

# Medication Management and Administration



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# **Section 1: Introduction**

Welcome to the Medication Management and Administration course tailored specifically for Nursing Home Administrators (NHA). As administrators of longterm care facilities, you play a pivotal role in ensuring the health and well-being of residents, including the safe and effective management of medications. This comprehensive course aims to provide you with the knowledge, skills, and resources necessary to navigate the complexities of medication management within nursing home settings.

In this course, we will explore the multifaceted landscape of medication management and administration in nursing homes. We will begin by establishing a solid foundation in the fundamental principles guiding medication practices, including regulatory requirements, ethical considerations, and the importance of collaboration among healthcare professionals. Understanding these foundational concepts is essential for fostering a culture of safety and promoting optimal resident care.

Medications are integral to the management of residents' medical conditions and play a crucial role in alleviating symptoms and improving quality of life. However, improper medication management can lead to adverse events, medication errors, and compromised resident safety. Throughout this course, we will underscore the critical importance of diligent medication oversight and adherence to best practices. Through case studies and real-world examples, we will examine the impact of medication management on resident outcomes and highlight strategies for mitigating risks and enhancing medication safety.

Navigating the complexities of medication administration in nursing homes presents numerous challenges. From polypharmacy to medication errors, staffing shortages, and limited resources, healthcare professionals face a myriad of obstacles in ensuring safe and effective medication practices. By identifying these challenges and implementing proactive strategies to address them, we can enhance medication safety and optimize resident care delivery.

Effective medication management relies on a skilled and knowledgeable workforce. We will take a look at the roles and responsibilities of various healthcare professionals involved in medication administration, including registered nurses, licensed practical nurses, certified medication aides, and direct care staff. Understanding the qualifications and scope of practice for medication administration personnel is essential for ensuring compliance with regulatory standards and promoting quality care delivery.

Medications come in various forms and serve diverse purposes in managing residents' medical conditions. From analgesics to antipsychotics, antibiotics, and cardiovascular medications, understanding the pharmacological properties, indications, and potential side effects of these medications is crucial for safe and effective administration. Throughout this course, we will delve into the different types of medications commonly administered in nursing homes and examine best practices for their use.

Respecting residents' autonomy and ensuring their involvement in decisions related to medication management are fundamental principles guiding ethical medication practices. In this course, we will explore the rights of medication administration, including informed consent, the right to refuse treatment, and other key principles aimed at upholding residents' dignity and autonomy.

Additionally, we will examine the implications of reimbursement policies and the importance of ongoing continuing education in medication management. We will also explore emerging trends and innovations in medication management, highlighting opportunities for enhancing efficiency and improving resident outcomes.

Join us on this educational journey as we delve into the intricacies of medication management and administration in nursing homes. By equipping yourself with the knowledge and skills presented in this course, you will be better prepared to navigate the complexities of medication practices, promote medication safety, and uphold the highest standards of care for residents in your facility.

# Section 2: Medication Management in Nursing Facilities

# **Overview of Nursing Facilities (SNFs and NFs)**

In the United States, nursing facilities are broadly categorized into two main types: skilled nursing facilities (SNFs) and nursing facilities. Skilled nursing facilities, whether integrated into a hospital or operating independently within the community, offer comprehensive medical care including 24-hour nursing services and specialized rehabilitation programs administered by licensed therapists in disciplines such as speech therapy, occupational therapy, and physical therapy. Typically, SNFs cater to individuals requiring short-term rehabilitative care following hospitalization, providing a transitionary setting until they are deemed fit to return home. Licensed by the Centers for Medicare & Medicaid Services (CMS), SNFs accept various forms of insurance including Medicare, Managed Care, select private insurances (when in-network), and private pay arrangements.

In contrast, nursing facilities are designed to serve as long-term residences for senior citizens, offering a homelike environment conducive to extended stays. These facilities also provide round-the-clock nursing care, with admission often contingent upon meeting specific eligibility criteria. Individuals accessing nursing facilities commonly rely on Medicaid as a primary payer source, although private payment options using personal funds are also available.

As a nursing home administrator, it is very likely one will operate facilities that are dually licensed by CMS as SNFs/NFs. For the remainder of the course, the terms nursing home, skilled nursing facility, and nursing facility will be used interchangeably. The role of the NHA does not change, regardless of the technical classification of a facility. Understanding the guidelines of both SNF/NF is essential. Regardless of facility type, both SNFs and nursing facilities are tasked with fulfilling residents' needs by providing essential services such as room and board, social services, medication management, medical supplies and equipment, nutritional meals, and personal care items.

# **Importance of Medication Administration**

According to the U.S. Department of Health and Human Services, Office of the Inspector General, as of July 2022, there are over 1.2 million individuals residing in more than 15,000 certified nursing homes across the United States. This equates to an average of approximately 80 residents per nursing home. The demographic makeup of nursing home residents often includes individuals with cognitive impairments, physical disabilities, and a propensity for multiple comorbidities, among other challenges. These factors underscore the importance of robust medication management systems within nursing home facilities.

Nursing home residents frequently contend with complex medication regimens, necessitating the administration of various medications at different times throughout the day. Effective medication management is essential to ensuring that residents receive their prescribed medications accurately, in the appropriate doses, and at the designated times. By implementing systematic medication management protocols and adhering to established procedures, nursing home staff can significantly reduce the occurrence of medication errors. This, in turn, mitigates the associated risks of adverse effects, hospitalization, and potential mortality resulting from medication-related mishaps.

The significance of medication management in nursing homes extends beyond individual resident safety to encompass broader considerations such as overall health outcomes, regulatory compliance, and the optimization of care coordination. Ensuring patient safety, maintaining health and wellness, and adhering to state and federal regulations are paramount objectives. To achieve these goals, nursing facilities must prioritize comprehensive training for nursing staff and medication aides, where permitted by state regulations. Additionally, robust medication tracking mechanisms, routine medication reviews conducted by physicians and pharmacists, and streamlined ordering and review processes are indispensable components of a well-functioning medication management system. By diligently implementing and maintaining these protocols, nursing homes can uphold the highest standards of care while safeguarding the well-being of their residents.

# **Challenges in Medication Administration**

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Medication administration in nursing homes presents several challenges that impact resident safety and quality of care. These challenges include polypharmacy, staffing shortages, limited training and education, documentation issues, medication storage and handling concerns, communication barriers, resident adherence difficulties, and regulatory compliance requirements. Addressing these challenges is essential to ensuring safe and effective medication management practices in nursing home settings, ultimately enhancing resident outcomes and minimizing the risk of medication errors and adverse events.

#### Polypharmacy

Polypharmacy has recently garnered additional attention in the healthcare world, specifically when considering senior citizens. Polypharmacy, the phenomenon of patients taking multiple prescribed medications daily, is increasingly prevalent in the healthcare landscape, particularly among senior citizens (Hoel et al., 2021). This trend is closely associated with the rising life expectancy of the average individual, leading to the accumulation of clinical conditions, chronic illnesses, and diseases that necessitate pharmacological intervention (Aliouche, 2022). For instance, the probability of having multiple significant conditions increases with age, reaching around 60% for individuals aged 75 to 79 and surpassing 75% for

those aged 85 to 89 (Aliouche, 2022). For instance, a resident admitted to a nursing home with chronic hypertension, congestive heart failure, and depression may require multiple medications to manage these comorbidities and alleviate associated symptoms. Comorbidities, which refer to the presence of multiple clinical conditions in an individual, often contribute to the complexity of medication regimens, resulting in polypharmacy (Aliouche, 2022).

The implications of polypharmacy extend beyond the mere quantity of medications and can have profound negative impacts on older adults. Adverse drug reactions, drug toxicity, falls resulting in injury, and cognitive impairments such as delirium or confusion are among the potential consequences. Furthermore, polypharmacy is closely linked to increased hospitalization rates and elevated healthcare costs, both for individuals and healthcare systems (Hoel et al., 2021). These challenges highlight the critical importance of medication management strategies that prioritize optimizing medication regimens, minimizing unnecessary prescriptions, and closely monitoring for adverse effects to ensure the safety and well-being of older adults in nursing home settings. ucation for Nursing t

#### **Staffing Shortages**

318 Staffing shortages in long-term care facilities and skilled nursing facilities (SNFs) have reached alarming levels, significantly impacting resident care and facility operations. Since the onset of the pandemic, a staggering 406,200 employees have left jobs in long-term care facilities, with nursing homes bearing the brunt of the workforce loss, experiencing a 15.2% reduction in staff, equating to approximately 241,000 employees (Heiks & Sabine, 2022). This exodus of workers has severely strained the capacity of these facilities to provide adequate care to residents. Indeed, more than 60% of nursing homes in the United States have been forced to limit new admissions due to staffing shortages, resulting in a decline in median occupancy rates to 77%, lower than pre-pandemic levels (Heiks & Sabine, 2022). Some facilities have even been compelled to close beds or halt new admissions altogether, exacerbating the strain on an already burdened longterm care system.

The detrimental effects of staffing shortages in long-term care facilities and SNFs extend beyond resident admissions and occupancy rates, significantly impacting medication administration and management programs. Adequate staffing levels are crucial for ensuring timely and accurate medication administration, as well as for conducting necessary medication reviews, documentation, and monitoring. However, with a diminished workforce, facilities may struggle to meet the demands of medication administration, potentially leading to errors, missed doses, and compromised resident safety. Moreover, understaffing can impede effective communication among healthcare professionals, hinder interdisciplinary collaboration, and exacerbate existing challenges in medication storage, handling, and adherence.

### **Section 2 Personal Reflection**

- Reflect on the multifaceted challenges posed by polypharmacy in nursing home residents. How might the presence of polypharmacy impact not only individual resident health outcomes but also the broader healthcare system?
- 2. Considering the significant staffing shortages plaguing long-term care facilities, analyze the potential ramifications for medication administration programs within these settings. How might understaffing contribute to medication errors, missed doses, and compromised resident safety, and what strategies could be implemented to mitigate these risks?
- 3. Reflect on the interconnectedness of staffing shortages, communication barriers, and medication management challenges in nursing homes. How might improved communication strategies among healthcare professionals help address medication administration issues and enhance resident care in the face of staffing shortages?

### **Section 2 Key Words**

<u>Comorbidity</u> - The concurrence of one or more clinical condition in a single person <u>Polypharmacy</u> - An accumulation of 5 or more medications taken by a patient

# **Section 3: Regulatory Framework and Compliance**

Understanding the regulatory landscape governing nursing home operations is essential for administrators and staff to ensure compliance and maintain high standards of care. Nursing homes in the United States are subject to both federal and state regulations, each playing a crucial role in shaping the policies and procedures that govern facility operations. While federal regulations establish minimum standards for nursing home care nationwide, it's important to recognize that state regulations may impose additional requirements or variations tailored to local needs. It's crucial to note that in cases of conflict, federal regulations always take precedence over state regulations. However, nursing home facilities are obligated to adhere to both federal and state regulations concurrently, navigating the intricate interplay between the two to uphold regulatory compliance and provide optimal care for residents. This section will explore the key differences between federal and state regulations governing nursing home operations, emphasizing the importance of understanding and adhering to both sets of standards.

# **Federal Regulations**

In a nursing home setting, adherence to federal regulations governing medication management is paramount to ensuring the safety and well-being of residents. Failure to comply with these regulations can have significant adverse impacts on the facility's medication management program, leading to potential citations from state and federal surveyors. The implications of non-compliance extend beyond the immediate citation, potentially affecting multiple facets of resident care and facility operations.

For instance, under §483.10(c)(5) concerning resident rights, residents have the right to be informed about the risks and benefits of proposed care and to choose their preferred treatment options. Violations of this regulation, such as failing to provide adequate information about medication risks and alternatives, could result in citations related to residents' rights to make informed treatment decisions (F552) and participate in care planning (F553).

Similarly, §483.45 outlines requirements for pharmacy services, including the establishment of accurate records for controlled substances and regular drug regimen reviews. Non-compliance with these regulations may lead to citations related to pharmacy services and procedures (F755), drug regimen review (F756), and ensuring residents are free from unnecessary medications (F757). Additionally, violations of staffing qualifications under §483.70(f)(2) (F839) could further exacerbate medication management issues by compromising the competency of personnel responsible for administering medications.

Furthermore, infection control measures outlined in §483.80 are crucial for preventing the transmission of communicable diseases, including those related to medication administration practices. Failure to implement effective infection control protocols, could cause issues when administering medications, if not completed in a safe and appropriate manner. Furthermore, such as ensuring residents are immunized against influenza, covid-19, and pneumococcal viruses (F883) are an infection control expectation.

As a nursing home administrator, it is imperative to prioritize compliance with all federal regulations governing medication management and ensure staff are well-trained and familiar with their responsibilities. By maintaining rigorous adherence to these regulations, nursing homes can safeguard resident safety, uphold their rights, and mitigate the risk of citations and regulatory penalties.

#### State Operations Manual Appendix PP Regulations

\*All of the below regulations and f-tag information are taken from the Centers for Medicare and Medicaid Services State Operations Manual Appendix PP and the chart of Federal Regulatory Groups for Long Term Care.

§483.10 - Resident Rights	§483.10(c)(5)
Tresident Rights	The right to be informed, in advance, by the physician or other practitioner or professional, of the risks and benefits of proposed care, of treatment and treatment alternatives or treatment options and to choose the alternative or option she or she prefers.
Possible F-Tag Implications	F552 Right to be informed/Make treatment decisions
	F553 Right to participate in planning care
	F554 Right to self-administer meds
§483.12 -	§483.12(a)(2)
Freedom from Abuse, Neglect, and Exploitation	[The facility must] ensure that the resident is free from physical or chemical restraints imposed for the purpose of discipline or convenience and that are not required to treat the resident's medical symptoms. When the use of restraints is indicated, the facility must use the least restrictive alternative for the least amount of time and document ongoing re-evaluation of the need for restraints.
Possible F-Tag Implications	<ul> <li>F605 right to be free from chemical restraints</li> </ul>
§483.45 - Pharmacy Services	<ul> <li>§483.45 Pharmacy Services</li> <li>The facility must provide routine and emergency drugs and biologicals to its residents, or obtain them under an agreement described in §483.70(g). The facility may permit unlicensed personnel to administer drugs if State law permits, but only under the general supervision of a licensed nurse.</li> <li>§483.45(b)(2) Establishes a system of records of receipt and disposition of all controlled drugs in sufficient detail to enable an accurate reconciliation; and</li> <li>§483.45(b)(3) Determines that drug records are in order and that an account of all controlled drugs is maintained and periodically reconciled.</li> </ul>

Possible F-Tag	F755 Pharmacy services/procedures/pharmacist/records
Implications	F756 Drug regimen review, report irregular, act on
	<ul> <li>F757 Drug Regimen is free from unnecessary drugs</li> </ul>
	• F758 Free from unnecessary psychotropic meds/ PRN use
	• F759 Free from medication error rate of 5% or more
	<ul> <li>F760 Residents are free of significant med eros</li> </ul>
	F761 label/store of drugs and biologicals
§483.70 -	§483.70 - Administration
Administration	A facility must be administered in a manner that enables it to use its resources effectively and efficiently to attain or maintain the highest practicable physical, mental, and psychosocial well-being of each resident.
	§483.70(f)(2) - Staff Qualifications
	Professional staff must be licensed, certified, or registered in accordance with applicable State laws.
Possible F-Tag Implications	F839 Staff qualifications
§483.80 - Infection	§483.80
Control	The facility must establish and maintain an infection prevention and control program designed to provide a safe, sanitary, and comfortable environment and to help prevent the development and transmission of communicable diseases and infections.
	§483.80 (d) Influenza, pneumococcal, and COVID–19 immunizations
Possible F-Tag Implications	<ul> <li>F883 Influenza and Pneumococcal Immunizations</li> </ul>

The chart above serves as a reference tool, outlining key federal regulations alongside their corresponding F-tags. While the list is not exhaustive, it offers a comprehensive overview of regulatory requirements related to medication management in nursing homes. Administrators should familiarize themselves with these regulations and F-tags to ensure compliance and facilitate effective management of medication-related processes. Additionally, staying informed about revisions and updates to surveyor and facility guidance is essential, as regulatory standards may evolve over time. By maintaining a thorough understanding of regulations and staying current with guidance changes, administrators can better navigate compliance challenges and uphold the highest standards of resident care and safety.

# **State Regulations**

Regarding state regulations, it's important to note that while federal regulations establish a baseline standard for nursing home care across the country, individual states may have their own set of regulations that nursing homes must also adhere to. These state regulations can vary widely and may include additional requirements or specifications beyond what is outlined at the federal level.

Nursing home administrators must be diligent in understanding and following both federal and state regulations concurrently. Failure to comply with state regulations can result in citations and penalties from state regulatory agencies, in addition to potential federal citations.

For example, state regulations may dictate specific protocols for medication administration, documentation, and staff qualifications that differ from federal requirements. Nursing homes must ensure that their policies and procedures align with both federal and state regulations to maintain regulatory compliance and provide quality care to residents.

Understanding the interplay between federal and state regulations is crucial for

nursing home administrators to effectively manage medication administration and ensure the safety and well-being of residents. By staying informed and up-to-date on both sets of regulations, administrators can navigate the regulatory landscape more effectively and mitigate the risk of compliance issues.

# **Section 3 Personal Reflection**

- How can nursing home administrators mitigate the risks associated with non-compliance with federal regulations governing medication management, considering potential impacts on resident care and facility operations?
- 2. Discuss the challenges nursing home administrators face in navigating both federal and state regulations regarding medication management, and how these regulations shape medication practices differently.
- 3. How can nursing home administrators ensure ongoing compliance with evolving federal and state regulations regarding medication management, and what strategies can be implemented to facilitate effective management amidst regulatory changes?

# Section 4: Role of Nursing Staff in Medication Administration

In nursing facilities or long-term care settings in the United States, medication administration is a critical aspect of resident care, primarily conducted by licensed healthcare professionals under the guidance of a prescribing physician or advanced practice provider. This group typically includes registered nurses (RNs), licensed practical nurses (LPNs) or licensed vocational nurses (LVNs), nurse practitioners (NPs), and physician assistants (PAs). Their expertise ensures the safe and accurate administration of medications, as well as monitoring for any adverse reactions or interactions.

However, depending on state regulations and facility policies, certain tasks related to medication administration may also be delegated to certified medication aides (CMAs) or medication technicians under the supervision of licensed nurses. These individuals undergo specialized training to assist with medication administration and are essential members of the healthcare team in many facilities.

It's important to note that medication aide programs vary by state, leading to differences in training requirements and delegated responsibilities. For example, some states may authorize CMAs to administer insulin injections, while others restrict this task to licensed nurses or higher-level medical practitioners. Therefore, nursing home administrators and staff must be familiar with the specific regulations governing medication administration in their state to ensure compliance and safe practices.

Adherence to state licensing requirements and compliance with state-specific regulations is essential to ensure safe and effective medication management within nursing facilities. Additionally, facilities must also adhere to any regulatory guidelines set forth by the Centers for Medicare & Medicaid Services (CMS) to maintain compliance and quality of care standards.

Furthermore, it's imperative for facilities to establish policies and procedures to continually monitor the licensure and certifications of their staff. Nurses, certified nursing assistants (CNAs), CMAs, and other licensed or certified individuals must not act using a license if it is suspended or expired. Ensuring that all staff receive appropriate training and stay up to date on current standards of practice is essential for maintaining regulatory compliance and providing quality care to residents. Failure to adhere to these standards can result in non-compliance with both federal and state regulations, potentially jeopardizing resident safety and well-being.

# Section 4 Case Study

#### Introduction

In the ever-evolving landscape of healthcare regulations, certified medication aide (CMA) programs play a vital role in ensuring safe medication administration practices in nursing homes. This case study explores the differences between the CMA programs in State #1 and State #2, highlighting how state-specific regulations shape training requirements, scope of practice, and certification processes for medication aides.

#### Background

In State #1, certified medication aides (CMAs), also known as Medication Aides (MAs), are overseen by the State #1 Health and Human Services Commission. CMAs undergo rigorous training, typically totaling 140 hours, covering classroom instruction and clinical practice. On the other hand, State #2 certifies certified medication aides as Certified Nurse Assistants (CNAs) with Medication Certification or CMAs, regulated by the State #2 Department of Public Health. The CMA program in State #2 requires a minimum of 60 hours of training, including classroom instruction, clinical practice, and competency evaluations.

#### Comparisons

- Training Duration: State #1 mandates a longer training duration of 140 hours, while State #2 requires 60 hours, indicating potentially different standards and scope of practice.
- Regulatory Oversight: Both states require approval of training programs by their respective regulatory bodies to ensure quality and compliance with state regulations.
- Scope of Practice: CMAs in both states are authorized to administer

medications under the supervision of licensed nurses, but the level of supervision may vary.

• Continuing Education: State #1 mandates annual continuing education credits, while State #2 requires renewal every two years.

#### **Contrasting Information**

- Training Duration: State #1 mandates a longer training duration of 140 hours, while State #2 requires 60 hours, indicating potentially different standards and scope of practice.
- Supervision: While both states authorize CMAs to administer medications under nurse supervision, the level of supervision may differ, impacting the autonomy and responsibilities of CMAs in each state.

#### **Questions for Comprehension**

1. How do the training requirements for certified medication aides in State #1 and State #2 differ, and what factors might contribute to these variations?

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- 2. Discuss the implications of the differences in continuing education requirements between State #1 and State #2 for certified medication aides in nursing homes.
- 3. How might the contrasting levels of supervision for medication administration impact the roles and responsibilities of certified medication aides in State #1 and State #2 nursing homes?

# Section 4 Case Study Review

#### **Comprehension Answers**

1. How do the training requirements for certified medication aides in State #1

and State #2 differ, and what factors might contribute to these variations?

The training requirements for certified medication aides (CMAs) in State #1 and State #2 differ significantly in terms of duration. State #1 mandates a longer training duration of 140 hours, whereas State #2 requires only 60 hours. These variations may stem from differences in state priorities, resources, and perceived levels of competency needed for medication administration in nursing homes.

 Discuss the implications of the differences in continuing education requirements between State #1 and State #2 for certified medication aides in nursing homes.

The differences in continuing education requirements between State #1 and State #2 for certified medication aides have significant implications for their professional development and ongoing competency. State #1 mandates annual continuing education credits, ensuring that CMAs stay updated on best practices and regulatory changes. In contrast, State #2 requires renewal every two years, potentially allowing for longer intervals between educational updates and assessments of competence.

3. How might the contrasting levels of supervision for medication administration impact the roles and responsibilities of certified medication aides in State #1 and State #2 nursing homes?

The contrasting levels of supervision for medication administration can impact the roles and responsibilities of certified medication aides (CMAs) in State #1 and State #2 nursing homes. In State #1, where CMAs undergo more extensive training and may be granted greater autonomy in medication administration under the supervision of licensed nurses, CMAs may have a broader scope of practice and more direct involvement in resident care decisions. In State #2, where CMAs receive fewer training hours and may require more direct supervision, their roles may be more restricted, with less autonomy in medication administration practices and a heavier reliance on direct oversight from licensed nurses.

# **Section 5: The Rights of Medication Administration**

There are five recognized rights of medication administration in the healthcare community. Nurses or the medication designee are often the individual responsible for ensuring accuracy in the medication administration by following the 'five rights' or 'five R's' with each medication pass to their residents. The 'five R's' include: right patient, right drug, right route, right time, and right dose (Hanson & Haddad, 2023).

# **The Right Patient**

It is vital for the nursing home staff to ensure the correct patient is in their presence and matches the name on the medication being administered. Nursing facilities often have long-term residents that staff can easily identify; however, there are many circumstances of nursing facilities having a revolving door of short-term patients often there for rehabilitation services. The nurse should ask the patient to verify their name, as well as match the patient to the photo to populate on the electronic health record. In the event the patient cannot speak or does not have the cognition to accurately identify him or herself, the nurse is responsible for confirming the patient's identity through alternative means, ensuring due diligence (Hanson & Haddad, 2023).

# The Right Drug

The nurse administering the medication must check that the medication matches the drug name that was prescribed. The staff member should check the order on the electronic health record (EHR) or the medication administration record (MAR) and compare it to the label of the drug that is in their medication cart. Furthermore, it is important that brand names and generic names match both the order and the medication label. According to Hanson and Haddad, "recent evidence-based studies support the practice of prescribers writing out full generic names as opposed to brand names of medications along with the indication for prescribing when writing orders to help minimize confusion."

# **The Right Route**

The right route of medication is extremely important to ensure the proper absorption of the medication. Some medications may only be taken orally, through the mouth, whereas other medications may not be able to be given orally at all. Listed below are the common routes of medication delivery for the human body (Kim & De Jesus, 2023).

- **Oral:** Medications are swallowed and absorbed through the gastrointestinal tract. This route is convenient and suitable for many types of medications, including tablets, capsules, and liquids.
- **Sublingual:** Medications are placed under the tongue and absorbed through the mucous membranes. This route allows for rapid absorption into the bloodstream, bypassing the digestive system.
- **Buccal:** Medications are placed between the cheek and gum and absorbed through the mucous membranes. Like sublingual administration, buccal administration allows for rapid absorption.
- **Topical:** Medications are applied directly to the skin or mucous membranes. This route is used for local effects and can include creams, ointments, patches, and eye or ear drops.
- **Transdermal:** Medications are absorbed through the skin and enter the bloodstream. Transdermal patches provide a controlled release of

medication over an extended period.

- Inhalation: Medications are inhaled into the lungs and absorbed through the respiratory tract. This route is used for respiratory conditions and includes inhalers, nebulizers, and nasal sprays.
- **Rectal:** Medications are inserted into the rectum and absorbed through the rectal mucosa. This route can be used when oral administration is not feasible or when rapid absorption is needed.
- **Vaginal:** Medications are inserted into the vagina and absorbed through the vaginal mucosa. This route is used for local effects or to treat vaginal infections.
- Intravenous (IV): Medications are injected directly into a vein and enter the bloodstream immediately. This route allows for rapid onset of action and precise control of dosage.
- Intramuscular (IM): Medications are injected into a muscle and absorbed into the bloodstream over time. This route is used for medications that cannot be given orally or require a slower release.
- **Subcutaneous (SC):** Medications are injected into the fatty tissue under the skin and absorbed into the bloodstream gradually. Insulin and some other medications are commonly administered via this route.

Each route has a specific reason and can involve contraindications that may need to be recognized. For example, oral medication route may be contraindicated if the patient is unable to tolerate swallowing or a rectal route may not be possible if the resident is experiencing significant diarrhea, bleeding, or a recent procedure (Kim & De Jesus, 2023).

For patients with trouble swallowing, medications can be administered orally through various methods to ensure safe and effective delivery. One approach is to crush or dissolve solid medications in a small amount of water or another suitable liquid to facilitate swallowing. Alternatively, medications may be administered in liquid form if available, allowing for easier ingestion without the need for swallowing solid tablets or capsules. In cases where patients have difficulty swallowing due to physical impairments or neurological conditions, specialized swallowing techniques such as modified positioning or use of assistive devices like straws or syringes may be employed to help facilitate medication intake. Overall, individualized approaches tailored to the patient's specific swallowing limitations and medication requirements are essential to safely administer oral medications and optimize therapeutic outcomes. It is important to note that any modifications to medication administration techniques should be approved by a doctor and/or speech therapist to ensure safety and efficacy for the patient's individual needs.

It is important to note that as technology expands and innovation continues, the routes of medication administration continue to evolve (Hanson & Haddad, 2023). Healthcare providers must stay educated on advancements and the latest medication route indications.

# The Right Time

Administering medications at the prescribed time is crucial for maintaining therapeutic effectiveness and avoiding potential complications. Medications often have specific intervals or windows during which doses should be given to achieve desired outcomes (Hanson & Haddad, 2023). Nurses must adhere to these timeframes as closely as possible.

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Below is a list of common medication schedules and acronyms for orders (Bihari, 2023).

Abbreviation	Latin	Meaning
PO	Per os	Orally (by mouth)
BID	Bis in die	Twice a Day
TID	Ter in die	Three Times a Day
Q4H	Quaque 4 hora	Every Four Hours
Q8H	Quaque 8 hora	Every Eight Hours
PRN	Pro re nata	As Needed

# The Right Dose

The importance of administering the correct dose of medication cannot be overstated, as errors in dosage are common sources of medication administration mistakes. Such errors may arise from nurses providing patients with incorrect doses, even when the medication and patient's identity are confirmed. Mistakes can occur due to factors like misplaced decimals, arithmetic errors such as miscalculations, or confusion between different units of measurement (Hanson & Haddad, 2023). Common errors could involve a miscount of an oral tablet, or not scoring a pill if there is a half dose.

# **Beyond the Five Rights**

While the established consensus recognizes the 'five rights' of medication administration, recent efforts within scholarly circles aim to expand this framework. Nursing home administrators may encounter proposed additions to these rights, which could include considerations such as the right documentation, right reason, right patient education, right to refuse, and right assessment, among others (Baily, 2021).

# **Section 6: The Different Types of Medications**

Understanding the various types of medications commonly prescribed in nursing homes is essential for healthcare professionals to provide safe and comprehensive care to their residents. In this section, we will explore the major categories of medications used in nursing homes. This understanding serves as a foundation for discussing the complexities of medication management and the challenges faced in ensuring optimal medication outcomes for nursing home residents.

The FDA categorizes drugs into various general categories based on their therapeutic effects and intended use (Food and Drug Administration, 2015). These categories include analgesics for pain relief, antibiotics for bacterial infections, antidepressants for mood disorders, antihypertensives for lowering blood pressure, anticoagulants for preventing blood clots, antidiabetic agents for managing diabetes, antipsychotics for managing psychosis, bronchodilators for treating respiratory conditions, diuretics for reducing fluid retention, and laxatives for relieving constipation.

Common medications that are highly scrutinized and can have impacts that a nursing home administrator needs to be aware of will be discussed in detail below.

### **Common Diseases in the Elderly**

As individuals age, they become more susceptible to various age-related diseases, which are illnesses and conditions that occur more frequently in older adults due to the physiological changes associated with aging. Some of the most common age-related diseases include cardiovascular disease, cerebrovascular disease (strokes), high blood pressure (hypertension), cancer, type 2 diabetes, Parkinson's disease, dementia (including Alzheimer's disease), chronic obstructive pulmonary disease (COPD), osteoarthritis, osteoporosis, cataracts, age-related macular degeneration (AMD), and hearing loss (Basaraba, 2022).

These conditions pose significant health risks for elderly individuals and can lead to serious complications if left untreated. Age-related diseases are influenced by various factors such as genetics, lifestyle habits (e.g., smoking, diet, exercise), environmental exposures, and physiological processes like inflammation and cellular damage (Basaraba, 2022). While aging itself is not a disease, understanding the common age-related diseases and their risk factors is essential for healthcare professionals, especially nursing home administrators involved in medication management and administration, to provide comprehensive care and support to elderly residents.

### Antipsychotics, Antidepressants, and Antianxiety Medications

In the context of nursing homes, various psychotropic medications are frequently utilized to manage psychiatric conditions among residents. Among these medications are antipsychotics, antidepressants, and antianxiety drugs. While originally intended for conditions such as schizophrenia and bipolar disorder, antipsychotics are commonly used off-label to address behavioral symptoms associated with dementia, like agitation and aggression (Crystal et al., 2022). However, it's crucial to recognize that their extensive use in this context has been associated with an elevated risk of mortality. Notably, the FDA has issued a black box warning for all antipsychotics, signaling an increased risk of death for older adults with dementia-related psychosis (Purse, 2021). This misuse of antipsychotics has been identified as a form of chemical restraint, prompting intervention from CMS. Consequently, a national campaign was initiated in 2012 to advocate for safer dementia care, resulting in a significant reduction in antipsychotic usage by the second quarter of 2019. This decrease underscores the effectiveness of initiatives at both the state and facility levels aimed at promoting more cautious prescribing practices (Crystal et al., 2022). Furthermore, these initiatives have led to additional federal regulations that are assessed during relicensure and complaint surveys, as well as quality assurance metrics that impact overall reimbursements, nursing facility ratings, and reputations.

Similarly, antidepressants are frequently prescribed in nursing homes to treat depression and mood disorders among residents. These medications help regulate mood by balancing neurotransmitters in the brain (*Antidepressants* 2023). While they can effectively alleviate symptoms of depression and anxiety, close monitoring is necessary to mitigate risks such as falls and gastrointestinal issues, especially in older adults (Romdhaniet al., 2023).

Antianxiety medications, known as anxiolytics or benzodiazepines, are prescribed to alleviate symptoms of anxiety and panic disorders. However, similar to antipsychotics and antidepressants, antianxiety medications carry risks of sedation, cognitive impairment, and dependence, particularly when used longterm or in high doses (Meyen, 2022).

In summary, while these medications play a crucial role in managing psychiatric symptoms among nursing home residents, their use necessitates careful consideration of potential benefits and risks. Healthcare providers in nursing homes should conduct thorough assessments, monitor for adverse effects, and regularly review medication regimens to ensure safe and appropriate use of antipsychotics, antidepressants, and antianxiety medications. Nonpharmacological interventions, such as behavioral therapies and environmental modifications, should be prioritized whenever feasible to minimize reliance on medications and enhance resident well-being.

### **Dementia Medications**

Dementia presents a multifaceted diagnostic challenge, requiring a comprehensive assessment to identify its underlying cause and manage its symptoms effectively. Healthcare professionals employ various approaches, including cognitive and neuropsychological tests, neurological evaluations, brain imaging scans such as CT, MRI, and PET scans, as well as laboratory tests to detect underlying physiological issues that may contribute to cognitive decline (Mayo Clinic, n.d.).

Once diagnosed, the management of dementia often involves a combination of pharmacological and non-pharmacological interventions. Pharmacotherapy aims to alleviate symptoms and slow disease progression. Cholinesterase inhibitors, such as donepezil, rivastigmine, and galantamine, are commonly prescribed to enhance levels of neurotransmitters involved in memory and cognition. While primarily indicated for Alzheimer's disease, these medications may also benefit individuals with other forms of dementia (Mayo Clinic, n.d.).

Memantine, another medication used in dementia management, regulates glutamate activity in the brain, thereby improving learning and memory functions. Memantine is sometimes prescribed alongside cholinesterase inhibitors for synergistic effects (Mayo Clinic, n.d.).

In recent years, significant advancements have been made in pharmacological treatments for Alzheimer's disease. Lecanemab (Leqembi), approved by the U.S. Food and Drug Administration (FDA) in 2023, has shown promise in slowing cognitive decline by preventing the clumping of amyloid plaques in the brain. However, its use is associated with potential side effects, including infusion-related reactions, brain swelling, and bleeding, particularly in individuals with specific genetic risk factors (Mayo Clinic, n.d.).

Additionally, ongoing research is investigating other potential therapeutic agents, such as donanemab, which targets both amyloid plaques and tau proteins, showing promise in slowing cognitive decline in early Alzheimer's disease (Mayo Clinic, n.d.). These advancements underscore the importance of staying updated on emerging treatments and considering individualized approaches to dementia management in nursing home settings.

### **Pain Medications**

Analgesics, or pain relievers, are categorized into two main types: non-narcotic analgesics for mild pain and narcotic analgesics for severe pain (Food and Drug

Administration, 2015). Non-narcotic options like acetaminophen, aspirin, and ibuprofen are readily available over the counter but still require a physician's order for administration in a skilled nursing facility. Some medical directors of facilities may have standing orders for over-the-counter medications based on specific criteria, giving the nursing staff an opportunity to treat pain quickly. On the other hand, narcotic analgesics, often referred to as prescription opioids, such as morphine, codeine, oxycodone, and others, are tightly regulated and necessitate a prescription from a licensed provider, prior to administration (Food and Drug Administration, 2015). These medications are stored separately and require strict monitoring, including regular counts by licensed staff at shift changes to prevent diversion and ensure resident safety. While state regulations may vary, facilities are responsible for implementing policies for medication reconciliation, particularly concerning narcotics.

The management of pain in nursing home residents is paramount, necessitating a comprehensive assessment of each resident's pain experience. This assessment should encompass not only the intensity and location of pain but also consider physical, psychological, and social factors influencing pain perception. Despite challenges like underreporting or masking of pain in older adults due to cognitive impairment or communication barriers, healthcare providers must employ a holistic approach to pain assessment. Various tools and techniques, including self-report scales and observational assessments, aid in gathering accurate information about residents' pain. By accurately assessing pain, healthcare providers can tailor interventions to effectively address residents' needs, thereby improving quality of life, promoting functional independence, and enhancing overall well-being (Booker et al., 2020).

### **Controlled Substances and Drug Scheduling**

In 1970, the United States Drug Enforcement Agency (DEA) created the Controlled Substances Act to maintain a list of medications based on given categories related to their purpose and potential for dependency or misuse (Lopez et al., 2023).

The schedule of drug classes range from 1 to 5. Below are the schedules with a brief description:

- Schedule I: These substances have a high potential for abuse and no accepted medical use. Examples include marijuana, heroin, LSD, and MDMA.
- Schedule II: Substances in this category also have a high potential for abuse but have accepted medical uses. Examples include fentanyl and oxycodone. They are tightly regulated, and prescriptions cannot typically be refilled.
- Schedule III: These substances have less potential for abuse compared to Schedule II but more than Schedule IV drugs. Examples include anabolic steroids and ketamine.
- Schedule IV: Drugs in this category have a lower potential for abuse compared to Schedule II but more than Schedule V drugs. Examples include diazepam and alprazolam.
- Schedule V: These medications have the lowest potential for abuse among controlled substances. Examples include pregabalin and dextromethorphan.

This classification system helps regulate the prescribing, dispensing, and administration of controlled substances to minimize their misuse and abuse while ensuring their availability for legitimate medical purposes (Lopez et al., 2023).

# Section 6 Key Words

Analgesics - medications primarily used to alleviate pain

<u>Antibiotics</u> - Medications used to treat bacterial infections by either killing bacteria or inhibiting their growth.

<u>Antidepressants</u> - Medications prescribed to alleviate symptoms of mood disorders such as depression or anxiety.

<u>Antihypertensives</u> - Drugs administered to lower high blood pressure and reduce the risk of cardiovascular events.

<u>Anticoagulants</u> - Medications that prevent the formation of blood clots or reduce the risk of existing clots becoming larger.

<u>Antidiabetic agents</u> - Medications used to manage blood sugar levels in individuals with diabetes by either increasing insulin production, improving insulin sensitivity, or reducing glucose production.

<u>Antipsychotics</u> - Drugs prescribed to manage symptoms of psychosis, such as hallucinations or delusions, often associated with conditions like schizophrenia or bipolar disorder.

<u>Bronchodilators</u> - Medications that relax and widen the airways in the lungs, commonly used to treat respiratory conditions like asthma or chronic obstructive pulmonary disease (COPD).

<u>Diuretics</u> - Drugs that promote the removal of excess fluid and salt from the body by increasing urine production, often used to treat conditions like hypertension, heart failure, or edema.

<u>Laxatives</u> - Substances that promote bowel movements and relieve constipation by softening stool or stimulating intestinal muscle contractions.

<u>Pharmacological Treatment</u> - the therapeutic approach of using medications or drugs to manage, alleviate, or cure medical conditions or diseases

<u>Non-pharmacological Treatment</u> - therapeutic interventions or approaches that do not involve the use of medications or drugs

# Section 7: Proper Packaging and Storage of Medications

The regulation F761 Label/Store Drugs & Biologicals is frequently cited as a deficiency in nursing homes across the United States. This regulation encompasses several key aspects, including the proper labeling and storage of medications. It mandates that drugs and biologicals must adhere to professional standards of labeling, including clear instructions and expiration dates.

Furthermore, the regulation emphasizes the importance of storing medications in locked compartments with appropriate temperature controls, restricting access to authorized personnel only. Controlled substances, such as narcotics, must be stored separately in locked compartments, except in cases where single unit package drug distribution systems are utilized.

Surveyors pay close attention to specific details when assessing proper medication storage. They examine whether medications and biologicals are maintained within secured (locked) locations, accessible only to designated staff. They also ensure that storage areas, including medication rooms, carts, boxes, and refrigerators, are kept clean and sanitary. Additionally, surveyors verify that medications are stored at proper temperatures according to manufacturer specifications.

Regarding controlled substances, surveyors confirm that Schedule II medications are stored within a separately locked permanently affixed compartment. They also assess whether detailed records of receipt and disposition of controlled medications are maintained to enable accurate reconciliation. Moreover, surveyors review medication records to ensure proper labeling in accordance with professional principles, including appropriate accessory and cautionary instructions, as well as expiration dates when applicable.

The guidelines and regulations for standard practices can typically be through various regulatory bodies and organizations. For further information and statespecific expectations, additional resources include:

- Centers for Medicare & Medicaid Services (CMS): CMS provides regulations and guidelines for nursing homes through the State Operations Manual (SOM), specifically in the section pertaining to pharmaceutical services. You can access this information on the CMS website or through your state's department of health website.
- State Boards of Pharmacy: Each state has its own Board of Pharmacy responsible for regulating pharmacy practices, including medication packaging and storage in nursing homes. State Boards of Pharmacy often publish guidelines, regulations, and best practices for medication management in long-term care facilities.
- The Joint Commission: The Joint Commission provides accreditation and certification for healthcare organizations, including nursing homes. Their standards often include requirements for medication management, including packaging and storage. You can access their guidelines through their website or by contacting them directly.
- Professional Organizations: Organizations such as the American Society of Consultant Pharmacists (ASCP) and the American Pharmacists Association (APA) may provide resources, guidelines, and best practices for medication management in nursing homes.
- Pharmaceutical Manufacturers: Pharmaceutical companies often provide specific instructions for the storage and handling of their medications. These instructions can usually be found on the medication packaging or through the manufacturer's website.

By consulting these sources, nursing home administrators can ensure compliance with regulations and best practices for the packaging and storage of medications, thereby promoting medication safety and quality of care for residents.

# **Section 8: Medication Administration Documentation**

In skilled nursing facilities, meticulous documentation of medication administration is essential to ensure resident safety and regulatory compliance. Proper documentation encompasses various key requirements and expectations:

- Accurate Recording: Staff must precisely document medication details, including name, dosage, route of administration, date, time, and administering personnel.
- **Resident Identification:** Documentation should include the resident's name or unique identifier to prevent medication errors.
- **Signature and Credentials:** The signature or initials of the administering staff, along with their professional credentials, must be included in the documentation.
- Omissions or Variances: Any omitted doses or deviations from the prescribed regimen must be documented, with reasons provided. Communication with physicians is vital in such instances.
- **Controlled Substances:** Detailed records of controlled substances, from receipt to disposal, should be maintained, including medication name, dosage, quantity administered, and staff signature.
- **Communication:** Documentation should facilitate effective communication among healthcare team members, ensuring continuity of care and timely response to medication needs. Regular medication reviews during care plan conferences are recommended.
- **Timeliness:** Documentation of medication administration should be completed promptly after each dose to prevent errors or omissions.
- **Compliance with Regulations:** Nursing homes must adhere to federal and state regulations governing medication documentation, including guidelines
from agencies like CMS.

Additionally, electronic health records (EHR) systems, often equipped with electronic medication administration records (EMAR), offer streamlined documentation processes. Staff training on EMAR systems is crucial for efficient medication management. With a high-quality EHR/EMAR system, completion of documentation steps is often mandatory before proceeding, ensuring thoroughness and accuracy.

By meeting these documentation requirements and expectations, nursing homes prioritize resident safety, enhance medication management practices, and demonstrate regulatory compliance.

It is important to note that medication administration documentation requirements can vary depending on the specific regulations of your state and the local pharmacy regulations. While the core principles outlined above remain consistent across most settings, consulting with the relevant authorities, your company or organization, and pharmacy partners is crucial to ensure complete and accurate documentation that adheres to all applicable regulations or policies and procedures.

## **Section 8 Personal Reflection**

- How do you plan to ensure that your facility's medication administration documentation meets the outlined requirements and expectations, particularly regarding accuracy and timeliness?
- 2. Reflecting on the importance of communication in medication documentation, how will you promote effective communication among healthcare team members to ensure seamless coordination of medicationrelated information and resident care?

# Section 9: Understanding Medication Errors and Their Prevention

Medication errors can take various forms, including administering the wrong medication, incorrect dosage, improper scheduling, or even omitting medication entirely. According to the National Coordinating Council for Medication Error Reporting and Prevention, a medication error is defined as "any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer." Such events may stem from various aspects of healthcare practice, including prescribing, dispensing, administration, and monitoring.

In nursing facilities and long-term care (LTC) settings, medication errors pose significant risks to residents, underscoring the importance for nursing home administrators to be well-versed in common errors and prevention strategies. Dispensing errors, encompassing incorrect doses, drugs, patients, routes, or administration times, are prevalent in these settings (Pandya, 2021). Compounding this issue, look alike and sound alike drugs, such as hydroxyzine and hydralazine, can further contribute to medication errors (Pandya, 2021).

Moreover, errors associated with compliance blister and foil packaging, as well as partial tablets, emphasize the critical need for rigorous inspection and verification processes within pharmacies (Pandya, 2021). Timely medication delivery is paramount to prevent errors, necessitating transparent communication between pharmacies and facilities. Proactive measures, including monthly inventory checks and meticulous verification of expiration dates and lot numbers, are essential for preventing errors related to expired inventory (Pandya, 2021).

Nursing home administrators play a pivotal role in medication safety by ensuring adherence to facility policies and fostering effective collaboration with pharmacy partners. It is imperative to oversee the fulfillment of contractual obligations by pharmacy technicians and pharmacists to mitigate medication errors effectively. Additionally, the transition of residents from hospitals to LTC facilities introduces another potential source of errors, especially concerning changes in medication regimens. Pharmacists, physicians, and nursing staff must collaborate diligently to verify and reconcile medications upon admission, minimizing discrepancies and avoiding duplication of therapy (Pandya, 2021).

In conclusion, nursing home administrators must prioritize medication safety and work closely with interdisciplinary teams, including pharmacists, physicians, and nursing staff, to ensure the highest quality of care for residents.

## Section 9 Case Study

#### Introduction

In a small nursing home located in a suburban area, Resident Sally Smith, an 85year-old woman with multiple chronic conditions including diabetes and hypertension, was admitted for long-term care due to her increasing care needs. Despite the facility's reputation for providing quality care, recent inspections by federal surveyors revealed significant violations related to medication administration, raising concerns about resident safety and quality of care.

#### Background

Resident Sally Smith has been under the care of the nursing home for the past two years. She requires assistance with activities of daily living, including medication management. Sally's medications include insulin for her diabetes, antihypertensives, and medications for pain management. She relies on the nursing staff to administer her medications accurately and timely to maintain her health and well-being.

#### **Violation Findings**

During the recent survey conducted by federal regulators, several violations

related to medication administration were identified:

- Medication Errors: Surveyors found instances where Resident Sally Smith received incorrect dosages of her insulin, leading to fluctuations in her blood sugar levels. These errors were attributed to inadequate training of the nursing staff and poor medication reconciliation processes.
- **Timeliness of Medication Administration:** There were documented instances where Sally's medications were administered late, compromising their effectiveness and potentially leading to adverse health outcomes. The nursing home's staffing shortage was identified as a contributing factor to these delays.
- Lack of Documentation: Proper documentation of medication administration, including recording the administration time and any observed side effects, was found to be inconsistent and incomplete. This lack of documentation raised concerns about the adequacy of monitoring ucation for Nursing Home Adm residents' responses to medications.

#### Consequences

are As a result of these violations, the nursing home received citations from regulatory authorities, requiring them to develop and implement corrective action plans to address the deficiencies in medication administration practices. Additionally, Resident Sally Smith's family was notified of the violations and reassured that steps were being taken to improve the quality of care provided to her.

#### **Questions for Comprehension**

- 1. What were the key violations identified by federal surveyors related to medication administration in the nursing home?
- 2. How did these violations impact Resident Sally Smith's health and well-

being?

3. What steps should the nursing home take to rectify the deficiencies in medication administration and ensure resident safety moving forward?

## **Section 9 Case Study Review**

#### **Comprehension Answers**

1. What were the key violations identified by federal surveyors related to medication administration in the nursing home?

The key violations identified by federal surveyors related to medication administration in the nursing home included medication errors, timeliness of medication administration, and lack of documentation.

2. How did these violations impact Resident Sally Smith's health and wellbeing?

These violations impacted Resident Sally Smith's health and well-being in several ways. Firstly, medication errors, such as receiving incorrect doses of insulin, could lead to fluctuations in her blood sugar levels, potentially causing hypo- or hyperglycemia and related complications. Secondly, delays in medication administration compromised the effectiveness of her medications, increasing the risk of uncontrolled chronic conditions such as diabetes and hypertension. Lastly, the lack of proper documentation meant that there was insufficient monitoring of Sally's responses to medications, potentially resulting in adverse reactions or unidentified medication-related issues.

3. What steps should the nursing home take to rectify the deficiencies in medication administration and ensure resident safety moving forward?

To rectify the deficiencies in medication administration and ensure resident

safety moving forward, the nursing home should take several steps:

- Provide comprehensive training to nursing staff on medication administration protocols, including proper dosage calculation and verification procedures.
- Implement systems to ensure timely administration of medications, such as optimizing staffing levels and workflow processes to minimize delays.
- Enhance documentation practices by implementing standardized procedures for recording medication administration, including the administration time and any observed side effects.
- Conduct regular audits and quality assurance checks to monitor adherence to medication administration policies and identify areas for improvement.
- Foster a culture of accountability and continuous improvement within the facility to prioritize resident safety and quality of care.

## Section 9 Key Words

<u>Medication Error</u> - A medication error is a mistake or oversight that occurs during any stage of medication use, including prescribing, dispensing, administering, or monitoring, which can result in harm to the patient or failure to achieve the desired therapeutic outcome.

# Section 10: Resident Involvement in Medication Management

#### **Resident Education and Involvement**

In long-term care facilities, empowering residents to actively participate in their medication management and care planning is essential for promoting autonomy, dignity, and safety. Residents should be encouraged to take an active role in their care, with their responsible party involved in discussions and decision-making if the resident is unable to participate independently.

Residents should receive comprehensive education about their medication regimen, including the purpose of each medication, proper administration techniques, potential side effects, and precautions. This education should be tailored to the resident's comprehension level, language preference, and individual needs, utilizing clear language, visual aids, and interactive methods to enhance understanding and retention.

Encouraging open communication between residents and healthcare providers is crucial for aligning treatment goals with individual preferences and values. Residents should have the opportunity to discuss their treatment preferences, concerns, and goals with their healthcare team to ensure medication management aligns with their unique needs and quality of life goals.

Residents should actively participate in care planning meetings where medication management strategies are discussed and decisions are made. Providing residents with a voice in care planning allows them to express preferences, raise concerns, and actively participate in decision-making processes, promoting residentcentered care and empowering residents to take ownership of their health.

Encouraging residents to actively monitor their health status and medication effects empowers them to become active participants in their care. Residents

should be educated on how to recognize and report medication-related adverse effects, changes in symptoms, and concerns to their healthcare team promptly, facilitating early detection of potential issues and enhancing medication safety.

Regular reviews of the medication regimen with residents ensure that their treatment plan remains aligned with changing health status, preferences, and goals. Residents should have opportunities to provide feedback on their medication regimen and request adjustments as needed, promoting resident engagement in care and facilitating shared decision-making with healthcare providers.

Resident education and involvement in care planning are integral components of effective medication management in long-term care facilities. By empowering residents to actively participate in their medication management, healthcare providers can promote medication adherence, enhance resident satisfaction, and improve overall health outcomes.

## **Resident Medication Self-Administration**

Residents have the right to self-administer their medications if deemed safe by the facility's interdisciplinary (IDT) team. According to the State Operations Manual Appendix PP from the Centers for Medicare and Medicaid Services (CMS), §The [resident has the] right to self administer medications if the interdisciplinary team, as defined by § 483.21(b)(2)(ii), has determined that this practice is clinically appropriate.

When assessing the suitability of self-administration for a resident, the interdisciplinary team (IDT) should consider several factors:

- Identifying which medications are suitable and safe for self-administration.
- Evaluating the resident's physical capability to swallow easily and open medication containers.

- Assessing the resident's cognitive function, including their ability to accurately identify medications and understand their purposes.
- Determining if the resident can follow instructions and keep track of medication schedules.
- Ensuring the resident comprehends medication instructions, including dosage, timing, potential side effects, and when to seek assistance from facility staff.
- Educating the resident on the concept of medication refusal and implementing appropriate measures to address it.
- Verifying the resident's ability to store medications securely and appropriately.

In summary, the IDT should thoroughly assess the resident's medication management abilities, considering physical, cognitive, and functional capacities, to determine the appropriateness of self-administration. If a resident is deemed capable of self-administration, it must be accurately documented in their medical record and comprehensive care plan. Staff should be trained and aware of the resident's self-administration to ensure safety for the resident and others in the facility.

# Section 11: Mandatory Reporting Expectations and Health Inspections

Medication errors within nursing homes can have significant regulatory implications, potentially resulting in deficiency citations from state or federal surveyors following investigation during health inspections (commonly referred to as "survey"). Depending on the nature and severity of these errors, specific F-tags may be cited, particularly if they are deemed to have violated a resident's rights. Nursing home residents are afforded various rights and protections, which are rigorously investigated and enforced by regulatory agencies to ensure compliance. These rights encompass a wide range of aspects, including dignity, participation in activities, freedom from discrimination and abuse, access to medical care, financial management, privacy, social interactions, and more. In instances where medication mismanagement by nursing home staff leads to harm to a resident, the facility may be held liable for neglect or abuse, underscoring the importance of stringent medication management protocols to safeguard resident well-being.

According to CMS, "neglect" means "the failure of the facility, its employees or service providers to provide goods and services to a resident that are necessary to avoid physical harm, pain, mental anguish or emotional distress. In other words, neglect occurs when the facility is aware, or should have been aware of goods or services that a resident(s) requires but the facility fails to provide them to the resident(s) resulting in physical harm, pain, mental anguish or emotional distress."

As of February 2023, CMS has updated the mandatory reporting guidelines for nursing facilities. Federal and State laws may differ; however, the federal regulation always supersedes the state regulations in the event the state regulation is not as stringent. With this in mind, all nursing homes and nursing home administrators have mandatory reporting guidelines. In the event a medication error is alleged or believed to be abuse resulting in serious bodily injury, the facility has to report within 2 hours after the allegation is made. For alleged violations of neglect, exploitation, misappropriation of resident property, or mistreatment that does not involve serious bodily injury, the facility has 24 hours to report. Follow-up investigations are due within 5 working days of the incident.

An example of a reportable incident related to neglect given by CMS is as follows: "failure to oversee the management of pain for a resident resulting in a resident not receiving required medications or treatments, leading to prolonged excruciating pain." If the claim of neglect is substantiated, the facility could face tags with a high enough scope and severity to warrant penalties and fines. Moral of the story, it is extremely important for the nursing home administrator, director of nursing, and facility leadership in general to monitor the medication administration and management program. In the event of a reported medication error, a thorough investigation must take place. Depending on the circumstances and outcomes, the facility leadership may be obligated to report the error to the local regulatory body, per CMS requirements.

In the event of a reported occurrence, a surveyor team may come to the facility to complete an investigation as well. In these situations, the facility could face regulatory tags based on the events occurring that violated resident rights or based on a lack of the facility appropriately working to prevent the issue from happening again.

#### Health Inspections or "The Survey Process"

CMS plays a pivotal role in regulating nursing homes and enforcing compliance with federal regulations to ensure the safety and well-being of residents. Through its regional offices, CMS imposes enforcement actions, known as remedies, which are designed to address deficiencies identified during surveys conducted in accordance with the State Operations Manual (SOM). These enforcement actions encompass a range of interventions, from temporary management to civil money penalties, aimed at promoting prompt compliance with program requirements and safeguarding resident care standards.

Enforcement actions are guided by the severity of deficiencies identified during surveys, with specific categories of enforcement responses correlated to the seriousness of noncompliance. The imposition and duration of remedies are based on the premise that all requirements must be met and enforced, with considerations given to the circumstances and resident outcomes in each facility. However, when a nursing home fails to achieve substantial compliance within specified timeframes, federal regulations mandate termination from participation in Medicare and/or Medicaid, underscoring the gravity of noncompliance. Notification of remedies and deficiencies is provided to nursing homes, outlining the nature of noncompliance, the imposed remedy, effective dates, and the right to appeal. Additionally, CMS maintains transparency by providing public access to information about nursing homes' compliance status through resources such as Nursing Home Compare and state survey agencies. The severity and scope of deficiencies are determined by factors such as the level of harm and the extent of noncompliance, with levels ranging from minimal harm to immediate jeopardy and scopes ranging from isolated incidents to widespread patterns. Understanding the implications of CMS regulations and enforcement actions is essential for nursing home administrators, staff, and residents alike to ensure accountability and quality care delivery.

#### Section 11 Case Study

A resident was prescribed opioid pain medication following a recent surgery for a knee replacement. The resident requested that the staff review her pain medication as it was not effective over the weekend, leaving her in uncontrolled pain. The resident also shared with the staff that she wasn't able to participate in the weekend activities due to the pain. The resident was suffering discomfort and also losing out on sleep, as she was not able to sleep as well because of the breakthrough pain. The resident also shared with facility staff that the pills she was given for pain over the weekend were not the same color as the pills she was receiving for pain throughout the week.

The facility launched an investigation. The team learned that it was the same nurse working on the weekend shifts in which the resident reported the uncontrolled pain. The nurse, as was expected for her role and shift, had access to the controlled medications for residents on her unit. All staff who would have been working on these shifts and with the resident and nurse in question were interviewed. During an interview with one of the nurse aides who worked the same unit under the staff nurse, the nurse aide revealed she did see the nurse come out of the resident's room with a medication cup that still had a pill in it one night. The nurse had explained to the nurse aide that the resident was asleep and she would attempt to administer the medication again shortly. The nurse aide reported she saw the nurse swallow the medication herself shortly after the conversation.

The nurse aide reported to leadership that she didn't report the nurse for taking the medication because she wasn't entirely sure it was the resident's medication being taken and she didn't want to make any negative assumptions about the nurse. She shared she knew the nurse was excellent at patient care and she didn't realize she was required to report any suspicions. Further interviews with the rest of the facility staff showed that they were not aware of any facility policies regarding reporting such behaviors of possible crimes including potential drug diversion.

#### Questions for Comprehension

- 1. How did the lack of awareness among facility staff regarding reporting protocols for suspected drug diversion hinder the nursing home's ability to address the issue effectively?
- 2. What steps can the nursing home take moving forward to strengthen medication management protocols and ensure resident safety and well-being are prioritized?

## Section 11 Case Study Review

This section will review the case study that was previously presented in Section 12. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

#### **Comprehension Answers**

1. How did the lack of awareness among facility staff regarding reporting protocols for suspected drug diversion hinder the nursing home's ability to address the issue effectively?

The lack of awareness among facility staff regarding reporting protocols for suspected drug diversion hindered the nursing home's ability to address the issue effectively by creating a culture of silence and uncertainty. Without clear guidelines on how to identify and report suspicious behaviors related to medication administration, staff members were left unsure of their responsibilities and hesitant to take action when witnessing concerning incidents. This lack of clarity resulted in missed opportunities to intervene and prevent potential harm to residents, ultimately undermining the nursing home's ability to protect residents from drug diversion.

2. What steps can the nursing home take moving forward to strengthen medication management protocols and ensure resident safety and well-being are prioritized?

Moving forward, the nursing home can take several steps to strengthen medication management protocols and ensure resident safety and wellbeing are prioritized. These steps may include:

- Implementing comprehensive training programs to educate staff on the signs of drug diversion and the importance of reporting suspicious behaviors.
- Developing clear and accessible policies and procedures for identifying, documenting, and reporting instances of suspected drug diversion.
- Establishing mechanisms for staff to report concerns anonymously, to encourage reporting without fear of retribution.

- Conducting regular audits and reviews of medication administration practices to identify any gaps or vulnerabilities in the system.
- Encouraging a culture of accountability and transparency among staff, where concerns about medication management are taken seriously and addressed promptly. By taking these proactive measures, the nursing home can enhance its ability to detect and prevent drug diversion, ultimately ensuring the safety and well-being of its residents.

In Case Study #1, the facility failed to prevent mental anguish, pain, and/or emotional distress of the resident, due to the repeated drug diversion. The resident missed out on weekend activities, her sleep quality was affected due to the pain, and she experienced significant pain that could have and would have been prevented, had she received the appropriate medication she was prescribed.

This Case Study used was an example of a Severity Level 3 Noncompliance Actual Harm tag that is not Immediate Jeopardy, per surveyor guidance from CMS.

# Section 11 Key Words 2 Burgeducation for hursing the

<u>Drug Diversion</u> - the illicit transfer or misuse of prescription medications, straying from their intended legal distribution and usage, often for personal gain or unauthorized purposes.

# Section 12: Medication Management and the Five-Star Quality Rating System

In the realm of nursing home administration, achieving and maintaining highquality standards is paramount to ensuring resident safety, well-being, and overall satisfaction. Central to this endeavor is the CMS Five-Star Quality Rating System, a comprehensive assessment tool that evaluates nursing homes across three domains: health inspections, staffing, and quality measures. This rating system serves as a benchmark for comparing facilities' performance and guiding consumers in their decision-making process when selecting a nursing home for themselves or their loved ones. Among the key determinants of a nursing home's quality rating is its medication management and administration program, which plays a critical role in enhancing overall quality and positively impacting all three domains of the Five-Star Rating System.

A robust medication management and administration program is vital to achieving better quality outcomes across the board. Effective medication management ensures that residents receive timely, accurate, and appropriate medications, minimizing the risk of adverse drug events, medication errors, and associated complications. Moreover, adherence to medication protocols and best practices not only improves resident health and safety but also reflects positively on health inspection outcomes, staffing ratios, and overall quality measures. Nursing home administrators must recognize the integral link between medication management and the Five-Star Rating System, as investing in excellence in this area can lead to improved ratings, enhanced reputation, and ultimately, better resident care outcomes.

#### **Health Inspections**

Section 11 summarized the survey process for nursing facilities. In terms of the five-star quality rating, CMS calculates points for the overall rating using the previous three years of surveys for each facility. The surveys include most recent recertification health inspections, deficiency findings from complaint inspections, and results from focused infection control surveys. The varying scope and severity of the deficiencies weighs in on the overall score for the health inspection portion of the five-star rating system.

# Staffing

Nursing facilities are mandated to report their labor hours for Registered Nurses (RNs), Licensed Practical Nurses/Licensed Vocational Nurses (LPN/LVNs), and nurse aides through the Payroll Based Journal program. This reporting system allows for a comparison of staffing levels among nursing homes based on the quantity of nurse and nurse aide hours allocated per day per resident. The Five-Star Quality Rating System evaluates staffing ratios as higher levels of staffing are associated with a higher quality of care provided to residents. Additionally, staff turnover rates are factored into this metric, as lower turnover rates generally indicate greater continuity of care and may contribute to higher quality ratings for nursing homes.

#### **Quality Measures**

The quality measure system used by CMS for nursing homes directly impacts reimbursement and profits through various mechanisms tied to performance and compliance. Nursing homes receive reimbursement from Medicare and Medicaid based on their compliance with quality measures, which are indicators of the facility's ability to deliver high-quality care and achieve positive resident outcomes. Facilities that consistently meet or exceed quality measures may receive higher reimbursement rates, reflecting the perceived value and effectiveness of their services.

Conversely, nursing homes that fail to meet quality measures may face financial penalties or reduced reimbursement rates. CMS has implemented various payment incentive programs, such as Value-Based Purchasing (VBP) and the Skilled Nursing Facility Quality Reporting Program (SNF QRP), which link reimbursement to quality performance. Facilities that perform poorly on quality measures may experience reduced payments or withholdings, leading to decreased revenue and potentially negative financial impacts on profitability. Moreover, quality measures can influence consumer perception and market competitiveness, further affecting a nursing home's profitability. Prospective residents and their families often consider quality ratings and performance metrics when selecting a nursing home, preferring facilities with higher quality scores and positive outcomes. Nursing homes that consistently achieve highquality measures may attract more residents, resulting in increased occupancy rates and revenue generation. Conversely, poor performance on quality measures can tarnish a facility's reputation, leading to decreased demand and potential financial losses.

In summary, the quality measure system used by CMS for nursing homes serves as a critical determinant of reimbursement levels, financial incentives, and market competitiveness. Facilities that prioritize quality improvement initiatives and demonstrate superior performance on quality measures stand to benefit from enhanced reimbursement rates, increased profitability, and a positive reputation in the healthcare marketplace. Conversely, noncompliance with quality measures can result in financial penalties, reduced reimbursement, and diminished profitability, highlighting the significant impact of quality performance on the financial health and sustainability of nursing homes.

All of the information above regarding the Five-Star Quality Measure System was retrieved from the Design for Care Compare Nursing Home Five-Star Quality Rating System: Technical Users' Guide 2023.

# **Excellent Medication Management Improves Quality Measures**

Having a robust medication management program can significantly impact a nursing home's quality measures, particularly those related to resident outcomes and safety. One key quality measure affected by medication management is the percent of residents who newly receive antipsychotic medication, which is monitored for both short-stay and long-stay residents. A well-implemented medication management program ensures that antipsychotic medications are prescribed judiciously and in accordance with clinical guidelines, reducing the likelihood of unnecessary use and associated adverse effects. By minimizing the initiation of antipsychotic medications without appropriate indications, nursing homes can improve resident outcomes and avoid potential complications such as falls, cognitive decline, and adverse drug reactions.

Furthermore, medication management practices directly influence quality measures related to resident health and well-being, such as changes in skin integrity and pressure ulcers. Adequate pain management, preventive measures, and regular assessments for skin integrity are essential components of medication management protocols. By optimizing pain control and implementing strategies to prevent pressure ulcers, nursing homes can positively impact these quality measures, demonstrating a commitment to resident safety and comfort.

Additionally, vaccination rates for seasonal influenza and pneumococcal vaccines are quality measures closely linked to medication management practices. Ensuring that residents receive appropriate vaccinations in a timely manner requires effective coordination of medication administration schedules, documentation, and resident education. A proactive approach to medication management facilitates adherence to vaccination protocols, reduces the risk of vaccinepreventable illnesses, and contributes to overall resident health and immunization rates.

Overall, a comprehensive medication management program not only promotes safe and appropriate medication use but also aligns with quality improvement efforts aimed at enhancing resident care outcomes and meeting regulatory standards. By addressing medication-related factors that impact quality measures, nursing homes can enhance their performance and reputation while prioritizing resident safety and well-being.

# **Section 13: Conclusion**

This comprehensive course has equipped you, the Nursing Home Administrator (NHA), with a foundational understanding of medication management and administration in nursing home settings. Throughout this journey, we have explored the multifaceted landscape of medication practices, delving into key topics such as:

- The critical role of NHAs in ensuring safe and effective medication management for residents
- Overseeing accurate and complete medication documentation procedures, including medication orders, administration records, and monitoring forms.
- Facilitating resident involvement in their care, considering their preferences, capabilities, and right to self-determination.
- The complexities of medication administration, including challenges like polypharmacy and staffing shortages.
- The importance of adhering to federal and state regulations to safeguard resident safety and maintain compliance.
- The roles and responsibilities of various healthcare professionals involved in medication administration, including nurses, licensed practical nurses, certified medication aides, and direct care staff.
- Strategies to mitigate risks and enhance medication safety through diligent oversight, best practices, and ongoing education.
- Complying with mandatory reporting requirements for medication errors, ensuring timely communication with regulatory bodies following state and federal survey guidelines.
- Navigating the Five-Star Quality Rating System and its impact on medication management practices, particularly regarding quality measures and

financial incentives tied to the appropriate use of psychotropic medications.

By actively applying the knowledge and skills gained from this course, you can significantly contribute to fostering a culture of medication safety within your facility. As an NHA, you are well-positioned to:

- Implement robust medication management policies and procedures that adhere to regulatory standards.
- Champion resident safety by prioritizing continuous improvement in medication practices, including documentation, resident involvement, and self-administration processes.
- Advocate for adequate staffing levels and ongoing training for healthcare personnel involved in medication administration.
- Foster open communication and collaboration among healthcare professionals to optimize medication management and resident care, including considering resident preferences and fostering informed decisionmaking.
- Stay informed about evolving regulations and best practices in medication management, including guidance on psychotropic medication use and resident involvement, to ensure continuous improvement.

Through your dedication and leadership, you can play a pivotal role in ensuring the well-being of residents and upholding the highest standards of quality care in your nursing home. Remember, medication management is an ongoing endeavor, and by embracing a continuous learning mindset and prioritizing resident safety, you can make a positive and lasting impact on the lives of those entrusted to your care.

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