IIIB3: PREVENTING AND DETECTING ADVERSE CONSEQUENCES AND MEDICATION ERRORS

Policy

The facility employs a system to assure that medication usage is evaluated on an ongoing basis. When a resident has a change in condition, medication-related problems are considered. Significant medication-related problems are assessed, documented, and reported as appropriate to the resident's attending physician, the **[the Quality Assessment and Assurance Committee (QAA)]**, the pharmacy, the consultant pharmacist, and the Food and Drug Administration MedWatch Program or USP/ISMP Medication Error Reporting Program (when applicable).

Procedures

A. The interdisciplinary team reviews the resident's medication regimen for efficacy and actual or potential medication-related problems on an ongoing basis in accordance with the policy on Medication Management (See IIIB2: MEDICATION MANAGEMENT).

B. When a resident receives a new medication, the medication order is evaluated for the following:

1) The dose, route of administration, duration, and monitoring are in agreement with current clinical practice, clinical guidelines, and/or manufacturer's specifications for use.

2) A written diagnosis/indication **[and documented objective findings, if necessary]** support the use of the medication.

3) The resident has no known allergies to the medication.

4) Presence of a Boxed Warning for specific side effect(s).

5) The resident is not taking other medications, nutritional supplements, including herbal products, or foods that would be incompatible with the prescribed medication.

6) The resident does not have a condition, history, or sensitivity that would preclude the use of the medication.

7) The prescriber documents the clinical rationale in the resident's **[active record]** for using a medication outside these stated guidelines.

C. Facility staff monitor the resident for possible medication-related adverse consequences, including mental status and level of consciousness, when the following conditions occur:

1) A clinically significant change in condition/status.
   a. An unexplained decline in function or cognition.
   b. A worsening of an existing problem or condition.
   c. A new or worsening psychiatric manifestation or distressed behavior.
   d. Acute onset of signs or symptoms or worsening of a chronic problem

or condition.

2) Addition or discontinuation of medications and/or non-pharmacologic interventions.

3) Change in dose.

4) Addition or discontinuation of care and services such as enteral feedings.

5) Significant changes in diet that may affect medication absorption.

6) Medication error, e.g., wrong or expired medication.

D. When any of the above occurs, the prescriber and/or staff rule out medication as a cause and document it in the resident's clinical record.

1) A review of medications as potential causes of permanent significant change that requires a Significant Change of Status MDS Assessment should be performed within the required 14-day observation period.

E. The facility staff monitors residents on the following combinations for possible adverse consequences and/or the need to modify the dose of one or more medications. The prescriber documents why or how these medications' benefits outweigh their risks in the resident's clinical record.

Medication 1	**Medication 2**	**Impact**
warfarin (Coumadin®)	NSAID's (e.g., ibuprofen (Motrin®), naproxen (Naprosyn®), celecoxib (Celebrex®))	Potential for serious gastrointestinal bleeding
warfarin (Coumadin®)	sulfonamides (e.g., trimethoprim/sulfamethoxazole (Bactrim®))	Increased effects of warfarin with potential for bleeding
warfarin (Coumadin®)	macrolides (e.g., azithromycin (Zithromax®), clarithromycin (Biaxin®), erythromycin)	Increased effects of warfarin with potential for bleeding
warfarin (Coumadin®)	fluoroquinolones (e.g., ciprofloxacin (Cipro®), levofloxacin (Levaquin®), ofloxacin (Floxin®))	Increased effects of warfarin with potential for bleeding
warfarin (Coumadin®)	phenytoin (Dilantin®)	Increased effects of warfarin and/or phenytoin
ACE Inhibitors (e.g., benazepril (Lotensin®), captopril (Capoten®), enalapril (Vasotec®), lisinopril (Prinivil®/Zestril®), quinapril (Accupril®), ramipril (Altace®))	potassium supplements	Elevated serum potassium levels
ACE Inhibitors (e.g., benazepril (Lotensin®), captopril (Capoten®), enalapril (Vasotec®), lisinopril (Prinivil®/Zestril®), quinapril (Accupril®), ramipril (Altace®))	spironolactone	Elevated serum potassium levels
digoxin	amiodarone	Digoxin toxicity
digoxin	fluoroquinolones (e.g., ciprofloxacin (Cipro®), levofloxacin (Levaquin®), ofloxacin (Floxin®))	Digoxin toxicity

F. In the event of a significant medication-related error or adverse consequence,

immediate action is taken, as necessary, to protect the resident's safety and welfare. Significant is defined as:

1) Requiring medication discontinuation or dose modification.
2) Requiring hospitalization, or extending a hospitalization.
3) Resulting in disability.
4) Requiring treatment with a prescription medication.
5) Resulting in cognitive deterioration or impairment.
6) Life threatening.
7) Resulting in death.

G. The attending physician is notified promptly of any significant error or adverse consequence.

H. The physician's orders are implemented, and the resident is monitored closely for 24 to 72 hours or as directed.

I. The incident is described on the shift change report to alert staff of the need to monitor the resident.

J. The following information is documented in an incident report and in the resident's clinical record:

8) Factual description of the error or adverse consequence.
9) Name of physician and time notified.
10) Physician's subsequent orders.
11) Resident's condition for 24 to 72 hours or as directed.

K. Each incident report is forwarded to the **[Director of Nursing/Quality Assurance Nurse/Medical Director/Consultant Pharmacist/Director of Pharmacy]**.

L. Data regarding medication adverse consequences and errors (e.g., total number of incidents, number of incidents by category/type, trends) will be compiled and presented to the Quality Assessment and Assurance Committee by the **[Director of Nursing/Consultant Pharmacist/Quality Assurance Nurse]** on **a [monthly/quarterly]** basis.

M. The QAA Committee then conducts a root cause analysis of medication administration errors to determine the source of errors, implements process improvement steps, and compares results over time to determine that system improvements are effective in reducing errors.