

F759

§483.45(f) Medication Errors. The facility must ensure that *its—*

§483.45(f)(1) Medication error rates *are not* 5 percent or greater; and

F760

The facility must ensure that *its—* §483.45(f)(2) Residents are free of any significant medication errors.

DEFINITIONS “Medication Error” *means* the observed *or identified* preparation or administration of medications or biologicals which is not in accordance with:

1. The prescriber’s order;
2. Manufacturer’s specifications (not recommendations) regarding the preparation and administration of the medication or biological; *or*
3. Accepted professional standards and principles which apply to professionals providing services. Accepted professional standards and principles include the various practice regulations in each State, and current commonly accepted health standards established by national organizations, boards, and councils.

“**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 *below*. *Significance* may be subjective or relative depending on the individual situation *and duration*, e.g., constipation that is unrelieved *because an ordered* laxative *is omitted for one day*, resulting in a medication error, may *cause a resident* slight *dis*comfort or perhaps no *dis*comfort at all. *However, if this omission leads to* constipation *that* persists for greater than three days, the *medication error* may be *deemed* significant *since* constipation *that* causes *an* obstruction or fecal impaction can *directly* jeopardize the resident’s health and safety.

“**Medication error rate**” is determined by calculating the percentage of medication errors observed during a medication administration observation. The numerator in the ratio is the total number of errors that the survey team observes, both significant and non-significant. The denominator consists of the total number of observations or “opportunities for errors” and includes all the doses the survey team 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 (doses given plus doses ordered but not given) X 100.

The error rate must be 5% or greater in order to cite *F759*. Rounding up of a lower rate (e.g., 4.6%) to a 5% rate is not permitted. *A medication error rate of 5% or greater may indicate that systemic*

problems exist. The survey team should consider investigating additional potential noncompliance issues, such as F755– Pharmacy Services, related to the facility’s medication distribution system.

NOTE: Significant and non-significant medication errors observed at 5% or greater during the Medication Administration Observation task should be cited at *F759*. However, any **significant** medication error, *whether or not the error rate is 5% or greater*, should be cited at *F760*.

Significant and Non-significant Medication Errors

Determining Significance

The relative significance of medication errors is a matter of professional judgment. Follow three general guidelines in determining whether a medication error is significant or not:

- **Resident Condition** -The resident’s condition is an important factor to take into consideration. For example, a *diuretic* (fluid pill) 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 resident’s condition requires rigid control, *such as with strict intake and output measurement, daily weights, or monitoring of lab values*, a single missed or wrong dose can be highly significant;
- **Drug Category** -If the medication 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 important with a medication that has a Narrow Therapeutic Index (NTI) (i.e., a medication in which the therapeutic dose is very close to the toxic dose). Examples of medications with NTI *include*: phenytoin (Dilantin), carbamazepine (Tegretol); warfarin (Coumadin); digoxin (Lanoxin); theophylline (TheoDur); lithium salts (Eskalith, Lithobid); *and*
- **Frequency of Error** -If an error is occurring *repeatedly*, there *may be* more reason to classify the error as significant. For example, if a resident’s medication was omitted several times, *it may be appropriate, depending on consideration of resident condition and medication category, to classify that error as significant. (See Dose Reconciliation Technique to the Observation Technique below).*

Significant medication errors are *cited at F760* in the following circumstances:

- *When the surveyor observes a significant medication error during a medication preparation and/or administration (regardless of whether the overall facility error rate is 5% or greater);*
- *When the surveyor identifies a significant medication error(s) during the course of a resident record review.*

While observation is the preferred method for citing medication errors, the surveyor may identify medication errors based on evidence from other sources, such as documentation of a change in the resident’s condition determined to be due to medication errors, reports from family members that medication was given incorrectly and investigation supports that a medication error occurred, or discrepancies in the MAR that lead to identification of a medication error. The surveyor must conduct any follow up investigation to obtain corroborating information regarding the error, such as interviews with the nurse, Director of Nursing, or the pharmacist, and review other relevant documents. Surveyors should evaluate whether past non-compliance exists using the survey protocol.

Medication errors identified through methods other than observation are not counted in the medication pass observation and not cited at F759, but, any significant medication errors would be cited at F760 if evidence supports the citation.

Examples of Significant and Non-Significant Medication Errors

Some of the error *examples* are identified as significant. This designation is based *on accepted clinical standards of practice* without regard to the status of the resident *because* these error *examples show* a high potential for creating problems for the typical long-term care facility resident. Those errors identified as non-significant have also been designated primarily on the basis of the nature of the medication. Resident status, *actual or potential resident response to the error*, and frequency of error could *cause such errors to be classified* as significant.

Examples of Medication Errors

In the following tables, S=Significant; NS=Not Significant.

Omissions (Medication ordered but not administered at least once): Medication Order	Significance
<i>Metoprolol Succinate 100mg daily</i>	S
<i>Furosemide 40mg twice daily</i>	S
<i>Trazodone 25mg at bedtime</i>	NS
<i>Ibuprofen 400mg three times daily</i>	NS
<i>Artificial tears 2 drops both eyes three times daily</i>	NS
<i>Fiber supplement one packet twice daily</i>	NS
Multivitamin one daily	NS
<i>Calcium Carbonate Chewable 1 tablet three times a day after meals</i>	NS