



# Medication Error Surveillance

42<sup>nd</sup>  
Annual Meeting



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# HLGT Medication Error

## HLT Maladministrations

- PT Drug dose omission
- PT Underdose
- PT Poor quality drug administered
- PT Incorrect route of drug administration
- PT Incorrect drug dosage form administered
- PT Incorrect drug administration rate
- PT Incorrect drug administration duration
- PT Inappropriate schedule of drug administration
- PT Wrong technique in drug usage process
- PT Incorrect dose administered
- PT Wrong drug administered
- PT Drug administration error
- PT Intercepted drug administration error
- PT Drug administered at inappropriate site

## HLT Medication monitoring errors

- PT Documented hypersensitivity to administered drug
- PT Labeled drug-drug interaction medication error
- PT Labeled drug-food interaction medication error
- PT Labeled drug-disease interaction medication error

## HLT Overdoses

- PT Overdose
- PT Accidental overdose
- PT Multiple drug overdose
- PT Multiple drug overdose accidental
- PT Intentional overdose
- PT Multiple drug overdose intentional

## HLT Medication errors due to accidental exposures

- PT Accidental exposure
- PT Drug exposure via breast milk
- PT Drug exposure during pregnancy
- PT Transmission of drug via semen
- PT Radiation exposure
- PT Radiation exposure during pregnancy
- PT Unspecified agent exposure during pregnancy
- PT Accidental drug intake by child
- PT Drug exposure before pregnancy

## HLT Medication errors NEC

- PT Intercepted medication error
- PT Circumstance or information capable of leading to medication error
- PT Medication error
- PT Drug prescribing error
- PT Drug dispensing error
- PT Intentional drug misuse
- PT Treatment noncompliance
- PT Intercepted drug dispensing error



# HLT Maladministrations

- **PT Drug dose omission**
- MedDRA working definition:
  - Failure to administer an ordered dose: excludes patient's refusal and clinical decision (contraindication) or other reason not to administer (e.g., patient sent for test).
- Example:
  - Patient was ordered Drug A, but did not receive his dose



# HLT Maladministrations

- **PT Underdose**
- **MedDRA working definition:**
  - Less than medically recommended dose (in quantity and/or concentration) is administered. The dose administration occurs but is lower than the medically recommended labeled dose or administration of a lower dose than prescribed.
- **Example:**
  - Patient took an underdose of 10 mg orally daily of Drug B when he was prescribed to take recommended dose of 20 mg orally daily



# HLT Maladministrations

- **PT Incorrect dosage form administered**
- MedDRA working definition:
  - Dosage form: The physical form in which a drug is produced for administration to recipient (tablets, capsules, cream, etc)
- Example:
  - Drug C was ordered to be administered as extended release tablets, however immediate release tablets were administered



# HLT Maladministrations

- **PT Incorrect drug administration rate**
- MedDRA working definition:
  - Rate: The amount of drug (dose ) administered per unit of time
- Example:
  - Drug D was ordered to infuse at 100 ml/hr, but was administered at 40 ml/hr



# HLT Maladministrations

- **PT Incorrect drug administration duration**
- MedDRA working definition:
  - Duration: Includes duration of therapy/length of therapy
- Example:
  - Drug E was ordered x 7 days but was administered for longer or shorter time period



# HLT Maladministrations

- **PT Inappropriate schedule of drug administration**
- **MedDRA working definition:**
  - Inappropriate schedule: Includes all deviations from the prescribed dosage schedule
- **Example:**
  - LLT Drug dose administration interval too short
  - LLT Drug dose administration interval too long
  - LLT Once daily dose taken more frequently
  - LLT Once daily dose taken less frequently
  - LLT Once weekly dose taken more frequently
  - LLT Once weekly dose taken less frequently
  - LLT Once monthly dose taken more frequently
  - LLT Once monthly dose taken less frequently

*Drug F is ordered for administration twice daily, but is administered more or less frequently*





# HLT Maladministrations

- **PT Wrong technique in drug usage process**
- **MedDRA working definition:**
  - **Technique:** The manner of performance, method, operation, procedure, or details (e.g., pharmaceutical technique, aseptic technique) used to prepare a product.
- **Example**
  - **LLT Inappropriate dilution of medication**
  - **LLT Wrong solution used in drug reconstitution**
  - **LLT Inhalation not administered correctly**
  - **LLT Tablet split incorrectly**
  - **LLT Tablet crushed incorrectly**
  - **LLT Inappropriate removal of drug from capsule**
  - **LLT Wrong injection technique**



# HLT Overdose

- **PT Overdose**
- MedDRA working definition:
  - More than medically recommended dose (in quantity and/or concentration) is administered. An excessive dose.
- Example:
  - Patient took an overdose of 20 tablets of extended relief morphine sulfate and experienced respiratory depression and died.



# HLT Medication errors NEC

- **PT Drug prescribing error**
- MedDRA working definition:
  - Prescribing error: Prescribing errors may be made in the hand of physicians or other healthcare professionals who have the prescribing authority
- Example:
  - LLT Drug dose prescribing error
  - LLT Drug route prescribing error
  - LLT Drug dosage form prescribing error
  - LLT Drug schedule prescribing error



# HLT Medication errors NEC

- **PT Drug dispensing error**
- **MedDRA working definition:**
  - Dispensing error: Dispensing errors are not limited to pharmacists. It can include nurses and physicians. For example, physicians can dispense sample products in their office.
- **Example:**
  - LLT Wrong drug strength selected
  - LLT Wrong drug product selected
  - LLT Wrong patient package insert selected during dispensing
  - LLT Wrong label placed on medication during dispensing
  - LLT Drug dispensed with falsified packaging
  - LLT Wrong drug selected



# HLT Medication errors NEC

- **PT Intercepted medication error**
- **PT Intercepted drug dispensing error**
- Consider the following:
  - a medication error that is identified and is *prevented* from reaching the patient
- Example:
  - Prescriber orders incorrect dose of medication and pharmacist identifies error prior to medication being dispensed to patient

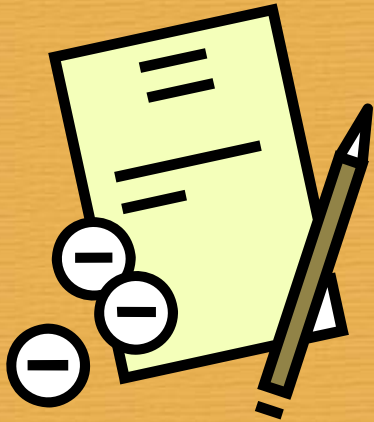


# HLT Medication errors NEC

- **PT Circumstance or information capable of leading to medication error**
- *capable of leading to (potential)*



# Example 1



- Patient, who previously had been treated with oral baclofen 3 x 25 mg, was given a test dosage of baclofen intrathecal, but did not receive the normal test dosage of 50 mcg but an overdose of 50000 mcg (5 bottles of baclofen intrathecal 10 mg / 5 ml). About one hour later he developed coma and respiratory insufficiency.

PT Overdose

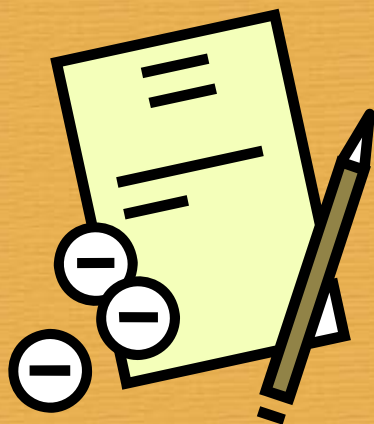
PT Drug administration  
error

PT Coma

PT Respiratory failure



# Example 2



Physician is concerned about the name similarity of 2 medications: Omacor and Amicar. The prescriber called in a prescription via voice mail for Omacor 1 gm tablets for a patient for her high triglycerides. The pharmacy called back to say it did not come in 1 gram tablets, only 500 mg tablets. This is a common scenario for the prescriber and so he told them to give her 2 of the 500 mg tablets. The patient received Amicar, a blood clotting drug instead of Omacor. However, the patient read the package insert prior to taking the drug and called the prescriber before taking the drug. A few days later the prescriber received another call from a different pharmacy again stating that Omacor did not come in 1 gram tablets. This time it was able to be corrected.

PT Medication error

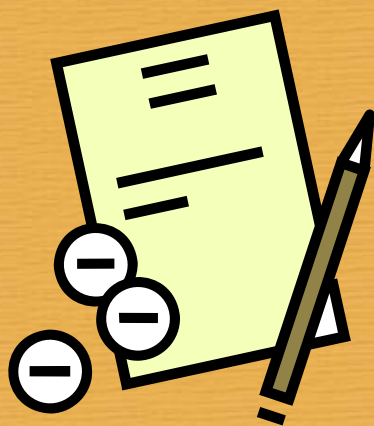
LLT Drug name confusion

PT Intercepted medication dispensing error





# Example 3



- This report concerns a female patient who normally received a total daily dose of apomorphine of 96 mg (4 mg/hr) but who received her entire dose within a 4-hour period. The patient's blood pressure increased as the day progressed and she had an episode of shaking.

PT Incorrect drug administration rate

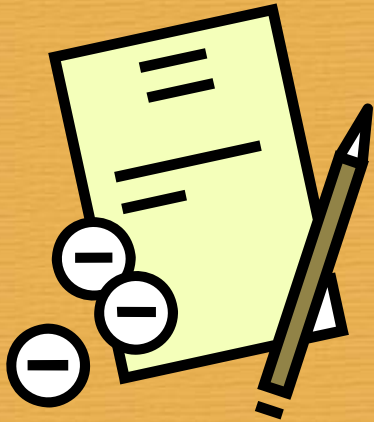
LLT Drug administration rate too fast

PT Tremor

PT Blood pressure increased



# Example 4

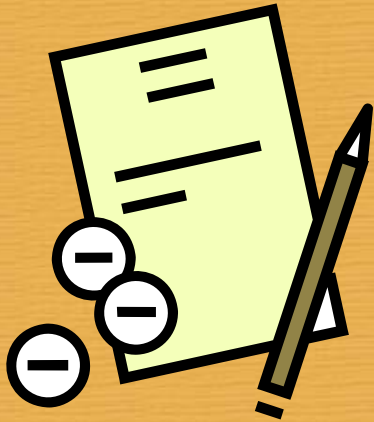


- Patient reported that the written patient instructions she received attached to her prescription were difficult to understand and could cause confusion in administering the correct dose.

PT Circumstance or information capable of leading to medication error



# Example 5



PT Wrong technique in drug usage process

LLT Inappropriate removal of drug from capsule

PT Herpes simplex

PT Dysphagia

- Female consumer reports she started gabapentin 300 mg on an unknown date for a ruptured disc. She was having difficulty swallowing the capsule so she opened the capsule and placed the contents in juice. She has begun experiencing cold sores.



# Take home tips



- When writing narratives, be succinct
- When coding medication error reports, use the most specific term **or combination of terms** available to reflect the reporter's own words described in the narrative
- Consistency in term selection will promote accuracy

