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Distributing drugs to in-patients and out-patients involves several key steps to ensure that medications are dispensed safely, accurately, and efficiently. Proper protocols must be followed to meet regulatory requirements and ensure patient safety. Below are detailed guidelines for drug distribution in both settings:

1. In-Patient Drug Distribution

Medication Ordering and Verification

- **Physician Orders:** Medications are typically ordered by physicians through an electronic health record (EHR) system.
- **Pharmacist Review:** Pharmacists review orders for accuracy, appropriateness, potential drug interactions, and allergies.
- **Double-Check System:** Implement a double-check system where a second pharmacist or pharmacy technician verifies the order before dispensing.

Preparation and Dispensing

- **Unit Dose System:** Use a unit dose system where each dose of medication is individually packaged and labeled.
- **Automated Dispensing Cabinets (ADCs):** Utilize ADCs, such as Pyxis or Omnicell, to store and dispense medications. These systems provide secure access and track inventory.
- **Labeling:** Ensure each medication is properly labeled with the patient's name, drug name, dosage, route of administration, and expiration date.
- **IV Medication:** For intravenous medications, use sterile preparation techniques in a laminar airflow hood or cleanroom environment.

Administration and Documentation

- **Nurse Administration:** Nurses administer medications according to the prescribed schedule, following the "five rights" (right patient, right drug, right dose, right route, right time).
- **Bar-Code Medication Administration (BCMA):** Implement BCMA systems to scan patient wristbands and medication barcodes to ensure accuracy.
- **Documentation:** Record each administration in the patient's EHR, noting the time and any relevant observations.

2. Out-Patient Drug Distribution

Prescription Processing

- **Receiving Prescriptions:** Prescriptions can be received electronically, by fax, or as written scripts from patients.

- **Verification:** Pharmacists verify the prescription details, checking for appropriateness, drug interactions, and patient allergies.
- **Insurance Processing:** Process prescriptions through the patient's insurance, ensuring coverage and handling any prior authorization requirements.

Preparation and Dispensing

- **Pharmacy Software:** Use pharmacy management software to manage workflow, labeling, and inventory.
- **Counting and Compounding:** Accurately count pills or prepare compounds. For compounding, follow USP <795> for non-sterile preparations and USP <797> for sterile preparations.
- **Labeling:** Labels should include patient information, drug name, dosage, instructions for use, warnings, and expiration date.
- **Patient Counseling:** Pharmacists should counsel patients on the proper use of the medication, potential side effects, and storage instructions.

3. Special Considerations for Narcotics and Cytotoxic Drugs

Narcotics (Controlled Substances)

- **Secure Storage:** Store controlled substances in a locked, secure area with limited access.
- **Inventory Management:** Maintain a perpetual inventory and conduct regular audits.
- **Prescription Verification:** Ensure prescriptions for narcotics comply with DEA regulations, including proper documentation and dosage limits.
- **Record Keeping:** Keep detailed records of dispensing, including patient information, date, quantity, and pharmacist's initials.

Cytotoxic Drugs

- **Safety Precautions:** Use appropriate PPE and safety protocols when handling and dispensing cytotoxic drugs.
- **Labeling and Packaging:** Clearly label cytotoxic medications with handling warnings. Use sealed, tamper-evident packaging.
- **Patient Instructions:** Provide detailed instructions for administration and handling to patients and caregivers, emphasizing safety measures.

4. Monitoring and Follow-Up

In-Patients

- **Regular Monitoring:** Monitor in-patients for therapeutic effectiveness and adverse reactions. Adjust therapy as needed.
- **Multidisciplinary Rounds:** Participate in multidisciplinary rounds to discuss patient progress and medication-related issues.

Out-Patients

- **Follow-Up Calls:** Conduct follow-up calls to check on patient adherence, side effects, and overall satisfaction with their therapy.
- **Medication Reconciliation:** Perform medication reconciliation during each patient visit to ensure accuracy and prevent errors.

4.2

Prescription order method

The individual prescription order method is a system where medications are prescribed and dispensed specifically for an individual patient based on their unique needs. Each prescription is written by a healthcare provider and filled by a pharmacy for the exclusive use of one patient. This method contrasts with bulk supply or floor stock systems, where medications are stored in bulk and used for multiple patients.

Advantages of Individual Prescription Order Method

1. **Personalized Care:**

- Medications are tailored to the specific needs of each patient, allowing for personalized treatment plans.
- Reduces the risk of medication errors associated with generic or one-size-fits-all approaches.

2. **Improved Accuracy:**

- Pharmacists can verify and double-check each prescription, enhancing the accuracy of the dispensed medications.
- The individual order method reduces the likelihood of administering the wrong medication or dose.

3. **Better Monitoring and Documentation:**

- Each prescription is documented in the patient's medical record, facilitating better tracking and monitoring of drug use and patient outcomes.
- Provides a clear audit trail for regulatory compliance and quality control.

4. **Enhanced Safety:**

- Minimizes the risk of contamination and cross-contamination that can occur with bulk supplies.
- Reduces the potential for drug diversion and misuse, as each prescription is linked to a specific patient.

5. **Patient Education:**

- Pharmacists can provide personalized counseling and education about each medication, enhancing patient understanding and adherence.
- Patients receive individualized instructions and warnings, tailored to their specific health conditions and medication regimen.

6. Regulatory Compliance:

- Facilitates adherence to regulatory requirements for controlled substances and high-risk medications, ensuring proper documentation and secure handling.

Disadvantages of Individual Prescription Order Method

1. Time-Consuming:

- The process of writing, verifying, and filling individual prescriptions can be time-consuming for healthcare providers and pharmacists.
- Increased workload and administrative burden, potentially leading to delays in medication administration.

2. Higher Costs:

- Personalized prescriptions may result in higher costs compared to bulk purchasing and distribution.
- Increased labor costs associated with the individualized verification, preparation, and dispensing process.

3. Storage and Inventory Challenges:

- Managing a large number of individual prescriptions can create challenges in storage and inventory control.
- Pharmacies and healthcare facilities need more space and resources to store and organize individual patient medications.

4. Potential for Delays:

- In situations where medications are needed urgently, the individual prescription order method might cause delays in obtaining the necessary drugs.
- Emergency situations might require faster access to medications than this method can provide.

5. Increased Risk of Errors in High-Volume Settings:

- In high-volume settings, the increased workload associated with individual prescriptions can lead to potential errors if not managed properly.
- Staff may become overwhelmed, increasing the risk of mistakes in order processing and dispensing.

6. Dependency on Accurate Communication:

- Effective communication between healthcare providers and pharmacists is crucial. Miscommunications or misunderstandings can lead to prescription errors.
- Relies heavily on the accuracy and clarity of handwritten or electronically transmitted prescriptions.

The floor stock drug distribution method involves storing a supply of commonly used medications on the patient care unit or floor. These medications are accessible to nurses and other healthcare providers who can dispense them directly to patients as needed, without requiring a specific prescription for each patient at the time of use. This method contrasts with the individual prescription order method, where medications are prescribed and dispensed for individual patients only.

Advantages of Floor Stock Drug Distribution Method

1. Quick Access to Medications:

- Medications are readily available on the patient care unit, allowing for rapid administration, particularly in emergency situations or when immediate treatment is necessary.
- Reduces the time delay associated with ordering and dispensing medications from a central pharmacy.

2. Efficiency:

- Streamlines the medication administration process, especially for frequently used drugs, by eliminating the need for individual prescription verification and preparation for each dose.
- Allows nurses to manage medication administration more efficiently, potentially improving workflow and reducing bottlenecks.

3. Cost Savings:

- Bulk purchasing of commonly used medications can be more cost-effective than dispensing individual prescriptions.
- Reduces the administrative and labor costs associated with processing individual medication orders.

4. Reduced Pharmacy Workload:

- Decreases the burden on the pharmacy department by reducing the number of individual prescriptions that need to be filled.
- Allows pharmacists to focus on more complex medication management tasks and clinical responsibilities.

5. Emergency Preparedness:

- Ensures that essential medications are available on the unit, enhancing preparedness for emergency situations and critical care scenarios.
- Provides immediate access to life-saving drugs without the need for delays in processing and dispensing.

Disadvantages of Floor Stock Drug Distribution Method

1. Risk of Medication Errors:

- Increased potential for medication errors, such as administering the wrong drug or dose, due to the lack of individual prescription verification.
- Reliance on nursing staff to accurately select and administer medications can lead to mistakes, particularly in high-stress or busy environments.

2. Inventory Management Challenges:

- Managing and maintaining an adequate stock of medications on the unit can be challenging, requiring diligent monitoring to prevent shortages or overstocking.
- Risk of expired medications being used if inventory is not regularly checked and rotated.

3. Potential for Drug Diversion and Misuse:

- Greater risk of drug diversion and misuse, especially with controlled substances, due to easier access by multiple healthcare providers.
- Requires stringent security measures to prevent unauthorized access and theft.

4. Lack of Patient-Specific Dosing:

- Medications are not tailored to individual patient needs, which can lead to suboptimal dosing and treatment outcomes.
- Limited ability to adjust doses based on patient-specific factors and changes in clinical status.

5. Documentation and Accountability Issues:

- Challenges in ensuring accurate documentation of medication administration, which is crucial for patient safety and regulatory compliance.
- Increased risk of discrepancies in medication records, leading to potential gaps in patient care information.

6. Reduced Pharmacist Involvement:

- Limited direct involvement of pharmacists in the medication administration process, potentially reducing the opportunity for medication review and intervention.
- Less oversight in ensuring the appropriateness of medication therapy for individual patients.

The unit dose drug distribution method involves dispensing medications in single-use, pre-measured packages, each containing the exact dose required for one administration to a patient. These doses are individually labeled and barcoded, and typically prepared and verified by the pharmacy before being delivered to the patient

care unit. This method contrasts with bulk supply methods where medications are stored in larger quantities and dispensed in multiple doses.

Advantages of Unit Dose Drug Distribution Method

1. Enhanced Patient Safety:

- **Reduction in Medication Errors:** Each dose is pre-measured and labeled, reducing the risk of dosing errors.
- **Barcoding and Verification:** Medications can be barcoded and scanned before administration, ensuring the right patient, drug, dose, route, and time.

2. Improved Accuracy and Accountability:

- **Documentation:** Each dose is recorded when dispensed and administered, providing accurate documentation and tracking.
- **Audit Trail:** Facilitates an audit trail for quality control and regulatory compliance.

3. Efficient Inventory Management:

- **Reduced Waste:** Minimizes medication waste as each dose is packaged separately, and unused doses can often be returned to inventory.
- **Stock Control:** Easier tracking of medication usage, helping to maintain appropriate stock levels and reduce shortages.

4. Patient-Centered Care:

- **Customization:** Allows for customization of therapy for individual patients, accommodating specific dosing schedules and adjustments.
- **Patient Education:** Enhances patient education and adherence as each dose can be labeled with instructions and warnings.

5. Cost-Effectiveness:

- **Waste Reduction:** Decreases waste and potential cost associated with expired or unused bulk medications.
- **Reduced Errors:** Reduces the financial impact of medication errors, including the costs of treating adverse drug events.

6. Regulatory Compliance:

- **Controlled Substances:** Provides better control and documentation for the dispensing of controlled substances, aiding compliance with DEA regulations.
- **Quality Assurance:** Facilitates compliance with pharmacy practice standards and guidelines from regulatory bodies.

Disadvantages of Unit Dose Drug Distribution Method

1. Increased Labor and Time:

- **Preparation Time:** Requires significant pharmacy time and effort to prepare and verify each unit dose.
- **Administrative Burden:** Higher administrative workload to maintain accurate records and manage the logistics of unit dose packaging.

2. Higher Initial Costs:

- **Packaging Costs:** Costs associated with specialized packaging materials and equipment for unit dose preparation.
- **Infrastructure Investment:** Investment in technology and systems, such as barcoding and automated dispensing cabinets, can be substantial.

3. Storage Requirements:

- **Space Constraints:** Unit dose packaging may require more storage space compared to bulk storage due to individual packaging.
- **Organizational Challenges:** Organizing and managing a larger number of small packages can be challenging.

4. Potential for Delays:

- **Pharmacy Workflow:** The time required to prepare and verify each unit dose can lead to delays in medication availability, especially in busy settings.
- **Emergency Situations:** May not be as efficient in emergency situations where immediate access to medications is critical.

5. Dependence on Technology:

- **System Failures:** Reliance on technology for barcoding and verification means that system failures or technical issues can disrupt the medication administration process.
- **Training Requirements:** Staff require training to effectively use the technology and systems involved in unit dose distribution.

6. Environmental Impact:

- **Increased Packaging Waste:** The individual packaging of unit doses can lead to an increase in medical waste, contributing to environmental concerns.

The drug basket method is a system of medication distribution where each patient's medications for a specific time period (e.g., a day or a shift) are prepared and placed in a labeled basket or container. This basket is then delivered to the patient care area and kept in a designated location for use by nurses and other healthcare providers. Each basket is typically labeled with the patient's name, room number, and other identifying information.

Advantages of Drug Basket Method

1. Personalized Medication Management:

- **Patient-Specific:** Each basket contains medications specifically prescribed for an individual patient, ensuring that patients receive the correct medications.
- **Customization:** Allows for easy adjustment and customization of medications based on changes in the patient's condition or treatment plan.

2. Improved Efficiency:

- **Streamlined Administration:** Reduces the time nurses spend collecting medications from a central pharmacy or automated dispensing cabinet.
- **Organized Workflow:** Enhances the organization of medication administration rounds, as everything needed for a patient is in one place.

3. Enhanced Safety:

- **Reduced Errors:** The clear labeling and individualized preparation help reduce the risk of medication administration errors.
- **Easier Verification:** Nurses can easily verify medications against the patient's chart before administration.

4. Better Inventory Control:

- **Tracking and Accountability:** Facilitates better tracking of medication use and accountability, as each basket is linked to a specific patient.
- **Efficient Restocking:** Simplifies the restocking process for the pharmacy, as baskets can be easily refilled with the needed medications for each patient.

5. Patient-Centered Care:

- **Convenience:** Medications are readily available at the point of care, improving the convenience for both patients and healthcare providers.
- **Patient Education:** Provides an opportunity for nurses to educate patients about their medications, as all of a patient's medications are together.

Disadvantages of Drug Basket Method

1. Storage and Space Issues:

- **Space Requirements:** Requires adequate storage space in patient care areas to hold multiple baskets, which can be a challenge in facilities with limited space.
- **Organizational Challenges:** Managing and organizing baskets for numerous patients can become cumbersome, especially in busy or large units.

2. Increased Preparation Time:

- **Pharmacy Workload:** The pharmacy must spend considerable time preparing and organizing baskets for each patient, which can increase the workload and require additional staffing.
- **Complexity:** The process of accurately preparing and verifying each basket can be time-consuming and complex.

3. Potential for Errors:

- **Mislabeled:** Errors in labeling or organizing baskets can lead to the wrong medications being delivered to the wrong patient.
- **Manual Errors:** Dependence on manual preparation increases the risk of human error compared to automated systems.

4. Limited Flexibility:

- **Changes in Orders:** If a patient's medication order changes frequently, the basket must be constantly updated, which can be inefficient and prone to errors.
- **Emergency Situations:** In emergencies, accessing and preparing medications quickly can be more challenging if they are not readily available outside the baskets.

5. Dependency on Staff Training:

- **Training Needs:** Requires thorough training for pharmacy and nursing staff to ensure proper preparation, handling, and administration of medications using this method.
- **Consistency:** Ensuring consistency in preparation and administration practices across all staff members can be difficult.

6. Waste Management:

- **Expired Medications:** Medications prepared in advance may expire or become unnecessary if a patient's treatment plan changes, leading to potential waste.
- **Inventory Issues:** Managing the inventory within each basket to avoid overstocking or understocking can be challenging.

The distribution of drugs to Intensive Cardiac Care Units (ICCU), Intensive Care Units (ICU), Neonatal Intensive Care Units (NICU), and Emergency Wards is a critical aspect of hospital operations. It ensures that patients receive timely and appropriate medications. Here is an outline of the typical processes involved:

1. Central Pharmacy Procurement and Storage

- **Procurement:** The central pharmacy department of a hospital is responsible for the procurement of medications. They purchase drugs from approved suppliers and maintain stock based on the hospital's formulary and anticipated needs.
- **Storage:** Medications are stored in a central pharmacy under appropriate conditions (temperature, humidity, etc.) to ensure their efficacy and safety.

2. Inventory Management

- **Stock Monitoring:** Inventory levels are regularly monitored using inventory management systems. This helps in tracking drug usage and predicting future needs.
- **Replenishment:** Based on the inventory data, the central pharmacy replenishes stocks to ensure that there are no shortages, especially for critical care units.

3. Distribution to Units

- **Automated Dispensing Cabinets (ADCs):** Many hospitals use ADCs located in or near ICU, ICCU, NICU, and emergency wards. These cabinets are stocked with commonly used medications and can be accessed by authorized personnel.
- **Manual Distribution:** For medications not stored in ADCs, the central pharmacy prepares and delivers them directly to the units as needed. This can be scheduled (daily, weekly) or on an emergency basis.

4. Medication Orders and Administration

- **Electronic Medical Records (EMR):** Physicians prescribe medications via the EMR system, which sends orders directly to the pharmacy. This system reduces errors and ensures clear communication.
- **Pharmacist Review:** Hospital pharmacists review medication orders for appropriateness, interactions, and allergies before dispensing.
- **Nursing Staff:** Nurses or designated healthcare professionals administer the drugs to patients according to the prescribed orders.

5. Emergency Protocols

- **Stat Orders:** In emergency situations, stat orders (immediate needs) are prioritized. Medications required urgently are dispatched immediately from the pharmacy to the unit.
- **Crash Carts:** Emergency wards and critical care units are equipped with crash carts containing essential drugs and equipment for resuscitation and other immediate interventions.

6. Special Considerations for NICU

- **Dosage and Formulation:** Medications for neonates require special attention regarding dosage and formulation. The pharmacy ensures that drugs are available in suitable forms (e.g., liquid preparations) and dosages appropriate for neonates.
- **Sterility and Safety:** Ensuring sterility and avoiding contamination is crucial in the NICU. Medications are often prepared in sterile environments to maintain high safety standards.

7. Regulatory Compliance and Quality Assurance

- **Documentation:** Accurate documentation of all steps from procurement to administration is essential for compliance with regulatory standards.
- **Audits and Reviews:** Regular audits and reviews of medication management processes are conducted to ensure quality and safety. This includes monitoring for compliance with policies and procedures.

8. Training and Education

- **Staff Training:** Continuous training and education for all staff involved in medication management (pharmacists, nurses, physicians) are vital to ensure they are updated on best practices, new medications, and safety protocols.

9. Technology Integration

- **Barcoding and Scanning:** Implementation of barcoding and scanning technologies helps in verifying the right drug, dose, patient, and time, minimizing errors.
- **Real-Time Monitoring:** Advanced systems allow for real-time monitoring and tracking of medication distribution and usage, enhancing efficiency and safety.

Automated drug dispensing systems and devices are advanced technologies used in healthcare settings to streamline the distribution, management, and administration of medications. These systems improve efficiency, enhance patient safety, and reduce the risk of medication errors. Here's an overview of various automated drug dispensing systems and devices commonly used in hospitals and other healthcare facilities:

1. Automated Dispensing Cabinets (ADCs)

- **Functionality:** ADCs are computerized drug storage units that provide secure, accessible storage for medications. They are typically located near patient care areas such as ICUs, emergency departments, and general wards.
- **Features:**
 - **User Authentication:** Access is controlled by user-specific credentials (e.g., fingerprint, password).
 - **Inventory Management:** Tracks medication usage and stock levels.
 - **Barcoding:** Scans barcodes to verify medication and patient information, reducing errors.
 - **Alerts:** Notifies staff of low stock levels or expired medications.

2. Automated Pharmacy Dispensing Systems

- **Functionality:** These systems automate the preparation and dispensing of medications in the central pharmacy. They can handle tasks such as counting pills, filling prescriptions, and labeling containers.
- **Types:**
 - **Robotic Dispensing Systems:** Use robotic arms to select, count, and dispense medications into patient-specific packaging.
 - **Unit Dose Systems:** Dispense single doses of medications packaged individually, which are then delivered to patient care areas.

3. Medication Carousels

- **Functionality:** Automated storage systems that rotate to present the correct medication to the pharmacy staff, reducing the time spent searching for drugs.
- **Features:**
 - **Inventory Control:** Tracks stock levels and usage.

- **Efficiency:** Increases speed and accuracy of medication retrieval.

4. Automated Compounding Systems

- **Functionality:** Used for preparing complex medication formulations, such as intravenous (IV) admixtures, parenteral nutrition, and chemotherapy drugs.
- **Features:**
 - **Precision:** Ensures accurate mixing and dosing of ingredients.
 - **Safety:** Reduces the risk of contamination and exposure to hazardous substances.

5. Pill Counters and Packagers

- **Functionality:** Devices that automate the counting, sorting, and packaging of pills into blister packs or other unit dose formats.
- **Features:**
 - **Accuracy:** Ensures precise counts, reducing wastage and errors.
 - **Speed:** Enhances workflow efficiency by speeding up the packaging process.

6. Smart Infusion Pumps

- **Functionality:** Programmable devices used to administer medications and fluids intravenously with precise control over flow rates.
- **Features:**
 - **Drug Libraries:** Contain databases of medication protocols to ensure correct dosing.
 - **Alarms and Alerts:** Notify healthcare providers of potential issues such as occlusions or empty bags.
 - **Integration:** Can be integrated with electronic health records (EHR) for real-time documentation.

7. Automated Medication Management Systems

- **Functionality:** Comprehensive systems that integrate various automated dispensing devices with software to manage the entire medication use process.
- **Features:**
 - **EHR Integration:** Ensures seamless communication between prescribing, dispensing, and administration.

- **Analytics:** Provides data for tracking medication usage, compliance, and inventory management.
- **Safety Features:** Includes checks for potential drug interactions, allergies, and contraindications.

8. Mobile Medication Workstations (Carts)

- **Functionality:** Mobile carts equipped with secure storage and computer systems, allowing nurses to bring medications directly to the patient's bedside.
- **Features:**
 - **Secure Access:** Controlled access to medications.
 - **Documentation:** Allows real-time updating of patient records at the point of care.
 - **Efficiency:** Reduces the need for trips back to the central pharmacy or ADCs.

9. Automated Drug Dispensing Robots

- **Functionality:** Advanced robots designed for high-volume dispensing environments, such as central pharmacies in large hospitals.
- **Features:**
 - **High Capacity:** Can manage and dispense thousands of doses daily.
 - **Accuracy:** Utilizes advanced algorithms to ensure precise dispensing.
 - **Integration:** Interfaces with hospital information systems for seamless operation.

The distribution and storage of narcotic and psychotropic substances in healthcare settings are subject to strict regulations to ensure security, prevent misuse, and ensure patient safety. Here is an overview of best practices for managing these controlled substances:

1. Regulatory Compliance

- **Legal Requirements:** Healthcare facilities must comply with national and international regulations, such as the Controlled Substances Act (CSA) in the United States and guidelines from the International Narcotics Control Board (INCB).
- **Licensing:** Facilities and personnel involved in handling narcotics and psychotropic substances must have appropriate licenses and registrations.

2. Procurement

- **Authorized Suppliers:** These substances must be procured only from suppliers authorized by regulatory authorities.
- **Documentation:** Accurate records of all orders and receipts must be maintained, detailing quantities, dates, and suppliers.

3. Storage

- **Secure Locations:** Narcotics and psychotropic substances must be stored in secure, locked cabinets or safes with restricted access.
- **Controlled Access:** Access should be limited to authorized personnel, such as pharmacists and designated nurses. Electronic access control systems with audit trails are recommended.
- **Environmental Controls:** Storage areas should maintain appropriate environmental conditions (temperature, humidity) to preserve drug efficacy.

4. Inventory Management

- **Perpetual Inventory:** Maintain a perpetual inventory system that tracks each unit of medication from receipt to dispensing.
- **Regular Audits:** Conduct regular audits and reconciliations to ensure inventory accuracy. This includes routine checks by pharmacists and periodic independent audits.
- **Discrepancy Resolution:** Any discrepancies must be promptly investigated and resolved, with appropriate documentation.

5. Distribution to Units

- **Controlled Distribution:** Transport narcotics and psychotropic substances from the central pharmacy to patient care units in tamper-evident containers.
- **Automated Dispensing Cabinets (ADCs):** Utilize ADCs in patient care areas to securely store and dispense these substances. ADCs provide controlled access, accurate tracking, and automated inventory management.
- **Manual Delivery:** For medications not stored in ADCs, the pharmacy should prepare and deliver them directly to the units, following secure hand-off procedures.

6. Medication Ordering and Administration

- **Electronic Medical Records (EMR):** Use EMR systems for prescribing controlled substances to ensure accurate, legible, and trackable orders.

- **Pharmacist Review:** Pharmacists should review and verify all orders before dispensing.
- **Nurse Administration:** Nurses must follow strict protocols for administering these substances, including verifying patient identity, dosage, and timing.

7. Documentation and Record-Keeping

- **Detailed Logs:** Maintain detailed logs of all transactions involving narcotics and psychotropic substances, including dispensing, administration, and wastage.
- **Patient Records:** Document administration details in the patient's medical record, including the name of the drug, dose, time, and administering personnel.
- **Retention Period:** Retain records for the period required by law, often several years.

8. Waste Management

- **Destruction Protocols:** Follow legal and environmental guidelines for the destruction of expired or unused narcotics and psychotropic substances. This often involves denaturing the substances and using approved disposal methods.
- **Witnessed Destruction:** Destruction should be witnessed and documented by authorized personnel.

9. Security Measures

- **Surveillance:** Install surveillance cameras in storage and dispensing areas to monitor and deter unauthorized access.
- **Alarm Systems:** Use alarm systems on storage cabinets and areas to detect unauthorized access attempts.
- **Staff Background Checks:** Conduct thorough background checks on all personnel authorized to handle controlled substances.

10. Training and Education

- **Ongoing Training:** Provide regular training for all staff involved in handling narcotics and psychotropic substances. This should cover regulatory requirements, security measures, and safe handling practices.
- **Emergency Procedures:** Train staff on procedures for handling incidents such as theft, loss, or diversion of controlled substances.