Safe Storage, Handling, and Administration of Medication

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Objectives

Participants will:

- Understand need for policies, procedures, and protocols for handling medications
- Be informed and aware of safeguards for medications
- Know the process for providing education on the risks and benefits of medications
- Be trained in timely reporting of medication side-effects and errors
General Medication Guidelines

Source: Safety and Quality in Pharmacology: https://quizlet.com/53280483/ch12-flash-cards
Medication Policies / Procedures / Practices

- Prescribing
- Ordering
- Authenticating Orders
- Procuring of medication and refills
- Labeling
- Storing
- Security
- Storage, inventory, dispensing and labeling of sample medications
Medication Policies / Procedures / Practices

- Dispensing
- Supervision of self-administration
- Administration of medications
- Recording/documentation
- Disposal of discontinued/out-of-date meds
- Education to individual and family
- PRN meds or "as needed" meds are accessible to each individual
Prescribers of Medication

Medications can be ordered only by a licensed prescriber

- Medical Doctor (MD)
- Doctor of Osteopathy (DO)
- Physician Extenders
  - Advance Practice Registered Nurse (APRN)
  - Clinical Nurse Specialist (CNS)
  - Nurse Practitioner (NP)
  - Physician Assistant (PA)
Essential Elements of a Drug Order

- Full name of individual
- Date order was written
- Name of the drug
- Dosage and frequency of administration
- Method/route of administration
- Prescriber’s signature

Medication: Orders

Patients full name
Date and time order written
Drug name
Dosage
Route
Time and frequency
Signature of provider

Patient Name: John Smith  
Address:  
400 E 3rd Street  
Duluth, MN 55804  
Rx Amoxicillin 250 mg tablets  
TT tablets p.o., T.i.d., X 7 days  
# 42  

Do Not Refill X
Refill Times
Date 10/3/00
Print Last Name: Johns

[Prescriber’s signature]
Physician Oversight of Medications

- Appropriateness of Medication(s)
- Documented need for continued use of the medication
- Monitoring for the presence of side effects
- Monitoring of therapeutic blood levels (as needed)

 Ordering of Specific Monitoring and treatment protocols for:
  - Diabetes
  - Hypertension
  - Seizure Disorder
  - Cardiac Disorder
Orders for Medical Services can only be completed by medical personnel licensed to prescribe:

- Psychiatric Treatment
- Nursing Assessment and Health Services
- Medication Administration
- Crisis Stabilization Unit
- Ambulatory Detox
- Opioid Maintenance
- Medication Assisted Treatment (MAT)
Authentication of orders: describes the required time frame for actual or faxed physicians signature on telephone or verbal orders accepted by a licensed nurse.

- Verbal **Medication** Orders in an Outpatient Clinic
  
  72 hours by fax or in person

- Verbal **Medication** Orders in the Crisis Stabilization Unit
  
  24 hours

- Verbal **Service** Orders
  
  7 calendar days.
A copy of the physician order or current prescription dated/signed *within the past year* is placed in the individual’s record for all medication administered or self-administered with supervision.

- Regular, on-going daily medications
- Controlled Substances
- Over-the-counter medications
- PRN (as needed) medications or
- Discontinuation order for the medication.
Educating on Benefits vs Risk

- The prescriber educates regarding benefits or desired outcome of the medication/treatment versus the risk of side effects.

- The prescriber may change medication based on the individual’s wishes.

- All discussion must be done in a manner that the individual or parent/guardian understands.

- The discussion of benefit vs risk of medication(s) must be documented in the record.
  - Signed Medication Consent Form
  - Physician or physician extender AND individual or parent/guardian
Educating and Training Staff

- Are the benefits and risks of taking the medication(s) prescribed discussed with the individual/guardian?
- Are your staff trained in the monitoring and supervision of individual’s self-administration of medications?
- Are your staff trained in the individual’s right to refuse medication?
- Are your staff trained how to document medication requirements?
MEDICATION ERROR
Medication Errors Can Have Dire Consequences!
Common Causes of Medication Errors

- Human error is the precipitating factor in nearly all medication-related errors.
- Packaging and labeling similarities can cause confusion and possible errors.
- Communication problems, such as prescribers’ illegible handwriting, has resulted in misinterpretation and incorrect transcription of written medication orders.
- Abbreviations: While abbreviations save time, they can be misinterpreted.
- Lack of familiarity with a drug.
- Failure to carry out orders.
- Failure to note or act upon patient allergies.

Common Causes of Medication Errors

- Failure to properly educate the individual/family about drug(s) the individual is taking.
- Failure to note contraindications to administration.
- Failure to react to adverse reactions.
- Busy day: Hectic environments can foster errors.
- Miscommunication, such as illegible handwriting and lack of documentation.
- Performance issues such as working too fast, interruptions, and fatigue.
Common Causes of Medication Errors

Common Prescriber or Transcriber Errors

- Decimal point errors
- Unit measurement errors
- Incorrect frequency
- Possible drug interactions
- Prescription for a drug for which the individual is known to be allergic
Medication Errors due to System Issues

- Inadequate Staffing
- Number of consecutive hours worked
- Assignment of floating nurses to unfamiliar units
- Distractions and Interruptions
- Rotating Shifts
- Staffing Mix and Numbers
- Nurse-to-patient ratios
Reasons Errors Are Not Reported

- Error Recognition
- Assessment of the need to report the error
- Incident Report Preparation
- Follow-up response by the staff person receiving the incident report
Timely Notification to the Prescriber

- Refusal of Medication
- Medication Problems
- Drug Reactions
- Medication Errors
### Medication Administration Record (MAR)

#### MEDICATION SHEET

<table>
<thead>
<tr>
<th>For Month of:</th>
<th>Year:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>HOUR</th>
<th>DAY</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>INITIALS</th>
<th>NURSE’S SIGNATURE</th>
<th>INITIALS</th>
<th>NURSE’S SIGNATURE</th>
<th>INITIALS</th>
<th>NURSE’S SIGNATURE</th>
<th>INITIALS</th>
<th>NURSE’S SIGNATURE</th>
</tr>
</thead>
</table>

**Key:**
- **P** = Pass
- **R** = Refused
- **NPO:** Nothing by Mouth

**NAME**

**CID #**

**DOB:**
# Medication Administration Record (MAR)

## Medication Sheet

<table>
<thead>
<tr>
<th>For Month of:</th>
<th>May</th>
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<tbody>
<tr>
<td>Year:</td>
<td>2019</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication</th>
<th>Hour</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cymetrexa 20mg PO BID</td>
<td>8am</td>
<td>BB</td>
</tr>
<tr>
<td></td>
<td>8pm</td>
<td>LS</td>
</tr>
<tr>
<td>Metformin 1,000mg PO BID</td>
<td>8am</td>
<td>BB</td>
</tr>
<tr>
<td></td>
<td>8pm</td>
<td>LS</td>
</tr>
<tr>
<td>Tramadol 50mg PO QHS</td>
<td>8pm</td>
<td>LS</td>
</tr>
<tr>
<td>Cymbalta XR 30mg PO q.d.</td>
<td>8am</td>
<td>BB</td>
</tr>
</tbody>
</table>

**Key:**
- P = Pass
- R = Refused
- NPO: Nothing by Mouth

<table>
<thead>
<tr>
<th>Name</th>
<th>CID #</th>
<th>DOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susie Smith</td>
<td>134869</td>
<td>8-30-84</td>
</tr>
</tbody>
</table>

**Allergies:**
- Penicillin, Haldol
Purposes for Gathering Error Data

- Detect errors
- Estimate the frequency of specific errors
- Assess the effects of change to the system
- Monitor system performance over time
- Data gathering through the incident reporting systems are not to be used in a punitive manner
- Data gathering through incident reporting is to improve individuals’ care.
Management should encourage reporting of ALL medication errors.

All medication discrepancies or errors should be reported to the Pharmacy & Therapeutic (P&T) Committee or designated committee for discussion of all medication errors.

The P&T Committee or designated committee should consist at a minimum of the Medical Director or designee, Pharmacist, and Nurse Manager.
Adherence to Medication Notification Policy

- P&T Committee or designated committee will review all incidents and document discussion, plan, and disposition of each incident.
- Policy should define how often the P&T Committee will meet.
- Medication errors/discrepancies should be tracked and trended specifically for the different service areas such as Outpatient Services, Crisis Stabilization Unit, Group Homes, Personal Care Homes, IDD Service Centers etc. and for the Agency as a whole.
Recap: Reporting of Medication Errors

- Medication Errors must **not be** hidden or ignored.
- All medication errors must be reported following the agency’s policy and procedures.
- All medications errors should have an incident report completed and all of the incidents should be discussed in a Pharmacy and Therapeutics Committee or the designated committee by the agency.
Recap: Reporting of Medication Errors

- Documentation should include a brief discussion and disposition of the incident with follow-up if indicated.
- Agency should track and trend medications errors monthly and/or quarterly separated out by programs such as Crisis Stabilization Unit, Outpatient Clinic, Group Homes, Residential etc.
Conclusion

- Reporting of adverse drug events is the responsibility of all health care personnel
- Reporting of adverse drug events is to help improve processes to prevent future errors and improve patient safety
- Reporting of adverse drug events is meant to be non-punitive
The “Eight Rights” for Medication Administration

- Right person
- Right medication
- Right time
- Right dose
- Right route
- Right position
- Right documentation
- Right to refuse
Safe Storage of Medications
Requirements for Safe Storage

- Single & Double Locks
- Shift Counting of Meds
- Individual Dose Sign Out Record
- Documented Planned Destruction
- Refrigeration & Daily Temperature Logs
Items to include in your safe storage of medication policy

- Storage of medications should be in a dry place away from heat and humidity.
- Some medications have to be protected from light and should be stored in a container that keeps light out.
- Identify the temperature range a medication fridge should always be within and procedures to follow if the temperature is out of range. The range is typically 34 to 40 degrees F.
Policy for Safe Storage of Medication

- Temperature log
- Medications should be stored in a locked room.
- Schedule II through V medications should be double locked at all times.
- Multi-dose vials of medications should be dated when opened and typically discarded after 28 days or returned to the pharmacy for disposal. (Follow your agency’s policy)
Policy for Safe Storage of Medication

- Multi-dose vials of medications should be refrigerated after being opened.
- Expiration dates of medications should be noted and documented per your agency’s protocol.
- No drinks or food should be stored in a medication refrigerator.
- Food used to give medications should be stored in a food refrigerator not the medication refrigerator.
Refrigeration of Medications

- Only Medications should be in the refrigerator designated for storage of medications.
  - No drinks opened or unopened
  - No Ensure or nutritional supplement drinks *(even if ordered)*
  - No lunches or snacks
  - No blood or urine

- The medication refrigerator with controlled substances must be locked at all times. In addition, the controlled substances are in a locked box inside of the locked refrigerator.

- Multi-dose vial of medications should be dated when opened and stored in the medication refrigerator.
Tips for Safe Storage of Medications

- Proper storage of medication is crucial to ensure their effectiveness and potency. All medications must be stored in an a cool, dry place, away from sunlight and moisture.

- It is important that medicines are stored correctly so that they don’t degrade and lose their effectiveness, or become cross-contaminated.

- Medicines should be stored in the container supplied by the pharmacist. This will be correctly labelled and suitable to keep the medicine in good condition.
Protocols for Licit and Illicit Drugs

- Confiscate
- Report
- Document
- Educate
- Discard
Protocols for Illicit Drugs

Protocols should be developed for when illicit drugs are brought into a service site.

- **Narcotics**
  - Even termed as ‘Opioids’ and originally derived from substance ‘Opiates’ and its common form includes morphine and *heroin*

- **Cocaine**
  - *Cocaine* is a strong stimulant mostly used as a recreational drug, it is commonly snorted, inhaled, or injected into the veins.

- **Hallucinogens**
  - Produces sensory hallucinations involving any of the 5 body senses. Common types of hallucinogens include *LCD, PCP* and *peyote*

- **Inhalants**
  - Drugs that are to be inhaled and are available either as a *Gas* or *Solvent*. Most common Inhalant products like nail polish and gasoline

- **Amphetamines**
  - Boosts alertness and increases activity of the central nervous system, the most sued form of stimulants are *amphetamines*

- **Cannabis**
  - Marijuana use has been legalized in certain states by prescription because of its *psychoactive* effects.
Protocols for Licit Drugs

Examples:

- Percocet
- Demerol
- Dilaudid
- Ativan
- Valium
Takeaways

- Policies, procedures and protocols
- Safe storage of medication
- Reporting of medication errors
- Illicit and licit drugs brought into the service site
- Documentation of medication administration (or self-administration)
- Track and trend medication incidents by service site and agency has a whole
Questions and Feedback

Question & Answer