



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 sideeffects and errors

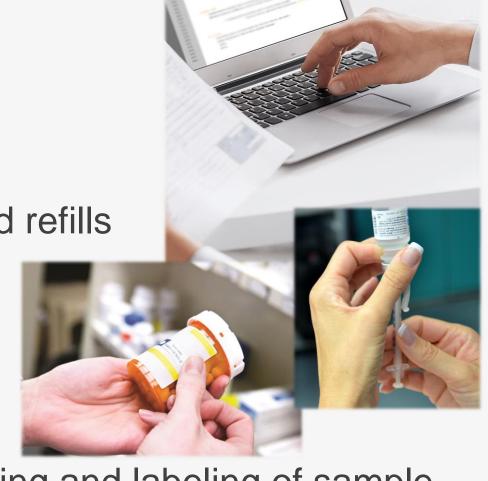
### **General Medication Guidelines**



Source: Safety and Quality in Pharmacology: <a href="https://quizlet.com/53280483/ch12-flash-cards">https://quizlet.com/53280483/ch12-flash-cards</a>

#### **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- Disposal of discontinued/out-of-date meds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



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

Patients full name

#### Medication: Orders

 Patient Name: John Smith

 Address:
 400 E 3rd Street

 Duluth, MN 55804

 Rx
 Amoxicillin 250 mg tablets
 # 42

 TT tablets p.o. T.i.d. X 7 days

 Do Not Refill
 X
 (Sign)
 M.D.

 Refill
 Times
 D.E.A. Number
 Date 10/3/00

 Print Last Name
 Johns



### 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**

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 Verbal Orders**

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 <u>Medication</u> Orders in an Outpatient Clinic
   72 hours by fax or in person
- Verbal <u>Medication</u> Orders in the Crisis Stabilization Unit
  - 24 hours
- Verbal <u>Service</u> Orders7 calendar days.





#### **Medication Oversight**

A copy of the physician order or current prescription dated/signed <u>within the past year</u> 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.

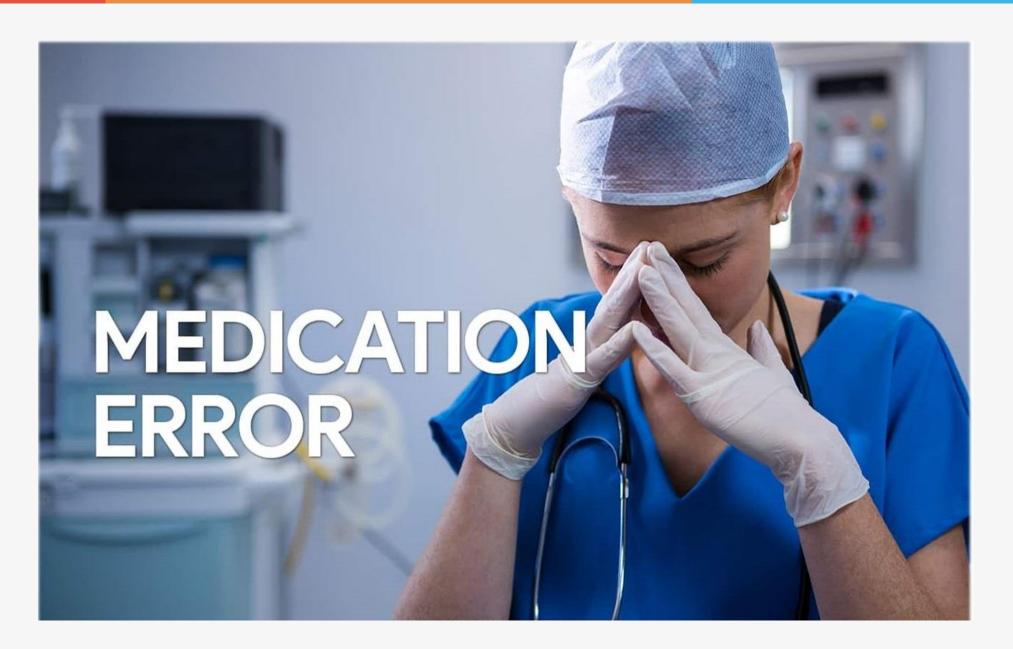


### **Educating on Benefits vs Risk**

- 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

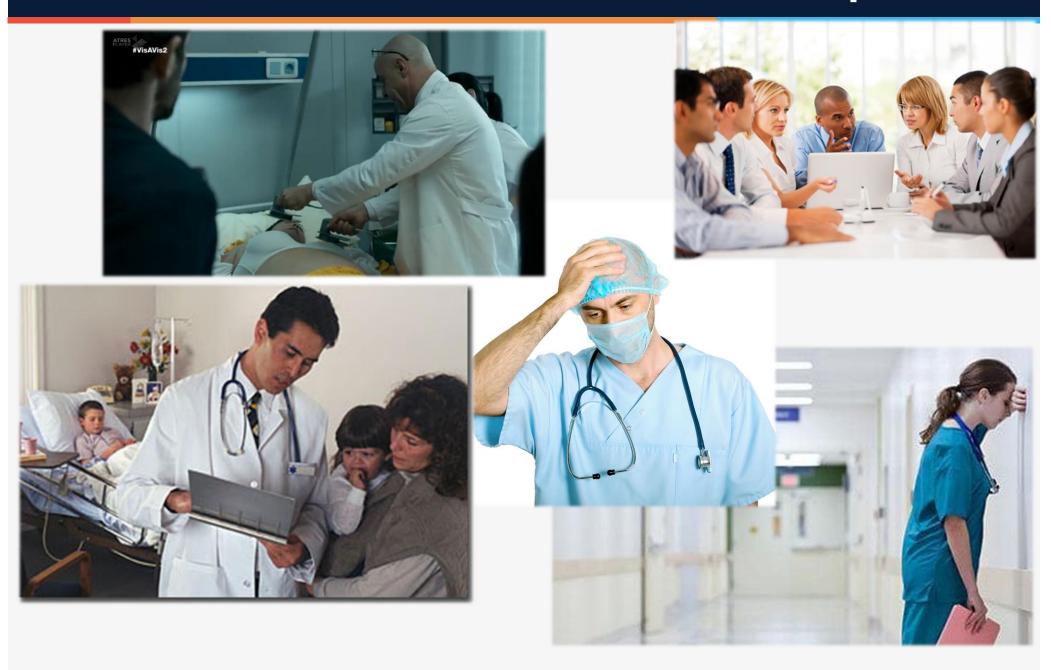
### **Educating and Training Staff**

- 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 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.

https://www.medcomrn.com/index.php/articles/common-nursing-medication-errors-types-causes-prevention

https://academic.oup.com/qjmed/article/102/8/513/1598923





#### **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**

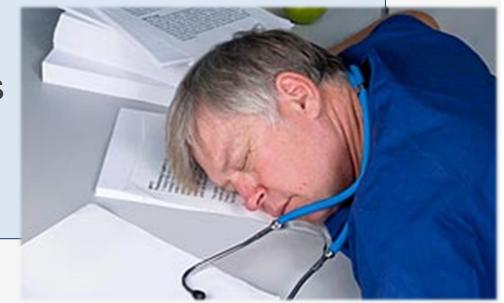
#### Common Prescriber or Transcriber Errors

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



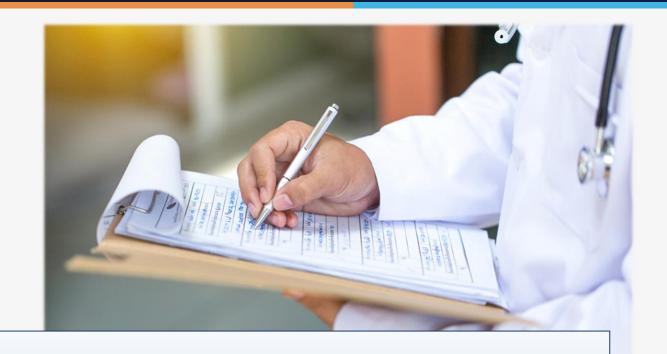
#### Medication Errors due to System Issues

- 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



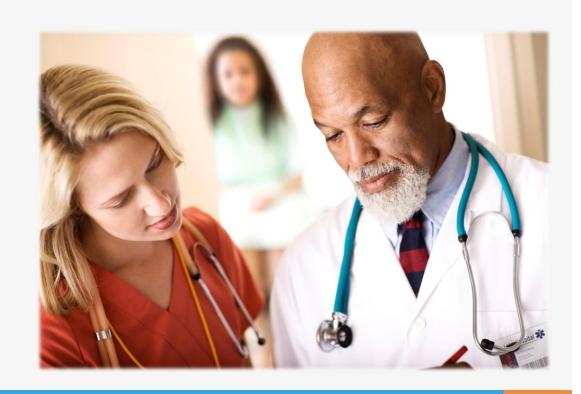
- Error Recognition
- Assessment of the need to report the error
- Incident Report Preparation
- Follow-up response by the staff person receiving the incident report



#### **Policies Procedures Protocols**

#### Timely Notification to the Prescriber

- Refusal of Medication
- Medication Problems
- Drug Reactions
- Medication Errors



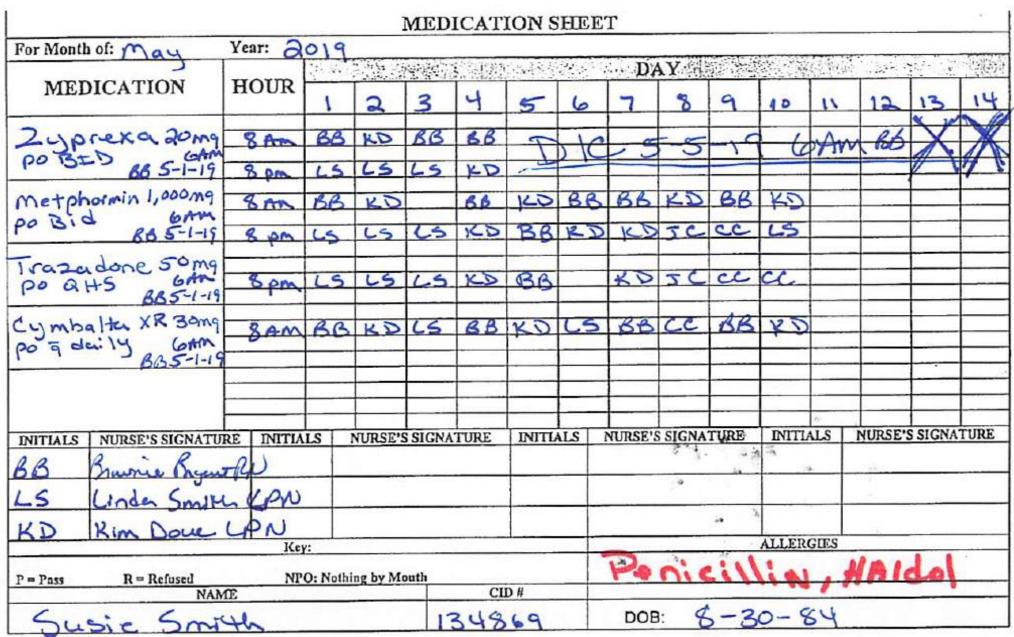


#### **Medication Administration Record (MAR)**

MEDICATION SHEET									
For Month of:	Year:								Total State
MEDICATION	HOUR	7 / 1 / 1 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2			D <sub>2</sub>	AY (I)			
								-	
INITIALS   NURSE'S SIGNAT	URE INITIA	LS   NURSE'S S	IGNATURE	INITIALS	NURSE':	SIGNATURE	INITIALS	NURSE'S SI	GNATURE
					•				
				-					
		ALLERGIES							
P = Pass R = Refused	th CD	D#							
			DOB:						



### Medication Administration Record (MAR)



### **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.

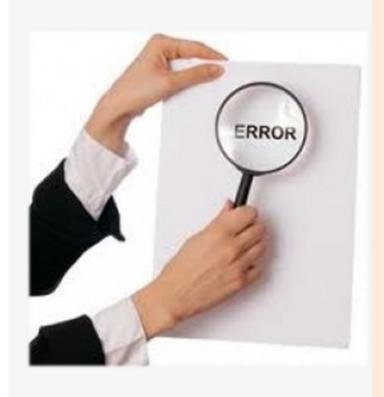
#### **Adherence to Medication Notification Policy**

- 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 <u>minimum</u> 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

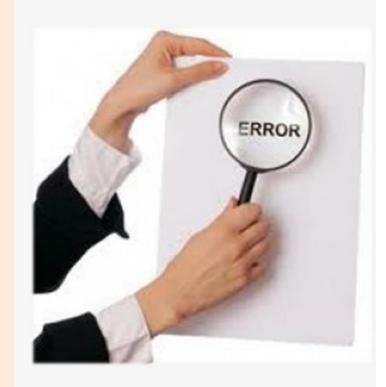


- Medication Errors must <u>not be</u> hidden or ignored
- All medication errors must be reported following the agency's policy and procedures.
- All medications errors should have an incident report completed and all of the incidents should be discussed in a Pharmacy and Therapeutics Committee or the 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.





### Reporting Medication Errors

#### 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



### Policy for Safe Storage of Medication

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 crosscontaminated.
- 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





### **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 alterness 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**



