Evidence-Based Best Practices for Medication Management in LTC

Overview

Medications are an important aspect of care provided to people living in nursing facilities (NFs). Treatment with medications is directed toward achieving various health and quality of life-desired outcomes, such as reducing or eliminating symptoms, or preventing or treating a disease process. NFs are required to manage their provision of medications in a manner that promotes medication effectiveness and safety. To that end, NFs are required to enlist the services of a licensed consultant pharmacist. The consultant pharmacist collaborates with the NF, medical director, and other NF staff to ensure important procedures that promote compliance with state and federal regulations are in place and followed. Important procedural areas include medication prescriber ordering and transcription, acquisition, administration, storage and labeling, control and disposal, monitoring, and gradual dose reduction for psychotropic medications.

In prescribing medications, NFs must ensure that they have a documented indication, are ordered at the lowest possible dose and duration, and have an appropriate monitoring strategy. Failure to address these important practices may increase the risk for a broad range of adverse consequences such as lack of efficacy, medication interactions, allergic reactions, reduced mental or physical functioning with associated complications, accidents such as falls, and even death. NFs are responsible for involving people in their care planning for medications, honoring their goals and preferences, attempting non-pharmacological interventions when possible, and working with the prescriber to revise their medications when indicated. NFs must also ensure competency of nursing staff who administer medications and monitor/respond to medication effects.

A NF must foster a culture of safety and motivate employees to participate in and contribute to a system that makes safety a top priority and protects the people living in the facility and staff. They must also manage a system-wide performance improvement program that identifies root causes of problems and corrects them.

Medication Management Best Practices

Ensure prescriber orders are completed and processed as follows:

- Check orders carefully during transitions (readmission from hospital, transfer from other NF, admitted from community, etc.).
- Complete orders clearly and accurately, without confusing language or discrepancies. Question unclear orders.
- Include medication name, dose, dosage form, amount (one, two, etc.), duration, route, frequency, and any special timing instructions (Should not contain excessive dose, excessive duration, drug interactions, or duplicate therapy, without a documented rationale).
- Avoid medication name abbreviations, e.g., HCTZ, MS, etc. and write drug names in full.
- Avoid medication errors by the following:
    - Use leading zeros (0.25 mg) and avoid trailing zeros (25.0 mg) for medication strength.
    - Write out unit, international unit, daily, every other day, greater than, and less than.
    - Write mL (preferred), ml, or milliliter instead of cc.
- Include stop date for short-term medications and tapering instructions as appropriate (such as with steroids).
- Include the indication for medication, and the specific indication for PRN medication.
- Note dosing time interval (frequency or limits) for all PRN medication.
- Provide stop dates for new PRN psychotropic medication, or rationale for extension.
- Question physician regarding medication that is prohibited by allergies.
- Define medication-associated monitoring.
- Transfer orders to the Medication/Treatment Administration Record (MAR/TAR) with the following:
    - Separate listings when two strengths are used to make up one dose.
    - Separate listings when PRN doses can be more than one amount, e.g., one or two tablets, capsules, etc.
    - Clinical reasons for PRN medication administration and post administration response.
    - Fields for injection site and transdermal patch site location.
    - Fields for monitoring and hold parameters associated with medication (blood pressure, pulse, blood sugar, etc.).

- Fields for monitoring for side effects and automatic stop dates for PRN psychotropic medications.
- Listings for "Call MD" when appropriate, such as for high or low blood glucose levels.

- Sign the orders (the nurse if verbal/phone order) and then the physician (as soon as possible).

Order, acquire, and store/label medications as follows:

- Order/reorder and acquire prescribed medications timely to ensure an adequate supply, with consideration to a person's condition, administration timing, supply availability, and type of medication (analgesic, antibiotic, etc.); do not borrow medications from other people, as this is considered misappropriation of property.
- Verify accuracy of medications received from pharmacy (must be a licensed nurse).
- Maintain an established process to ensure an adequate supply of house stock medications (vitamins, minerals, supplements, etc.) and supplies (medicine cups, syringes, single use lancets, etc.) needed to administer medications.
- Maintain an adequate supply of medications in E-Kit to meet the needs of the facility's population.
- Maintain detailed records of medication receipt, usage, and disposition, especially of controlled medications, to enable an accurate reconciliation.
- Ensure house stock medications have visible expiration dates, are labeled when appropriate for single person use, and are stored to prevent cross-contamination.
- Ensure medication labels contain the person's name, medication name, prescribed dose, strength, expiration date, route, special instructions, and precautions; with change of direction sticker if applicable.
- Maintain medication room, carts, and boxes as/with locked and secured; well stocked, clean, and organized; proper room temperature (68-77 degrees), humidity, and lighting; proper medication refrigerator temperature (36-46 degrees); proper food refrigerator temperature (40 degrees or below), freezer operational, free of damaged, expired, discontinued products; and spacing of medications to prevent cross contamination.
- Ensure refrigerated food is labeled with the person's name and date.
- Ensure controlled medications are secured in a separately locked and permanently fixed compartment.
- Ensure sharps containers are replaced when the fill line is reached.
- Ensure potentially unsafe items such as cigarette lighters, matches, vaping devices) are stored safely.
- Ensure single use devices and OTC medications are labeled with the person's name and stored to prevent cross-contamination.
- Ensure multidose vials are maintained as follows:

- If open, date when first entered and discarded within 28 days (unless manufacturer recommends shorter or longer time period)
- If unopened, store and discard according to manufacturer recommendations.
- If used for more than one person, keep in a centralized medication area and do not take into a a specific person's immediate area.
- If used for a single person, label accordingly.

- Ensure medications stored for self-administration are in a locked storage compartment in the person's room or in a secure location elsewhere in the NF.

Control/reconcile/store and dispose of/destroy medications that are no longer used as follows:

- Maintain records of personnel access, usage, and disposition of all controlled medications with sufficient detail to allow reconciliation; and conduct periodic reconciliations following internal policy.
- Remove all controlled and non-controlled medications that become damaged, expire, or are discontinued, from the storage area of current medications to another secure location; reconcile controlled medications upon removal and store all controlled medications in a separately locked permanently fixed compartment.
- Maintain an established process for disposal/destruction, such as return to pharmacy, destroy, follow state requirements, etc.
- Destroy controlled medications (with witness) using a method that prevents diversion and/or accidental exposure.

Assessments related to medications as follows:

- Complete a comprehensive assessment within 14 days of admission, with a significant change, and at least annually. Complete a non-comprehensive assessment quarterly.
- For comprehensive assessments, complete the care area assessment (CAA) process, which may trigger care areas related to medications (e.g., potential side effects/complications, need for monitoring, need for non-pharmacological interventions or future gradual dose reduction time intervals for psychotropic medications, etc.) and conduct decision making about care planning related to triggered areas.
- Assess people proactively on an ongoing basis regarding the following:
  - Benefits vs. risks of medications
  - Results of ordered monitoring of a person's responses to medications (vital signs, weight, lab values, etc.)
  - Results of monitoring for medication efficacy, and improvement in symptoms/condition, including potential for medication dose reduction or discontinuance, and especially gradual dose reductions in psychotropic medications

- Results of monitoring for adverse consequences, especially in high-risk drug categories (opioids, anticoagulants, diuretics, insulin, antibiotics, psychotropics)
- Continued need for PRN psychotropic medications (initial 14 day stop date, with rationale required for renewal, and in-person evaluation for antipsychotic renewal)

- Require consultant pharmacist to conduct medication regimen review (MRR) on an ongoing basis as follows:
  - Evaluate whether indication for medication is adequate.
  - Evaluate appropriateness of medication dose/route/duration.
  - Identify and evaluate problems such as:
    - ✓ Duplicate therapy
    - ✓ Drug-to-drug interactions
    - ✓ Adverse drug consequences
    - ✓ Lack of non-pharmacological interventions or gradual dose reductions with psychotropic medications
    - ✓ Inadequate monitoring
    - ✓ Medication errors
    - ✓ Issues with progress toward medication therapy goals.
  - Consider MRR part of record and make available for review.
  - Ensure consultant pharmacist provides MRR results to DON, Medical Director, and attending physician.
  - Ensure the attending physician responds to MRR with agreement and response, or disagreement and rationale, and documents this in the medical record.
  - Ensure the Medical Director addresses inadequate responses by the attending physician.
  - Establish a policy and procedure that explains the MRR process.

Complete care planning for each person as follows:

- Complete a baseline care plan within 48 hours of admission, and a comprehensive care plan within seven days of the comprehensive assessment, with significant changes in condition, quarterly, and annually. Ensure the Interdisciplinary team (IDT) is involved in care planning.
- Ensure there are documented efforts to involve the person and/or their representative in care planning.
- Ensure care plan contains person-centered goals (based on that person's priorities, preferences, limitations, etc.), and measurable objectives/timeframes for achieving goals.

- Ensure care plan contains interventions that address each person's needs based on their conditions, medications, and risks; being sure to target areas identified in the assessment. Interventions may include non-pharmacological interventions, pharmacological interventions, gradual dose reductions, monitoring for medication efficacy and adverse consequences, etc.)
- Ensure IDT reviews/updates care plan interventions as needed based on effectiveness of interventions, changing goals/preferences, changes in the person's conditions/medication therapy, monitoring results, etc.
- Ensure IDT evaluates and approves any requests for self-administration of medications (complete initial assessment of the person for competency and whether he/she can administer properly and communicate this and problems to staff, establish secure storage of medications, continue periodic reassessments).
- Ensure the IDT has required membership of the attending physician, a registered nurse and nurse aide with responsibility for the person, a member of the food and nutrition services staff, and the person and his/her representative, if possible.

Maintain an effective medication management system as follows:

- Maintain written policies and procedures related to the overall management of pharmaceutical services (e.g., ordering/receiving, administering, labeling and storage, controlling, disposing/destruction of medications; as well as supporting policies; and train staff on these.
- Provide training and conduct competency testing for new and existing staff regarding administration of medications, use of medication devices, cleaning of equipment, monitoring of medications, and appropriate response when medication issues arise.
- Maintain an Interdisciplinary Care Team (IDT) that participates in interdisciplinary assessment and review, revision, and monitoring of care plans.
- Make multidisciplinary resources for comprehensive evaluation available when needed for those living in the facility, e.g., consultant pharmacist, antibiotic stewardship expert, physician specialists, etc.
- Involve each person living in the facility in care planning, respect their goals and preferences, and provide education to them and their families regarding pharmaceutical services.
- Maintain a communication and reporting system to notify facility leadership/staff and families of pharmaceutical services issues for people living in the facility (e.g., medication errors, side effects, adverse drug events, etc.)
- Maintain an antibiotic stewardship program to surveil and analyze infections that may require antibiotics, standardize effective use of antibiotics, and prevent unnecessary antibiotic use, reduce antibiotic resistance, and promote safety.
- Maintain an effective QAPI program, including a Quality Assurance and Assessment (QAA) committee that oversees pharmaceutical services and systematic collection/analysis of data to monitor the pharmaceutical services program, identify areas of weakness and root causes; and initiate improvement

through intervention, revising care plans, and modifying facility practices. QAPI should be data-driven, in that performance indicators are used to drive improvement.

- Ensure the QAA Committee meets at least quarterly, with required membership to include the Medical Director, Director of Nursing, Infection Preventionist, and at least three other members of the facility's staff, with one in a leadership role.
- As part of QAPI, collect medication process/outcomes data through data collection, reports, and performance indicators; these may include MRR findings, antibiotic stewardship surveillance/reporting, adverse events, medication errors, and performance indicators.
- Promote a culture of safety, and a "just" culture; through leadership communicating safety as a priority, policies and procedures, accountability vs. punishment, reporting of safety issues, analysis of causes of issues, and improvement.

References

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