CHAPTER 24

MEDICATION ADMINISTRATION

(CHARTING, DOCUMENTATION AND THE MED PASS)

Medication Administration and Charting in the Nursing Home
(UNDER QUALITY OF CARE REQUIREMENTS)

I. Facility is responsible for administering drugs, timely, as ordered

   1. Charting
   2. Pharmacy stopping meds - re: no pay
   3. Pharmacy not supplying in a timely way
   4. Automatic stop order responsibility

II. Drugs given as ordered and checked against the orders

   1. Use of MAR
   2. Patient identification
   3. Dose recorded by nurse administering
   4. Nurse identifies initials
   5. Doses given by nurse preparing as soon as possible after preparing

III. If orders not given as ordered:

   1. Is there an explanation?
   2. Is there an incident report?

IV. PRN medications

   1. Documentation - why given and results
   2. Use of PRNs
   3. How to reduce numbers of PRNs

V. Crushing medications
   1. There must be an order
   2. The facility should NOT use ancillary orders allowing crushing of medication

NURSING ACTIVITIES RELATED TO
MEDICATION
IN A TYPICAL 120 BED FACILITY

NURSING TASK	AVERAGE HOURS TO ACCOMPLISH TASK
Preparation of medical records for new admissions	24
Ordering new medications throughout the month	90
Reordering medications during the medication pass	40
Reordering treatments during the treatment pass	8
Reconciling meds ordered against meds delivered by pharmacy	90
Validation of orders by pharmacy	40
Review and verification of medication records for following month	60
Preparation of medication cart prior to med pass	30
Identify patients that require medications during the med pass along with the actual meds needed. Positive identification of the patient.	40
Oral medication administration + documentation	**520**
Treatment administration + documentation	**180**
Facility review of medical records for missing documentation (holes on MAR and PRN documentation)	16
Preparation of medications for L.O.A.	10
Documenting meds for credit or destruction	60
	TRADITIONAL HOURS TO ACCOMPLISH TASK
TOTALS	**1208**

MED PASS WORKSHEET

FACILITY: STATION: DRUG CART: DATE:

NOTE: Nursing - please use military time when completing time fields

MED PASS TIMES	START/STOP TIMES	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	AVERAGE/DAY
AM	Time Finished								
	Time Started								
	Med Pass Time	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
NOON	Time Finished								
	Time Started								
	Med Pass Time	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
PM	Time Finished								
	Time Started								
	Med Pass Time	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
HS	Time Finished								
	Time Started								
	Med Pass Time	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00
ODD	Time Finished								
	Time Started								
	Med Pass Time	0:00	0:00	0:00	0:00	0:00	0:00	0:00	0:00

24.4

SAMPLE FACILITY
MED PASS WORKLOAD
February 1, 2014

NURSING STATION 1

RESIDENT	12MID	6:00AM	7:00AM	8AM	9-10AM	12N	1-2PM	3-4PM	5-6PM	7-8PM	9PM	10-11PM	TOTALS
Resident 1	2	1		10		1	3		3	4			22
Resident 2		2		10		3	2	2	4	8		1	32
Resident 3			1	6	1		1	1	2	3	1		16
Resident 4				10					1	3			14
Resident 5				8					1				9
Resident 6				2			1		1	1			5
Resident 7	1	1		12		1	4		4	3			25
Resident 8				7		1		1	2	4			15
Resident 9				1			1			1			3
Resident 10				1						1			2
Resident 11				11					1				12
Resident 12				5			1			2			8
Resident 13				12					1				13
Resident 14				7		1			1				9
Resident 15				9					3	1			13
Resident 16				9					7	5			21
Resident 17		1		9				1	3	1			15
Resident 18				6					3	1			10
Resident 19				5						3	1		9
Resident 20				7		1	2	1	1	2	1		18
Resident 21				14			1		5	7			27
Resident 22		1		21			1		7	3			33
Resident 23				22					2				24
Resident 24				1		1							2
Resident 25				8					4	4			16
Resident 26		1	1	8	5		1		4	2	4		26
TOTAL	3	7	2	221	6	9	18	6	60	59	10	1	399

Federal Survey Manual

483.60 Pharmacy Services.

F366   The facility must provide routine and emergency drugs and biologicals to its residents, or obtain them under an agreement described in 483.75 (j) of this part.

Interpretive Guidelines: 483.60.   The facility is responsible under 483.75 (j) for the timeliness of the services.

Survey Procedures and Probes: 483.60.   During your observation of the drug pass are all needed medications available? If one drug is not available for the resident at its scheduled time of administration <u>AND</u> the omission of that drug can cause the resident discomfort or endanger his or her health and safety, a negative finding should be recorded.

(1)   Administration means the obtaining and giving of a single dose of medicinal drugs <u>by a legally authorized person to a patient for his consumption.</u>

SAMPLE POLICY & METHODS

Drug Administration

POLICY:

All medications are to be administered only as prescribed and only by licensed medical or nursing personnel.

METHODS:

1. Drug administration is the act in which a single dose of an identified drug is given to a patient.

2. Drugs shall be administered in compliance with all local, state and federal laws.

3. The nursing director is responsible for the accurate handling and precise administration of drugs to the patient.

4. The physician orders should be checked before administering medications.

5. Drugs are to be administered as soon as possible after being prepared by the person preparing them.

6. The administration of medications will be done by a nurse, LPN or RN, who holds a current valid Florida license, or a graduate nurse under the direct supervision of an RN.

7. All nursing personnel assigned to administering medications shall identify their initials by signing their full signature once each month on the medication administration record.

PRN Orders in the Nursing Home

1.   Receipt of orders by nurse

     a.   conditions for which given
     b.   How long given? How frequently given?

2.   Vendor pharmacists to be informed

     a.   How long will the medication be given?
     b.   How frequently will it be used?

3.   The physician should be informed if resident is getting the PRN on a regularly scheduled so the order can be changed.

4.   Procedures to DC if not used in 60 days? 90 days?

5.   When administered:

     a.   Document that a PRN has been given
          (1)   on the MAR
          (2)   on the back of the MAR
          (3)   nursing notes
          (4)   elsewhere
     b.   Document what was the complaint
     c.   Document the time given, the dose, the route of administration, and if appropriate the injection site
     d.   Results achieved, no results achieved
     e.   The nurse's signature

6.   Review by the pharmacist

SAMPLE POLICY & METHODS

PRN Medications

POLICY:

PRN medications shall be provided to the residents as ordered by the physician and proper documentation of their usage shall be maintained.

METHODS:

1.   The nurse receiving the order for a PRN medication should obtain from the physician the condition or conditions for which the medication should be given.

2.   The pharmacist should be informed whether the medication is expected to be used for a short or long period of time when ordering the medication to reduce the amount of medication that could be wasted.

3.   When a PRN medication is administered, the nurse should properly document in the chart the following:

   a.   The complaint or the symptom for which the drug was given.
   b.   The dose, time, route of administration, and if appropriate the site of the injection.
   c.   The results achieved or the statement Ano results achieved≅.
   d.   The nurse's signature.

SAMPLE POLICY & METHODS

Refused Medications

POLICY:

It is the policy of this facility to encourage all residents to take medications as ordered by their physician.

METHODS:

1. It is the right of each resident to refuse or accept medications ordered by their physician.

2. It is the responsibility of the facility and the staff and in the best interests of the resident to encourage those residents who refuse medications to accept them.

3. All medications refused by a resident shall be identified in the chart as having been refused with an explanation in writing on the back of the medication administration form, if known, as to why the medications were refused.

4. If medications are refused routinely or in the judgment of the nurse, a significant number of times the unit manager shall be notified. The unit manager shall request the assistance of the family, the social services worker, etc. in getting the resident to accept the medication.

5. If the unit manager is unsuccessful in getting the resident to accept the medication, the physician shall be contacted and asked to discontinue the orders. If the physician refuses to change the orders, it shall be documented in the chart. Each month thereafter the chart should reflect that the physician is aware of the refusal and the staff regularly encourages the resident to accept the medication.

*Note: the unit manager may designate follow-through to the charge nurse.

THE CONSULTANT PHARMACIST'S
REVIEW OF CHARTING DOCUMENTATION

1. Regulation requires every 30 days. Part of Unit Dose System. Must be attached or kept on/in the Unit Dose System when administering medications to patients.

2. Hospital - Should normally occur at time of order entry.
   Nursing home – Review by Consultant Pharmacist.

3. Two basic types

   a. Manual

      1. Pharmacy Profile and Nursing MAR
      2. Pharmacy and nursing use same profile or MAR

   b. Automated

      Ideal – if pharmacy and nursing system is same
      - Efficient
      - Reduces opportunity for error
      - Uses same terminology and drug descriptions

4. Charting on MAR

   Initial in time box when medication administered.
   Scheduled doses NOT given - circle time box and indicate on back page reason why not given.

5. Verification process - IMPORTANT check and balance.

Questions and Answers About the Medication Error Detection Methodology

24.11

1. Q: What improvement over the old survey method does the observational method offer?

    A: The observational method relies on the surveyor actually seeing or not seeing the drugs being administered and comparing that observation to the Physician's order. This provides <u>direct</u> evidence as to whether the drugs were administered in accordance with physician's orders. The technique does not rely on paper review which only provides <u>indirect</u> evidence that a medication error has occurred. The paper review techniques has in fact resulted in facility personnel correcting the paper while actual errors continue to occur.

2. Q: Won't observation of the administration of medications distract the nursing staff?

    A: Yes initially, but the observer is trained to put the individual administering medications at ease. When put at ease, this individual will resort to their usual habit patterns. If those habit patterns are error producing, the Observer will see them.

3. Q: Why does the surveyor have to identify in a positive way each drug during the pour?

    A: Positive identification of the drug is the most critical aspect of the observation technique. Positive identification of the drug is imperative in order to make a valid comparison between what was actually administered and what the physician ordered.

4. Q: How does this problem of identifying each drug apply to the unit dose ystem?

    A: Identification of the drug is crucial regardless of the distribution system used. Most surveyors find it easier to identify a drug under the unit dose system however.

5. Q: Will the nursing staff become more aware of medication errors as a result of the observational method?

    A: Yes, most individuals administering medications are not aware that they are making errors. The observation technique will identify these previously undetected errors.

6. Q: Won't this method take more surveyor time?

    A: Yes, the <u>net</u> time is between 30 to 60 minutes longer depending on the drug distribution system used and the speed of the surveyor.

7. Q: Will the medication error detection methodology change the drug regimen review recommendation of consultant pharmacists?

    A: Perhaps. If the surveyor identifies an appreciable number of medication errors. The consultant pharmacist may no longer be willing to assume correct administration of the drug in making recommendations to physicians.

8. Q: Would it be useful for LTCF consultant pharmacists to observe medication administration in the manner of surveyors? Wouldn't this make nursing staffs more familiar with the observational method and less distracted by it?

    A: If any member of the facility staff including the consultant pharmacist wished to conduct medication error studies using the observation technique it would be useful to the facility and especially to its patients.

9. Q: If the surveyors observe and record medication administration of 20 patients who are selected by them, will the record of other patients not be reviewed?

A: If a surveyor did not feel that the records examined as part of the medication error detection methodology were representative of the facility for other survey purposes (*e.g.* nursing), then he or she would be obliged to examine other than these 20 records until a representative sample was reviewed.

10.   Q: How will nursing staffs learn what are "significant" and non-significant" errors?

A: Implicit in your question is the idea that one needs to differentiate between the two so that significant errors can be more vigorously avoided. That is not what we want to happen. One must remember that **if "non-significant" errors exceed 5 percent, the facility will be cited** on the theory that errors of this magnitude indicate that the drug distribution system is flawed and sooner or later will cause significant errors.

11.   Q: Is the medication error detection methodology a regulation?

A: No! It is a surveyor procedure that must be used to determine compliance with Medicare and Medicaid regulations.

12.   Q: Will improper drug administration procedures such as failure to measure a liquid at eye level result in a medication error?

A: Not necessarily. If measuring the liquid this way resulted in the wrong dose being administered, then it would be called an error.

13.   Q: Why will the observation technique as opposed to the paper review technique be more likely to change the behavior of facility staff?

A: The identification of paper errors does not hold as much significance as the identification of actual errors. Consequently it is expected that facility staff will genuinely endeavor to find the cause of actual errors.

483.25 (m)   Level B requirement: Medication errors
The facility must ensure that ...

F310   (1)   It is free of significant medication error rates; and

F311   (2)   Residents are free of any significant medication errors.

Interpretive Guideline: 483.25(m).

A.   Dose Reconciliation Technique: Observation Technique

   I.   Medication error means a discrepancy between what the physician ordered and What the surveyor observes during an observation of several different individuals administering drugs to residents in the facility.

   II.   Significant medication error means one which causes the resident discomfort or jeopardizes his or her health and safety. Criteria for judging significant medication errors as well as examples are provided under V.

   III.   Medication error rate is determined by calculating the percentage of errors. The numerator in the ratio is the total number of errors that you observe, both significant and insignificant. The denominator is all the doses you observed being administered plus the doses ordered but not administered. The equation for calculating a medication error rate is as follows:

Medication Error Rate = Number of Errors Observed divided by The Opportunities for Errors x 100.

   IV   Significant medication error rate means that in a sample of residents chosen for observation of medication administration, a number of errors in medication administration have occurred. The determination of whether a significant medication error rate occurs is a matter of surveyor judgment. A 5% threshold may indicate a significant medication error rate exists, particularly when the individual medication errors are significant. The facility must remain free of significant medication errors rates.

   V.   Significant and non-significant medication errors
      A.   General Rules for Determining Significance - The relative significance of medication errors is a matter of professional judgment. Surveyors who are responsible for assessing these requirements must be qualified to exercise such judgment (e.g., pharmacists, nurses). Follow three general rules in determining whether a medication error is significant or not:
         1.   Resident Condition - The resident's condition is an important factor to take into consideration. For example, a potent diuretic erroneously administered to a dehydrated resident may have serious consequences, but if administered to a resident with a normal fluid balance may not. If the

24.14

resident's condition requires rigid control, a single missed or wrong dose can be highly significant.

2.   Drug Category - If the drug is from a category that usually requires the resident to be titrated to a specific blood level, a single medication error could alter that level and precipitate a reoccurrence of symptoms or toxicity. This is especially true if the half life of the drug is short. Examples of drug categories which require titration of resident blood levels include anticonvulsants, anticoagulants, and antiarrhythmic, anti-anginal and antiglaucoma agents.

3.   Frequency of Error - If an error is occurring with any frequency, there is more reason to classify the error as significant. For example, if a resident's drug was omitted several times, as verified by reconciling the number of tablets delivered with the number administered, classifying that error as significant would be more in order. This conclusion may be especially valid when taken in concert with the resident's condition and the drug category.

B.   <u>Examples of Significant and Non-Significant Medication Errors</u> - Examples of medication errors that have actually occurred in long-term care facilities are presented below. Some of these errors are identified as significant. This designation is based on expert opinion <u>without regard to the status of the resident.</u> Most experts concluded that the significance of these errors, in and of themselves, have a high potential for creating problems for the typical long-term care facility resident. Those errors identified as non- Resident status and frequency of error could classify these errors as significant.

1.   Omissions (drug ordered but not administered at least once)

Haldol 1 mg BID	NS
Motrin 400 mg TID	NS
Quinidine 200 mg TID	S
Tearisol Drops 2 both eyes TID	NS
Indocin 25 mg TID pc	NS
Lioresal 10 mg TID	NS
Thorazine 25 mg BID	NS
Ampicillin 500 mg TID	NS
Metamucil one packet BID	NS
Inderal 20 mg one very 6 hrs.	S
Multivitamin one daily	NS
Mylanta Susp. One oz., TID AC	NS
Nitrol Oint. One inch	S
Librium 10 mg one TID	NS
Cortisporin Otic drop 4 to 5	
Left ear QID	NS
Aldactone 25 mg QID	NS

2. Unauthorized Drug (drugs administered without a physician's order)

Feosol	NS
Coumadin 4 mg	S
Lasix 40 mg	S
Zyloprim 10 mg	NS
Tylenol 5 gr	NS
Triavil 4-25	NS
Multivitamins	NS
Motrin 400 mg	NS

3. Wrong dose

Ordered	Administered	
Isoptocarpine 1% one drop in the left eye TID	three drops in Each eye	NS
Epinal 1% one drop in eyes BID	three drops in Each eye	NS
Digoxin 0.125 mg everyday	0.25 mg	S
Lasix 20 mg one daily	40 mg	NS
Amphojet 30cc QID	15 cc	NS
Slow K two TID	One	NS
Dilantin 125 susp 12 cc	2 cc	S
Lasix 40 mg daily	20 mg	NS

4. Wrong route of administration

Ordered	Administered	
Hydergine 0.5 mg SL.L. Bid	resident Swallowed	NS
Cortisporin Otic drops 4-5 left ear QID	Left eye	S

5. Wrong dosage form

Ordered	Administered	
Colace Liquid 100 mg BID	Capsule	NS
Mellaril 10 mg (*if correct dose was given)	Concentrate	NS*
Dilantin Kapseals 100 mg three kapseals p.o. HS	Prompt Phenytoin 100 mg three Capsules p.o. HS	S**

(**Park Davis Kapseals have an extended rate of absorption. Prompt phenytoin capsules do not.)

24.16

6.   Wrong dose

Ordered	Administered	
Tylenol 325 mg (Routinely)	Ascriptin	S

7.   Wrong time

Ordered	Administered	
Indocin 25 mg PC	AC	NS
Perlactin 4 mg PC	AC	NS
Digoxin 0.25 mg daily at 8AM	At 9:15 am	NS
Tetracycline 250 mg QID AC and HS	PC	S

S = Significant   NS = Not significant

VI.   Rules for Determining Medication Errors

A.   Timing Errors

If a drug is ordered before meals (AC) and administered after meals (PC) always count this as a medication error. Likewise if a drug is ordered PC and is given AC. Count a wrong time error if the drug is administered 60 minutes earlier or later than it scheduled time of administration, BUT ONLY IF THAT WRONG TIME ERROR CAN CAUSE THE RESIDENT DISCOMFORT OR JEOPARDIZE THE RESIDENT'S HEALTH AND SAFETY. Counting a drug with a long half-life (e.g., digoxin) as a wrong time error when it is 15 minutes late is improper because this drug has a long half-life (beyond 24 hours) and 15 minutes has no significant impact on the resident. The same is true for many other wrong time error (except AC and PC errors) in long-term care facilities.

To determine the scheduled time, examine the facility's policy relative to dosing schedule. The facility's policy should dictate when it administers AM doses, or when it administered the first dose in a 4 times a day dosing schedule.

B.   Physician's Orders

The latest recapitulation of the drug orders (monthly "recap") is sufficient for determining whether a valid order exists provided the physician has signed the "Recap" This signed "recap" and subsequent orders constitute a legal authorization to administer the drug. Attempts to find original orders in the physician's handwriting are usually too time consuming.

Survey Procedures and Probes: 483.25(m)

I.   Medication Error Detection Methodology Use an observation technique to determine medication errors. This means that you must observe the administration of drugs (on several different drug passes); record what is observed; and reconcile the record of observation with the physician's drug orders to determine whether or not medication errors have occurred.

Do not rely solely on a paper review to determine medication errors. Detection of blank spaces on a medication administration record does not constitute the detection of actual medication errors. Paper review only identifies possible errors. Experience has shown that facility staff are likely to correct the paper rather than correct the errors.

A.   Observation Technique - You must know without doubt, what drugs, in what strength, and dosage form, etc. are being administered. This is accomplished prior to drug administration and may be done in a number of ways depending on the surveyor and depending on the drug distribution system used (e.g., unit dose, vial system, punch card).

24.17

1.   Identify the drug product. There are two principal ways to do this. In most cases, they are used in combination.
    a.   Identify the product by its size, shape and color. Many drug products are identifiable by their distinctive size, shape, or color. This technique is problematic because not all drugs have distinctive sizes, shapes or color.
    b.   Identify the product by observing the label. When the punch card or the unit dose system is used, you can usually observe the label and adequately identify the drug product. When the vial system is used, observing the label is sometimes more difficult. Ask the nurse to identify the medication being administered.

2.   Observe and record the administration of drugs ("pass"). Follow the person administering drugs and observe residents receiving drugs (e.g., actually swallowing oral dosage forms). Be neutral and as unobtrusive as possible during this process.

    Make every effort to observe residents during several different drug passes so you will have an assessment of the entire facility rather than one staff member on one drug pass.

    Note every detail on your record of the drug administration. For example, "eye drops administered in both eyes" or "nurse took pulse" or "resident swallowed nitroglycerin" or "all drugs crushed and administered in applesauce".

    Identifying residents can present a problem. Some long-term care facilities do not use arm identification bands, so assume correctness of the resident by relying on the actions of the nurse and the response of the resident.

3.   Reconcile your record of observation with physician's orders. Compare the record of observation with the most current signed orders for drugs. This comparison involves two distinct activities:

    a.   For each drug on your list: Was it administered according to the physician's orders? For example, in the correct strength, by the correct route? Was there a valid order for the drug? Was the drug the correct one?
    b.   For drugs not on your list: Are there orders for drugs that should have been administered but were not? Examine the record for drug orders that were not administered and should have been. You are now looking for omitted doses -- one of the most frequent types of errors.

        You should now have a complete record of what you observed and what should have occurred according to the physicians☐ orders. Determine the number of errors by adding the errors on each resident. Before concluding for certain that an error has occurred, discuss the apparent error with the nurse who administered the drugs. There may be a logical explanation for an apparent error. For example, a surveyor once observed that a resident had received Lasix 20 mg, but the order was for 40 mg. This was an apparent error in dosage. But the nurse showed the surveyor another more recent order which discontinued the 40 mg order and replaced it with a 20 mg order.

4.   Reporting errors. Describe to the facility each error that you detect (e.g., Mary Jones received digoxin in 0.125 instead of 0.25 mg). You are not required to analyze the errors and come to any conclusions on how the facility can correct them. Do not attempt to categorize errors into various classifications (e.g., wrong dose, wrong resident). The important thing to stress is that an error occurred and that future errors must be avoided.

5.   Observed morning pass. It is preferable to watch the morning drug administration pass because that is when most doses are administered in long-term care facilities and hence offers the greatest opportunity to observed errors and conserve your survey time.

6.   Observe several individuals. Strive to observe individuals administering drugs in the facility so that an assessment of medication errors will be more broadly based. This requires the observation of several passes at the same time or different times of the day.

B.   Dose Reconciliation Technique: Supplement to the Observation Technique. When an omission error has been detected through the observation technique the dose reconciliation technique can sometimes enable you to learn how frequently an error has occurred in the past. Learning about the frequency of an error can assist you in judging the significance of the error. (See V. Significant and Non-Significant Medication Errors.) The dose reconciliation techniques require a comparison of the number of doses remaining in a supply of drugs with the number of days the drug has been in use and the directions for use. For example, if a drug were in use for 5 days with direction to administer the drug 4 times a day, then 20 doses should have been used. If a count of the supply of that drug shows that only 18 doses were used (i.e., two extra doses exists) and no explanation for the discrepancy exists (e.g., resident refused the dose, or resident was hospitalized) then two omission errors may have occurred.

The dose reconciliation technique can only be used in facilities that indicate the number of drugs received, and the date and the specific ☐pass☐ when that particular supply of drugs was started. Unless this information is available do not use this technique. If this information is not available there is no Federal authority under which you may require it, except for controlled drugs.

II.   When to Write a Deficiency for Medication Errors

A.   Significant Mediation Error Rate - The determination of whether the facility has a significant medication error rate is matter of professional judgment. Generally, a significant medication error rate exists, if a facility has a medication error rate of 5% or greater. The 5% error rate includes significant and non-significant medication errors.
The basis for writing a deficiency after a particular tolerance has been exceeded relates to the probability that these errors are symptomatic of a drug distribution system that is faulty and that will eventually produce significant errors that can jeopardize the health and safety of residents. The 5% minimum tolerance level was chosen on the basis of the best available information relative to what is achievable in terms of contemporary drug distribution systems, and the level of sophistication in methodologies for detecting medication errors.

B.   Significant Medication Error - If an individual resident experiences a significant medication error, the surveyor must mark 483.25(m)(2) (Tag #311) out of compliance. (Note: If a surveyor knows a medication error is about to occur, he or she must stop it, but stop it at a point that the staff cannot claim it would not have happened.)

MEDICATION PASS OBSERVATION REPORT

Facility		Station/Wing		Page	of	* ERROR TYPE CODES	

Staff Observed | Time Started | Time Finished | Date

* ERROR TYPE CODES
1. Omissions
   (Drugs ordered but not administered at least once)
2. Unauthorized Drug
   (Drugs administered without a physician's order)
3. Wrong Dose
4. Wrong Route of Administration
5. Wrong Dosage Form
6. Wrong Drug
7. Wrong Time
8. Mfg. Specs. and/or Professional Standard (below)

Form # MP5512 (Rev. 7/01)

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RESIDENT	DRUG/DOSE AS PASSED	CURRENT DRUGS AS ORDERED	ERROR TYPE * 1 2 3 4 5 6 7 8	S/NS

MP5512

SAMPLE FORM

	TOTAL NO. OF MEDS PASSED	TOTAL NO. OF DRUGS ORDERED	ERROR GRAND TOTALS

See explanation on reverse for error types and examples of significant and non-significant errors (S/NS)

PAGE ERROR TOTALS

CUMULATIVE ERROR TOTALS (This plus previous pages)

Type 8 = Medication Errors Due to Failure to Follow Manufacturers Specifications or Accepted Professional Standards (check each that was observed)

☐ Failure to "shake well" products so labeled.
☐ Failure to properly mix insulin suspensions (e.g., "rolling") without creating air bubbles.
☐ Crushing tablets or capsules where manufacturer states "do not crush" [Exceptions - (a) if MD explains in the clinical record why crushing will not adversely affect patient, or; (b) if Facility can provide manufacturer or professional literature to justify why modification of dosage form will not compromise patient care]
☐ Failure to administer adequate (i.e., 8 oz) fluids with medications when manufacturer so specifies (e.g., with administration of bulk laxatives, NSAIDs or solid/liquid potassium supplements).
☐ Failure to administer medications with food or antacids when so specified by manufacturer (either before or with medication). This is especially important with NSAID medications.
☐ Administration of medications immediately before, during or immediately after administration of enteral nutritional formulas (ENFs) without, as a minimum,
   (1) checking placement of nasogastric or gastrostomy tube (cited under F281)
   (2) pre- and post-flushing of tube with at least 30 ml of preferably warm water (cited under F332/F333).
   NOTE - if Dilantin (phenytoin) is being given immediately before, during or immediately after ENF, check clinical record to assure patient is not experiencing loss of seizure control or side effects such as sedation.
☐ Failure to properly administer ophthalmic products wherein either (a) contact of the product with the eye occurs, or; (b) insufficient time (3-5 minutes) is allowed between administration of multiple ophthalmic products.
☐ Allowing resident to swallow sublingual tablets.
☐ Failure to properly administer medication via metered dose inhalers (MDIs). Proper administration includes: (a) shaking MDI well; (b) positioning MDI 2 finger widths in front of resident's mouth (or using spacer); (c) having resident exhale first then take a slow, deep breath as MDI is activated; (d) holding breath for a count of 10 after inhalation before slowly exhaling, and; (e) waiting a minute between puffs if multiple puffs are ordered.
   NOTE - if resident is unable to cooperate with the above procedures (e.g., due to dementia) this should not be considered an error.
☐ Other (please explain including potential for resident's discomfort or jeopardy to his or her health and safety). _____
☐ _____
☐ _____
☐ _____

Reorder From: MED-PASS® 800-438-8884

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Conclusion/Recommendation(s)

NH-110/00

CALCULATED ERROR RATE = $\dfrac{\text{NUMBER OF ERRORS OBSERVED} \;\square}{\text{OPPORTUNITIES FOR ERRORS} \;\square}$ X 100 = [ ] %

(Significant + Non Significant)
(Doses Given + Doses Ordered But Not Given)

Consultant Pharmacist/Observer

SAMPLE NURSING INSERVICE
PROPER PROCEDURES FOR ACCURATE MEDICATION ADMINISTRATION

OBJECTIVES

Upon completion of this program the attendee should be able to:

1   Understand the ACHA inspection process of the med pass.

2   Identify methods of passing medications to reduce the risk of spreading infections in the facility.

3   Recognize dosage forms that should not be crushed.

4   Demonstrate the proper use of inhaler dosage forms for both oral and intranasal administration.

5   Discuss the importance of order of administration when multiple eye drops or inhalers are to be administered during the same med pass.

6   Identify potential problems of administering medications *via* a g-tube or n.g. tube and methods to reduce the risk of enteral supplement - drug interactions.

7   Review the facility procedures for proper use of the emergency drug kit and notification of pharmacy when this kit is broken.

THE MEDICATION PASS

1. Make sure the cart is ready to use before leaving the nursing station. The appropriate med pass bin should be moved to the top of the cart. Drinks, applesauce, tissues, soufflé cups, *etc*., should also be on the cart before leaving the nursing station.

2. MARs must be used during the med pass. Always make sure the MAR is open to the appropriate patient.

3. Medications should always be passed in the same sequence. The drug cart and MARs have been laid out in the appropriate med pass sequence.

4. The drug cart should be taken to the first patient's room. Drugs should not be pre-poured and carried to the patient's room.

5. Hands must be washed or alcohol gel used prior to starting the med pass and after each patient if contact has been made with the patient.

6. The patient must be positively identified.

7. The MAR. should be reviewed to determine what meds will be needed for this med pass.

8. All unit dose cards for this patient should be taken from the cart, double checked against the MAR and punched directly into a soufflé cup. Meds should not be punched into the hand or touched by the nurse. WE STRONGLY SUGGEST NOT PRE-POURING MEDICATION. Medications must be identified with patient name, drug name, strength, lot number and expiration date up until the time it is administered. *****ONLY THE NURSE PREPARING THE DOSE CAN ADMINISTER IT*****

9. As meds are punched from the unit dose cards, the cards should be turned over to ensure that they will remain in the same order for the next med pass. The cards can now be replaced in the cart.

10. After unit dose cards are used and returned to the cart other, medications needed for this med pass should be obtained from either the liquid cabinet, floor stock drawer or the top drawer (eye drops, ear drops, nitro-patches or nitroglycerin capsules).

11. Before leaving the cart, make sure that no meds are left on the top of the cart and that no resident can get to the drugs if you walk away.

12. Medication should be double checked and only then given to the patient. The patient must be watched to make sure meds are swallowed.

13. Meds may be charted at the time they are poured or after administration. In either case the orders must be charted prior to moving to the next patient.

14. If the nurse has charted the medication and the drug can not be given (*i.e*.,. the patient refuses, pulse or BP too low) the nurse must:
    a) chart the dose and circle it to indicate the dose has been held.
    b) explain the reason for holding the dose on the back of the MAR.

15. If patient contact occurs your hands must be washed before going to the next patient.

LIQUIDS

1) Always check a liquid to determine if the product should be shaken before administration. In general, solutions and syrups do not have to be shaken. Suspensions and emulsions need to be shaken.

2) If a dropper is to be used in measuring the appropriate dose, the dropper should be held at eye level.

3)   If an "Adaptacap" is on the bottle and a syringe will be used for measuring the liquid, the bottle should be inverted and the syringe filled at eye level.

4)   If a syringe is being used to measure the liquid dose, the syringe must be washed after the med pass is completed. DO NOT USE ONE SYRINGE FOR DIFFERENT PATIENT'S MEDS OR FOR DIFFERENT PRODUCTS.

5)   If multiple liquids are going to be administered at the same time:
   a)   NEVER pre-pour multiple liquids in a single medication cup unless meds are going to be administered immediately
   b)   Watch for a cloudy precipitate when liquids are mixed together. This usually indicates an interaction that may alter the effect of the medication.

7)   Always verify that the correct liquid has been poured before administration.

8)   Always wipe bottles clean before putting the bottle away.

EYE DROPS

1)   The nurse must wash hands before and after eye drop administration.

2)   Eye drop containers cannot come in direct contact with eyelashes or eyelids.

3)   Eye drops that are "Suspensions" must be shaken prior to administration.

4)   If a cotton ball is used to wipe eyes or cheeks after administration and if the drug is being used for infection **DO NOT USE THE SAME COTTON BALL FOR BOTH EYES.**

5)   If multiple eye drops are being used they must be separated from each other by at least 5 minutes. You should question the order in which drops are used.
   a)   If Atropine (or Homatropine) is being used with an antibiotic drop, the Atropine should be administered first.
   b)   If an ophthalmic ointment is being used with an antibiotic drop, the drop should be used first.

INHALERS

1)   If multiple inhalers are being used, specify which product should be used first. If a bronchodilator (*i.e.*, Proventil or Ventolin) is being used with a steroid inhaler (Aerobid, Beclovent or Vanceril) the bronchodilator should be used first.

2)   If a patient has difficulty using an inhaler, the pharmacy should be contacted. Products such as Aero-Chamber or Inspirease can be used to increase the effectiveness of the inhaler.

LANOXIN

1)   Pulse must be taken and charted prior to administering the drug. It should not be taken after the fact.

2)   The drug should not be automatically held if pulse is below 60 unless the order specifies. A pulse consistently below 60 or an extremely low pulse should be referred to the M.D.

INSULIN

1)   Insulin containers must contain an "OPEN DATE". Insulin should be discarded 30 days after the OPEN DATE.

2)   If two insulin products are to be mixed consider the order of mixing. Regular Insulin is usually drawn up first.

24.23

THE MEDICATION PASS INSERVICE
POST TEST

1) The MAR should be documented at the time the med is poured   T   F

2) Leaving the MAR book open when you leave the cart may violate patient
confidentiality   T   F

3) Meds that are held or refused must be documented on the back of the
MAR   T   F

4) The nurse must watch the patient after administration to ensure that the
med is swallowed   T   F

5) Hands must be alcohol "gelled" or washed with soap and water between
patients   T   F

6) Liquid medications should be poured at eye level to ensure accurate
measurement   T   F

7) If liquid medications form a precipitate when mixed together they should
not be administered.   T   F

8) Dilantin Susp should not be given with enteral supplements since the
Dilantin absorption will be decreased.   T   F

9) Multiple eye drops (in the same eye) must be separated by at LEAST 5
minutes   T   F

10) If Atropine or Homatropine eye drops are one of several eye drops to be
used it should be administered first.   T   F

11) If multiple inhaler products are to be administered the brochodilator
should be given before the steroid product.   T   F

12) If multiple insulin products are mixed in the same syringe, the
REGULAR insulin should always be drawn up first   T   F

Medication Administration Record (MAR)
- Paper MAR
- Electronic MAR

TJC MM.06.01.01
EP 3
Before administration, verify med selected matches med order and product label
EP7
Before administration, verify med is being administered at proper time, in prescribed dose, and by correct route

CMS updates, June 2014
Understand how this impacts your organization, ensure you understand impact and reflect in policy:
- Timing of Medication Administration
- Define hospital standard admin times
- Define categories for time sensitive scheduled admin times (abx, anticoags, insulins)
- Consider what is non-time critical?
- Policy must specify:
    - Meds eligible and not eligible for schedule dosing times
    - Administration of meds outside of administration times

Reference: CMS Manual System Pub 100-07 State Operations Provider Certification, DHHS, CMS, Transmittal 116, June 6, 2014.

General considerations:
- Does environment allow for nurse to validate med against MAR (such as when removing from ADC)?

- What are rules for dual verification and how is this accomplished on the MAR?

- May need to look outside of MAR for certain meds or details such as flow rates or volumes infused, depends on system.

- Consistent naming across systems (within eMAR, ADC, on product packaging) to avoid confusion

- BCMA = best practice

Appendix A: Standard Administration Times and Timely Medication Administration.

Documentation of medications on the eMAR should be completed immediately prior to administration, at the patient's bedside or chairside.

SCHEDULE	ADMINISTRATION TIMES	SCHEDULE	ADMINISTRATION TIMES
Daily (PO)	0900 0800 (Psych)	Every 24h (for IV)	Time will default from hour profiled
Bedtime	2100		
2 times daily	0900, 2100 0800, 1700 (Psych)	Every 12h	0900, 2100
3 times daily	0900, 1400, 2100 0800, 1200, 1700 (Psych)	Every 8h	0800, 1600, 2400
4 times daily	0900, 1300, 1700, 2100	Every 6h	0600, 1200, 1800, 2400
5 times daily	0500, 0900, 1300, 1700, 2100		
		Every 4h	0100, 0500, 0900, 1300, 1700, 2100
Before meals	0730, 1130, 1630	Every 3h	0300, 0600, 0900, 1200, 1500, 1800, 2100, 2400
With meals	0800, 1200, 1700	Every 2h	Even hours
With meals & at bedtime	0800, 1200, 1700, 2100	After meals	0830, 1230, 1730

DEFINITIONS:

  A. Medications not given at Standard Medication Administration Times include the following:
    a. STAT doses
    b. First time or loading doses
    c. One time doses
    d. Doses specifically timed for surgeries/procedures
    e. Doses timed for serum drug level monitoring
    f. Investigational drugs
    g. Doses that are dependent on timing of meals
    h. PRN doses

  B. Medications on Standard Administration Times: Medications eligible for scheduled dosing times are medications that are ordered and administered according to a standard, repeated cycle of frequency (e.g., once daily, twice daily, or standard hourly intervals). These are subdivided into the following two categories:
    a. Time-Critical medications: Medications whose early or delayed administration of greater than 30 minutes may cause harm or have significant negative impact on the intended effect.
    b. Non-Time-Critical medications: medications in which a longer or shorter interval of time since the prior dose does not significantly change the medication's therapeutic effect or otherwise cause harm.

24.26

PROCEDURE:

    A. Scheduled medications eligible for scheduled dosing times should be administered according to the following table:

TABLE 1

Type of Scheduled Medication (see definitions above)	Goals for Timely Administration	Examples
Time-Critical Scheduled Medications		
Time-Critical medications	Administer within 30 minutes before or after the scheduled time	• Dosing schedule every 4 hours or more frequently • Antibiotics for active infection • Therapeutic doses (non-prophylactic) of anticoagulants • Anticonvulsants • Immunosuppressants • Scheduled pain medications
Non-Time-Critical Scheduled Medications		
Medications ordered daily or more frequently, but no more frequently than every 4 hours	Administer within 1 hour before or after the scheduled time	• Daily, twice daily (BID), three times daily (TID), four times daily (QID) • Every 6, 8, 12, 24 hours
Medications ordered three times weekly, weekly, or monthly	Administer within 2 hours before or after the scheduled time	• Darbepoetin/epoetin • Cyanocobalamin

e-MAR

Normal e-MAR appearance – Unexpanded view

E-MAR functionality provides a wealth of information at the nurses finger tips at the point of medication administration

Custom administration instructions are clear and easy to ready

Multiple tabs to choose based on frequency, urgency of administration, or location of use (e.g. procedural areas)

ALL | Scheduled | PRN | Continuous | Respiratory | **Due/Overdue Meds** | Override Pulls | Procedural | AMB Meds

Go to Now or Select Date | Overdue | Not Scanned | Show All Details | Hide All Adming

Thursday February 26, 2015
0400 | 0500 | 0600 | 0700 | **0800** | 0900 | 1000 | 1100

aspirin EC tablet 81 mg : Dose 81 mg : Oral : DAILY
DO NOT CRUSH
0900 Due

digoxin (LANOXIN) tablet 125 mcg : Dose 125 mcg : Oral : DAILY
0900 Due

furosemide (LASIX) tablet 40 mg : Dose 40 mg : Oral : 3 TIMES DAILY
0900 Due

hydrALAZINE (APRESOLINE) tablet 50 mg : Dose 50 mg : Oral : EVERY 8 HOURS SCHEDULED
Do not give if systolic BP less than 90
Look – Alike / Sound – Alike Alert; Use Caution
0600 Due

insulin aspart (NovoLOG) injection : Dose 0-7 Units : Subcutaneous : 3 TI
LOW DOSE Insulin Administration Instructions

Blood Sugar
71-150   No Insulin
151-200   1 unit
201-250   2 units
251-300   3 units
301-350   4 units
351-400   5 units
Greater than 400   7 units; Administer dose and notify MD

Nurses frequently work from "Due/Overdue" MAR tab
- Displays missed administration times and administrations due in the next 2 hrs
- Clearly displays administration times

ALL | Scheduled | PRN | Continuous | Respiratory | Due/Overdue Meds | Override Pulls | Procedural | AMB Meds

Go to Now or Select Date | Overdue | Not Scanned | Show All Details | Hide All Adming

Thursday
0400 | 0500 | 0600 | 0700

aspirin EC tablet 81 mg : Dose 81 mg | Oral : DAILY
DO NOT CRUSH

Overdue button displays all "overdue" administration times in easy to read window

furosemide (LASIX) tablet 40 mg : Dose 40 mg : Oral : 3 TIMES DAILY

hydrALAZINE (APRESOLINE) tablet 50 mg : Dose 50 mg : Oral : EVERY 8 HOURS SCHE
Do not give if systolic BP less than 90
Look – Alike / Sound – Alike Alert; Use Caution
0600 Due

insulin aspart (NovoLOG) injection : Dose 0-7 Units : Subcutaneous : 3 TIMES DAILY BEFORE MEALS
LOW DOSE Insulin Administration Instructions

Blood Sugar

Overdue Documentation

Overdue Scheduled Administrations
- hydrALAZINE (APRESOLINE) tablet 50 mg
  o 02/26/15 0600
- isosorbide dinitrate (ISORDIL) tablet 10 mg
  o 02/26/15 0600
- metoprolol (LOPRESSOR) tablet 150 mg
  o 02/26/15 0600

Close

ALL | Scheduled | PRN | Continuous | Respiratory | Due/Overdue Meds | Override Pulls | Procedural | AMB Meds

Go to Now or Select Date | Overdue | Not Scanned | Show All Details | Hide All Adming

Wednesday February 11, 2015

| 0400 | 0500 | 0600 | 0700 | 0800 | 0900 | 1000 | 1100 |

phenylephrine (NEOSYNEPHRINE) injection : BOLUS PRN IN OR

- 0805 Given 150 mcg
- 1030 Given 100 mcg
- 1040 Given 100 mcg

potassium chloride 20 mEq in 50 mL IVPB : BOLUS PRN IN OR

propofol (DIPRIVAN) injection : BOLUS PRN IN OR : procedure sedation

- 0805 Given 50 mg
- 0925 Given 30 mg

- 0805 Given 70 mg
- 0925 Given 30 mg

Procedural MAR tab enables user to see which medications were given during surgery/procedure and when

---

digoxin (LANOXIN) tablet 125 mcg : Dose 125 mcg : Oral : DAILY

0900 Due

furosemide (LASIX) tablet 40 mg : Dose 40 mg : Oral : 3 TIMES DAILY

0900 Due — Click for interaction information

hydrALAZINE (APRESOLINE) tablet 50 mg : Dose 50 mg : Oral : EVERY 8 HOURS SCHEDULED
Do not give if systol

Nurses can easily:
- **Check for drug interactions**
  OR
- **Send message to Pharmacy**
  - *Missing meds, adjust times, etc*

acetaminophen (T
Maximum dose ac

aspirin EC tablet 81 mg : Dose 81 mg : Oral : DAILY
DO NOT CRUSH

0900 Due — Send message to Pharmacy

e-MAR

Normal e-MAR appearance – Unexpanded view

E-MAR can be expanded to reveal administration details (the view can be defaulted to always show details if desired)

Expanded "Detail" view

Details such as admin amount, order date/time, dispense location and Last administered dose listed

e-MAR

Expanded "Detail" view

Individual components of IV mixtures along with the line that is to be used (if linked) are also listed

Expanded "Detail" view

In addition, links to third party drug references may be provided
- Clicking link will open the monograph for drug listed

24.33

Recent lab values may be provided for medications impacted by labs

Cumulative daily dose calculator embedded into Acetaminophen entries

24.34

Tuesday February 24, 2015

| 0400 | 0500 | 0600 | 0700 | **0800** | 0900 | 1000 | 1100 |

heparin 25,000 units in D5W 250 mL infusion : Dose 5-30 Units/kg/hr × 91 kg : Admin Dose 455-2,730 Units/hr : 4.6-27.3 mL/hr : Intravenous : CONTINUOUS

FULL INTENSITY (STANDARD) PROTOCOL (use heparin dosing weight for all weight-based doses)

Initiate infusion at 18 units/kg/hr (using heparin dosing weight)

For heparin level (units/mL) less than 0.2 give bolus dose 80 units/kg (using heparin dosing weight) and increase rate by 4 units/kg/hr.

For heparin level (units/mL) 0.2 to 0.29 give bolus dose 40 units/kg (using heparin dosing weight) and increase rate by 2 units/kg/hr.

For heparin level (units/mL) 0.3 to 0.7 (GOAL RANGE), no change.

For heparin level (units/mL) 0.71 to 0.8 decrease rate by 1 unit/kg/hr (using heparin dosing weight).

For heparin level (units/mL) 0.81 to 0.9 stop infusion for 30 minutes and decrease rate by 2 units/kg/hr (using heparin dosing weight).

For heparin level (units/mL) greater than 0.9 stop infusion for 60 minutes and decrease rate by 3 units/kg/hr (using heparin dosing weight).

Obtain unfractionated heparin level every 6 hours after starting or changing rate of heparin infusion. When unfractionated heparin level is therapeutic for 2 consecutive lab draws, decrease unfractionated heparin level monitoring frequency to every morning.

0856 RatechangeDV
90 Units/kg/hr

Frequency:	CONTINUOUS	Order Start Time:	02/24/15 at 0430
Route:	Intravenous	Dispensed Volume:	250
Order Dose:	5-30 Units/kg/hr × 91 kg	Disp Location:	UF
Ordered Infusion Rate:	4.6-27.3 mL/hr	Last Admin Given:	Yes

Protocols may be provided in the Admin Instruction portion of the e-Mar

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insulin regular (humuLIN R,NovoLIN R) 250 Units in 0.9 % NaCl 250 mL infusion : Dose 0-212 Units/hr : 0-212 mL/hr : Intravenous : CONTINUOUS

Flush 30 mL of insulin infusion through IV tubing prior to connecting tubing to IV access.
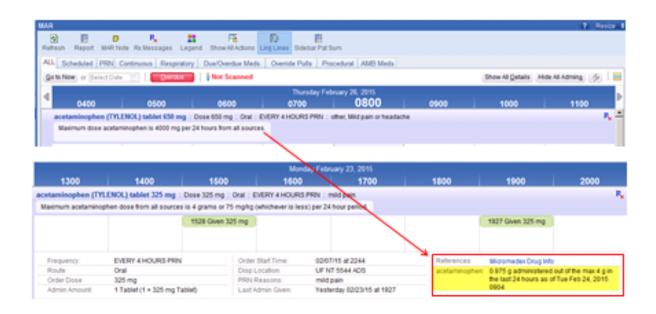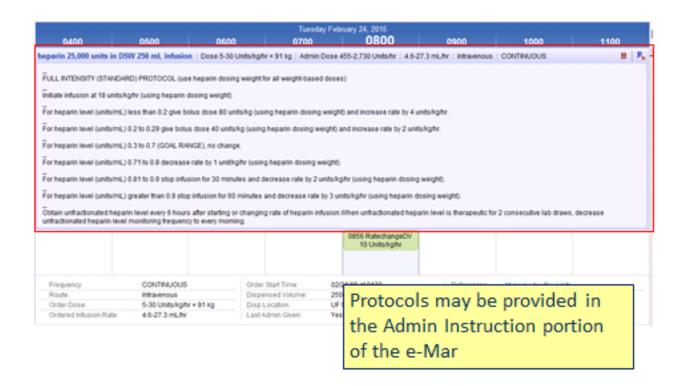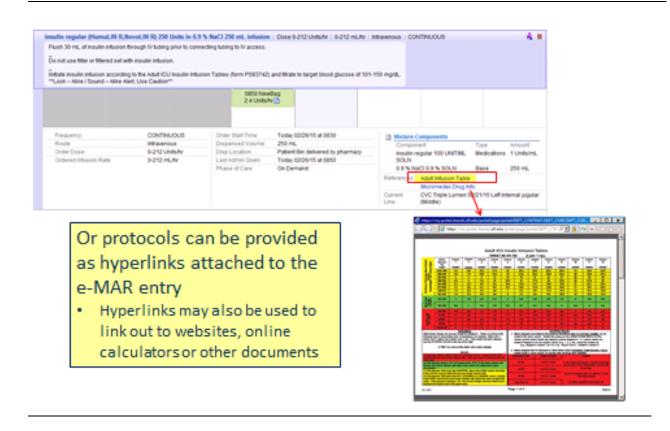
Do not use filter or filtered set with insulin infusion.

Initiate insulin infusion according to the Adult ICU Insulin Infusion Tables (form P093742) and titrate to target blood glucose of 101-150 mg/dL.
Look – Alike / Sound – Alike Alert, Use Caution

0850 NewBag
2.4 Units/hr

Frequency	CONTINUOUS	Order Start Time	Today 02/26/15 at 0830
Route	Intravenous	Dispensed Volume	250 mL
Order Dose	0-212 Units/hr	Disp Location	Patient Bin delivered by pharmacy
Ordered Infusion Rate	0-212 mL/hr	Last Admin Given	Today 02/26/15 at 0850
		Phase of Care	On Demand

Mixture Components
Component	Type	Amount
insulin regular 100 UNIT/ML SOLN	Medications	1 Units/mL
0.9 % NaCl 0.9 % SOLN	Base	250 mL

Reference: Adult Infusion Table
Micromedex Drug Info
Current Line: CVC Triple Lumen (02/21/15 Left internal jugular (Middle)

Or protocols can be provided as hyperlinks attached to the e-MAR entry

- **Hyperlinks may also be used to link out to websites, online calculators or other documents**

Orders may be placed with "Followed by" functionality which links them on the e-MAR in a successive manner
- E.g. Steroid tapers

Or desensitization regimens

- Orders may be also placed with "OR" functionality which allows the nurse to select one of the "Or Linked" choices based on the patients condition
- The other dosage forms will be blocked out for the remainder of the dosing interval once one "Or Linked" med is documented as administered

MAR Report