I) Unnecessary Drugs
  • Each resident’s drug regimen must be free from unnecessary drugs
    • In excessive dose (including duplicate therapy)
    • For excessive duration
    • Without adequate monitoring
    • Without adequate indications for use
    • In the presence of adverse consequences which indicate the dose should be reduced or discontinued
    • Any combination of the above
Appendix PP—Quality of Care

• 483.25(l) Unnecessary Drugs
  • Antipsychotic Drugs. Based on a comprehensive assessment of a resident, the facility must ensure that:
    • Residents who have not used antipsychotic drugs are not given these drugs unless antipsychotic drug therapy is necessary to treat a specific condition as diagnosed and documented in the clinical record; and
    • Residents who use antipsychotic drugs receive gradual dose reductions, and behavioral interventions, unless clinically contraindicated, in an effort to discontinue these drugs.
Gradual Dose Reductions (GDR)

- All medications should be considered for dose adjustments
- Antipsychotic-specific regulation
  - Within the first year of being admitted with an antipsychotic OR initiating an antipsychotic—attempt a GDR in two separate quarters (with at least one month between attempts)

State Operations Manual. Appendix PP.
Gradual Dose Reductions (GDR)

- Antipsychotic-specific regulation
  - GDR may be clinically contraindicated
    - Behavioral symptoms related to dementia
      - Symptoms worsened after GDR
      - Physician documents rationale
    - Psychiatric disorder
      - Continued use is concurrent with standards of practice and reasoning documented
      - Symptoms worsened and physician has documented rationale
Gradual Dose Reductions (GDR)

- Sedatives/Hypnotics regulation
  - GDR may be clinically contraindicated
    - Continued use is concurrent with standards of practice and reasoning documented
    - Symptoms worsened and physician has documented rationale

State Operations Manual. Appendix PP.
Gradual Dose Reductions (GDR)

- Other Psychopharmacological Medications regulation
  - Within the first year of being admitted with an Psychopharmacological Medications OR after initiation—attempt a GDR in two separate quarters (with at least one month between attempts)
  - GDR may be clinically contraindicated
    - Continued use is concurrent with standards of practice and reasoning documented
    - Symptoms worsened and physician has documented rationale

State Operations Manual. Appendix PP.
Methods to improve drug-related problems

- Improve compliance
- Reduce polypharmacy
- Consider pharmacokinetic/dynamic changes
- Assess drug-drug interactions
- Monitor appropriately
- Communication

Legal Issues Related to Pharmacy Consulting
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• Develop a plan for integrated professional cooperation to enhance patient care in Long Term Care Facilities
Regulations that guide consultants

- Alabama Board of Health
  - Chapter 420-5-10 – Nursing Facilities
- Alabama Board of Pharmacy
  - Chapter 680-x-2-.18 – Pharmacist Consultants of Pharmaceutical Services
  - Chapter 680-x-2-.18 – Institutional Pharmacies
- CMS Appendix PP
  - F425 – Pharmacy Services
  - F428 – Drug regimen review
  - F332/333 – Medication Errors
Rules about the rules

• Both federal and state regulations
  • State regulations can be more strict
  • State regulations take precedence

• Who enforces the rules?
  • Primarily - State board of health
Requirements of consultants

- Must be registered with the State Board of Pharmacy
- Registration initially and with license renewal
- Must complete an initial 10 hour course
  - Polices/Care specific to consultants
  - Pass test with >75% score
- Must complete 12 hours of CE approved by the board for consultants during renewal cycle
Consultant must

- Provide consultation on all aspects of provision of pharmacy service in the facility
  - Does not say whether this should be the vendor pharmacist or the consultant pharmacist
  - Only one of record for facility
- Establish a record keeping system for receipt and disposition of medications
- Determine records are in order
  - Maintain account of all controlled substances
  - Periodically reconcile controlled substances
P425 – Pharmacy Services

• Facility must provide
  • Pharmaceutical services
    • Procedures for acquiring, receiving, dispensing, and administering of all drugs
    • Routine and emergency drugs
  • Service consultations – must employ or obtain services of a licensed pharmacist
    • Consults on all aspects of pharmacy services
Responsibilities of the pharmacist

- Guide development and evaluation of implementation of pharmaceutical service procedures
- Identify, evaluate, and address pharmaceutical concerns
- Coordinate services between visits
- Coordination of care between service providers
- Develop IV therapy procedures
- Policies for emergency meds
Responsibilities of the pharmacist

- Ensure timely medication delivery
- Provide feedback on medication administration and medication errors
- Work with interdisciplinary team to address medication-related needs/problems
- Establish procedures for monthly med review
- Work with medical director as needed
Provision of medications

- Must provide emergency and routine medications to meet the need of the residents
  - Must avoid “medication not available”
- Responsible for procedures related to:
  - Acquisition
  - Receiving
  - Dispensing
  - Administration
  - Disposition of medication
  - Labeling and storage
Acquisition

- Must establish reasonable time frames for delivery and initiation of new medications with medical director, director of nursing, and vendor pharmacy
- Availability of emergency supply
- When, who and how be contacted to acquire medications
- Availability of medications – 24 hrs/7 days/week
- Handling of medications dispensed by prescriber
- Verification/clarification of medication orders
  - All medications must have current order.
- Medication delayed or not available
- Transportation of medication to facility
Receiving

- How receipt occurs
- How medications are reconciled
- Who is authorized to receive
- Storage until secured
- Incorporation into patient’s medication supply
Dispensing

- Effort to reduce errors
- How will meds be labeled
- Packaging for medication
Administration

- Avoid unnecessary interruption
- Reporting of medication errors
- Who can administer – authorized personnel
- Defining schedules of administrations
- Monitoring parameters
- Administration procedures for alternative dosage forms
- Use of enteral feeding tubes
Administration (cont.)

- Documentation of administration
  - Routine med not administered – why not?
  - As needed – why given?
  - Route, site, etc.

- Resources needed (references, product info)

- Clarification of orders prior to administration

- Reconciliation of orders
Timeliness

- Medications must be available in a timely-manner
  - No interruption or delay in care should occur
  - Pharmacist must
    - Monitor delivery system
    - Determine procedure when medication is not available
- Considerations
  - Availability of medication for admission/transfer
  - Condition of the patient – acuity, etc.
  - Type of medication (analgesics, antibiotics, etc.)
  - Availability of emergency medications
  - Ordered start time of medication
  - Cannot have “start when available order”
Disposition

- Identification and removal of medications
- Storage and control for those medications that are awaiting disposition
- Documentation of disposition
- Method of disposition
Disposition specifics

- Unused drug because of discontinuation or resident death
  - Must be destroyed within 30 days
  - Exception: legend drugs can be donated to charity
- Patient is transferred to hospital
  - May maintain until patient returns
  - Any medication not continued after hospitalization should be destroyed
- As needed medications
  - Should be destroyed if not used in 90 days
- May be destroyed on premises or picked up by environmental agency
  - Should not return to pharmacy or patient
Disposition - record keeping

- Facility must maintain for destroyed medications
  - Name and address of the facility
  - Date of destruction/date drugs picked up
  - Method of destruction
  - Prescription information (number, drugstore name, patient name, drug name, amount destroyed, reason)
- Pharmacist should verify and destroy with RN - both should sign
  - If controlled substance – Need third signature
- If being picked up RN should verify and obtain a signed copy of destruction form
- Maintain with patient record or for at least 2 years
Labeling

- Should be labeled with currently accepted professional principles
- Must include:
  - Accessory and cautionary instructions
  - Expiration date
- Labeling of medications prepared by facility staff
- Requirements for meds not received from pharmacy
- Changes in medication order/directions
- Labeling of multi-dose vials
Labeling specifics

- Label requirements
  - Name and strength of drug, resident name, physician, date of fill, directions, prescription number, expiration date, number, any auxiliary labels
- OTCs – Labeled with name and strength
- Prescriptions must remain in original container
- Procedure should be in place for when resident leaves facility temporarily
- Unit dose medications
  - Include product name, strength, control number, expiration date
  - Procedure for use should be established in policy
Storage

- Location and access to med rooms, carts, etc.
  - Must store medications in locked compartments
  - Proper temperature control
  - Only accessed by authorized personnel
- Specifics for controlled medications
  - Separately locked, permanently affixed compartment for CII medications (including refrigerator)
    - Exception: Facility uses single unit package distribution
  - Recording procedure for receipt and disposition
  - Periodic reconciliation
Emergency supply

- Medications, amounts, doses
- Location of supply
- Personnel with access
- Record keeping
- Monitoring for expiration dates
- Procedures for replacing used meds
Emergency medication kits

- Consist only of medications needed to manage a critical incident or need
- List of contents shall be maintained at facility and pharmacy
- Shall be sealed, locked and provided by pharmacy
  - Should have 2 color locks – one from pharmacy before use, one from facility after use
- Contents determined by consultant, medical director, and director of nursing
- Must be stored in secure area
- Shall be clearly labeled and include a list of medications
Emergency med kits (cont.)

- Medications should only be removed with valid written order of practitioner
- Expiration date is the earliest expiring medication
“Stat” medicine cabinet

- Each facility may only maintain one “stat” cabinet
  - Can obtain permission from the state board of health and pharmacy for more than one
- Minimum number of doses to meet needs of patients
- List of contents approved by nursing facility
  - Name, strength, quantity of drug
- Records kept as to dispensing from cabinet
- Written procedures for use required
- Inspected by consultant monthly
Work with facility/medical director

- Procedures/guidance for contacting prescribers
- Handling medication orders
- Determining medication delivery systems
- Logistics of delivery system
  - Must work with medical director, director of nursing and pharmacy vendor
- Issues regarding diversion and tampering
- Identify resources/education for staff
Foreign medications

- Potential safety/efficacy issues
- Facility should not obtain
- If obtained by the patient
  - Should not be administered by facility staff
  - Patient should not be allowed to self administer
Drug regimen review

- Outlined in Appendix PP – F428
- Monthly medication regimen review (MRR)
- Maintain residents highest level of functioning and minimize adverse effects
- At least monthly by licensed pharmacist
  - More often if conditions or med warrant
- Should occur in facility if possible
- Irregularities must be reported to attending physician and director of nursing
- Reports must be acted upon
Who needs MRR

- Those receiving respite care
- Patients at end of life/hospice
- Anticipated stay of less than 30 days
- Change in condition
- All patients
MRR sources of info

- Cannot just focus on physician order sheet
- Must be able to make an informed decision
- Medication Administration Record
- Prescriber’s orders
- Progress notes
- Nursing notes
- Consultant notes
- Resident assessment instrument (RAI)
- Laboratory and diagnostic tests
- Communication/interaction with staff and patient
Considerations for MRR

- Diagnosis, findings to support drug use
- Untreated diagnosis
- Allergies/side effects/interactions
- Dose, frequency, route, duration appropriate?
- Documentation of progress of therapy
- Response to lab, diagnostic results
- Medication errors
- Potential medication induced disease
Documentation of MRR

- Must be documented
- No irregularity
  - Need signed and dated statement
- Irregularities
  - Report to attending physician and director of nursing
  - Timeliness of notification of depends on potential for serious consequence
  - Method of notification must be determined
  - Notification can be electronic
  - Re-reporting addressed irregularities not necessary
- Part of the patient’s clinical record
Response to Irregularities

- Response must be made by physician
- Does not have to follow recommendation
- Must give rationale for not following requirements
- If no action and potential for harm
  - May contact Medical Director
  - Procedure in place for when attending physician = Medical Director
- If not physician action is needed (monitor vital signs, etc.) – can be done by nursing staff
Pain management

- Pharmacist is part of the interdisciplinary team to make sure pain is addressed
- Pain must be recognized
  - Can be verbal or non-verbal
  - May be symptom of new condition
- Identify circumstances when pain occurs
  - Allows for proactive response
- Ensure adequate treatment/prevention
- Monitor for ADEs related to pain medications
Resident/representative involvement

• Facility must have procedure to inform about
  • Specifics of treatment (duration, monitoring, ect.)
  • Potential negative effects of treatment
• Resident/representatives have the right to:
  • To be informed about resident condition
  • To be informed about resident treatment options, risks and benefits
  • Participate in the care plan process
  • Refuse care and treatment
Medication errors

- Medication error rate (MER) cannot exceed 5 percent
  - Indicates systemic problem
- Must be free of significant errors
- Can be cited for both
- Observation should occur during visit
  - Replicate survey procedures
Medication error - defined

Observed preparation or administration is not in accordance with:

- Prescriber’s order
- Manufacturer’s specification
- Accepted profession standard
- Significant medication error
  - Causes resident discomfort
  - Jeopardizes health or safety
Error examples

- Failure to “shake well”
- Crushes medication inappropriately
- Failure to give adequate fluids
- Failure to administer with food
- Errors with medications administered by feeding tube
- Alternative dosage form mistakes
- Timing
  - Must be greater than 60 mins early or late and can cause discomfort or jeopardy
  - Not administered appropriately in relation to event
Calculating MER

\[
MER = \frac{Number \ of \ errors}{Opportunities \ for \ errors} \times 100
\]

- Opportunities for error
  - Doses given plus doses ordered but not given
- Do not round up
Significant error

- Should be noted regardless of whether rate is greater than 5%
- What makes it significant
  - Resident condition
  - Drug category – drugs with narrow therapeutic index
  - Frequency of error
Significant vs. Not significant

Examples
- Missed dose of Quinidine 200 mg TID – significant
- Missed dose of Motrin 400 TID – not significant
- Coumadin administered without order – significant
- Colace liquid administered when capsules are ordered – not significant
- Vibramycin ordered, Vancomycin administered – significant
- Digoxin given 1.5 hours after schedule – non-significant
- Oxycontin crushed before administration – significant
Introduction for New Consultants

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