

SOP FOR SUPPLY CHAIN MANAGEMENT

Example of a Pharmaceutical Company

Document Control

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1. PURPOSE AND SCOPE

Purpose

To establish standardized procedures for effective inventory management ensuring optimal stock levels, regulatory compliance, patient safety, and cost control at ANC Pharmacy, Chennai.

Scope

This SOP applies to all pharmaceutical products, medical devices, and consumables handled by the pharmacy, covering the entire inventory lifecycle from procurement to disposal.

2. REGULATORY FRAMEWORK

Applicable Regulations:

Drugs and Cosmetics Act, 1940 & Rules, 1945
Tamil Nadu Drugs Control Rules
GST regulations for pharmaceutical products
Narcotics Drugs and Psychotropic Substances Act, 1985
Medical Device Rules, 2017









3. ROLES AND RESPONSIBILITIES

3.1 Pharmacy Manager

	Overall responsibility for inventory management
	Approval of procurement decisions above ₹25,000
	Monthly inventory review and analysis
	Ensuring regulatory compliance
3.2	Senior Pharmacist
	Daily inventory monitoring
	Supplier relationship management
	Staff training and supervision
	Quality control oversight
3.3	3 Junior Pharmacist/Assistant
	Daily stock recording and data entry
	Physical stock verification
	Customer service and dispensing
	Basic inventory maintenance
3.4	1 Store Keeper (if applicable)
	Receiving and inspection of goods
	Storage organization
	Stock movement recording
	Security maintenance





4. INVENTORY CLASSIFICATION

4.1 Product Categories

A. I	Prescription Medicines
	Schedule H, H1 drugs
	Controlled substances (Schedule X)
	Narcotics and psychotropic substances
В. С	Over-the-Counter (OTC) Products
	General medicines
	Health supplements
	Medical devices
	Consumables and sundries
4.2	2 ABC Analysis Classification
Ca	itegory A (High Value - 70% of investment, 10% of items)
	Minimum stock: 15 days
	Maximum stock: 45 days
	Review frequency: Weekly
Ca	itegory B (Medium Value - 20% of investment, 20% of items)
	Minimum stock: 15 days
	Maximum stock: 45 days
	Review frequency: Weekly







☐ Above ₹25,000: Pharmacy Manager



5.3	3 Preferred Suppliers (Chennai-based)
	Primary: Chennai Medical Distributors, T. Nagar
	Secondary: Tamil Nadu Pharmaceuticals, Egmore
	Emergency: 24/7 Medical Supply, Adyar
6.	RECEIVING AND INSPECTION PROCEDURES
6.	1 Delivery Acceptance Checklist
	Verify supplier invoice against purchase order
	Check GST invoice format and tax rates
	Inspect packaging for damage
	Verify batch numbers and expiry dates
	Check temperature-sensitive items immediately
	Count quantities received
	Sign delivery receipt with timestamp
6.2	Quality Control Checks
Fo	r Each Batch:
	Verify manufacturer details and licenses
	Check packaging integrity
	Ensure minimum 12 months shelf life (except fast-moving items)
	Verify batch number legibility
	Check for any recall notifications
Temperature-Sensitive Items:	
	Insulin: 2-8°C (refrigerated storage)
	Vaccines: As per manufacturer specifications





Certain antibiotics: Room temperature <25°C



6.3	Discrepancy Management
	Short Supply: Document shortage, inform supplier immediately Damaged Goods: Photograph damage, reject delivery, claim replacement
	Expired Products : Reject immediately, document for supplier credit
7.	STORAGE AND ORGANIZATION
7.	1 Storage Zones
Zoi	ne A: Prescription Medicines
	Climate-controlled area (18-25°C, <60% humidity) Alphabetical arrangement by generic name Separate locked cabinet for Schedule X drugs
Zo	ne B: OTC and General Items
	Open shelving system Category-wise arrangement Easy customer access for self-service items
Zo	ne C: Refrigerated Storage
	Dedicated pharmaceutical refrigerator Temperature monitoring every 4 hours Backup power supply
Zo	ne D: High-Value Items
	Locked storage cabinet Limited access (Manager/Senior Pharmacist only) CCTV monitorina







7.2 Storage Guidelines

FIF	O (First In, First Out):
	Arrange items by expiry date
	Use colored stickers for batch identification
	Red: Expiring within 6 months
	Yellow: Expiring within 12 months
	Green: >12 months shelf life
Seg	gregation Requirements:
	External use medicines separate from internal
	Controlled substances in locked cabinet
	Damaged/expired items in quarantine area
8.	INVENTORY TRACKING AND DATA ENTRY
8.1	Inventory Management System
Sof	ftware: PharmEasy POS/MediTrack Inventory System Access Levels
	Level 1: View only (Junior staff)
	Level 2: Add/Edit transactions (Senior Pharmacist)
	Level 3: Full access including reports (Manager)
8.2	Daily Data Entry Procedures (Timing: Every 2 hours)
	Purchase Entries: Log all received items immediately
	Sales Entries: Real-time POS integration
	Adjustments: Document any stock corrections with reason codes
	Transfers: Record any internal transfers between sections





8.3 Stock Movement Documentation

<i>ln</i> w	vard Register:	
	Date and time of receipt	
	Supplier name and invoice number	
	Item details (name, batch, quantity, expiry)	
	Storage location assigned	
	Received by (signature)	
Outward Register:		
	Date and time of sale	
	Customer details (for prescriptions)	
	Items dispensed	
	Remaining stock	
	Dispensed by (pharmacist signature)	
9.	STOCK MONITORING AND CONTROL	
9.1 Daily Stock Review (6:00 PM)		
	Review day's sales against targets	
	ldentify fast-moving items requiring reorder	
	Check for any stock discrepancies	
	Update minimum stock levels based on demand patterns	
9.2	Weekly Analysis (Every Monday, 10:00 AM)	
	Top 20 selling items	
	Slow-moving stock (>90 days)	
	Near-expiry items (within 6 months)	
	Stock-out incidents	







9.3 Monthly Stock Taking

Phy	sical Count Schedule:
	Week 1: Category A items (high-value) Week 2: Category B items (medium-value) Week 3: Category C items (low-value) Week 4: Special categories (controlled substances, refrigerated items)
Va	riance Analysis:
	Investigate discrepancies >2% Document reasons for stock variations Implement corrective actions Update security measures if required
10.	ORDER PICKING, PACKING, AND DISPATCH
10	.1 Prescription Dispensing Process
1. F	Prescription Verification:
	Check doctor's credentials and signature Verify patient information Confirm drug interactions and allergies
2.	Stock Selection:
	Select nearest expiry batch (FEFO - First Expiry, First Out) Verify correct strength and quantity Check for any special storage requirements





3. F	Packing Guidelines:
	Use appropriate containers (moisture-proof for tablets) Clear labeling with dispensing instructions Include patient counseling leaflets Separate internal and external use medicines
10.	2 Home Delivery Service
Co	verage Area: Within 10 km radius of T. Nagar location Delivery Schedule:
_	Morning: 10:00 AM – 1:00 PM Evening: 4:00 PM – 7:00 PM
Co	veragPacking Standards:
	Temperature-controlled bags for sensitive medicines Secure packaging to prevent damage Delivery receipt with customer signature Cash/card payment processing capability
11.	RETURNS AND REVERSE LOGISTICS
11.	1 Customer Returns Policy
Acc	ceptable Returns (within 7 days):
	Unopened packages with original packaging Manufacturing defects Wrong items dispensed (pharmacy error)





No	Non-Returnable Items:	
	Opened medicine packages Prescription medicines (unless pharmacy error) Items without original packaging Expired products	
11.	.2 Supplier Returns Process	
Ret	turn Categories:	
	Expiry returns (3-6 months before expiry) Damaged goods claims Overstock returns (as per agreement) Product recalls	
Do	cumentation Required:	
	Original purchase invoice Return authorization from supplier Batch-wise return list Reason for return Expected credit note value	
11	.3 Damaged and Expired Stock Management	
Qı	uarterly Review Process:	
	Identify expired and near-expiry stock Segregate damaged items Contact suppliers for return authorization Destroy non-returnable expired medicines as per regulations Maintain disposal records for regulatory compliance	





12. INVENTORY SECURITY MEASURES



12.1 Physical Security

Ac	cess Control:
	Biometric entry system for staff CCTV coverage of all storage areas Alarm system with 24/7 monitoring Secure locks for controlled substances cabinet
D a	ily Security Checklist:
	All entry points secured CCTV system operational High-value items properly locked No unauthorized personnel in storage areas Alarm system activated after hours
12.	2 Inventory Security Controls
Cor	ntrolled Substances (Schedule X):
	Double lock system (two keys, two authorized persons) Daily physical count Transaction log with signatures Monthly audit by external pharmacist Immediate reporting of any discrepancies
Hig	gh-Value Items (>₹5,000 per unit):
	Separate locked storage Access log maintenance Quarterly physical verification
1 1	Insurance coverage verification





13. EQUIPMENT AND TOOLS USAGE



17.1 Document Review Schedule

Wei	ighing and Measuring:
	Digital weighing scale (accuracy: 0.1g) Measuring cylinders (various sizes) Calibration certificates (annual)
Sto	orage Equipment:
	Pharmaceutical refrigerator with temperature logger Dehumidifier for monsoon season Air conditioning system for climate control
IT	Equipment:
	POS system with barcode scanner Thermal printer for labels Backup internet connection UPS for power backup
13.	.2 Maintenance Schedule
Da	ily:
	Temperature log recording POS system backup Equipment cleaning
We	eekly:
	Refrigerator defrosting Scale calibration check IT system undates







Mo	onthly:
	Deep cleaning of storage areas Equipment performance review Backup system testing
An	nual
	Professional equipment calibration Insurance policy renewal Equipment replacement planning
14	. SUPPLIER COMMUNICATION & ORDERING
14	.1 Supplier Relationship Management
Re	gular Communication Schedule:
	Daily: Order placement and delivery coordination Weekly: Performance review and issue resolution Monthly: Credit reconciliation and payment processing Quarterly: Contract review and rate negotiations
14	.2 Key Performance Indicators for Suppliers
	Delivery Performance: >95% on-time delivery Quality Score: <1% rejection rate Service Level: 24-hour response to queries Credit Terms: Minimum 30 days payment terms Stock Availability: >98% order fulfillment rate





14.3 Emergency Procurement Process

<i>Z4</i> /	7 Emergency Contacts:
	Primary supplier emergency line: [Phone Number] Backup distributor: [Phone Number] Hospital pharmacy network: [Contact Details]
Pro	ocess:
	Identify critical stock-out situation
	Contact primary supplier emergency line
	If unavailable, contact backup suppliers
	Document emergency purchase with reason
	Follow up with regular procurement process
15	. INVENTORY AUDIT PROCEDURES
15	.1 Internal Audit Schedule
Da	aily Audits:
	Cash register reconciliation
	High-value item count
	Controlled substances verification
	Temperature log review
M	onthly Audits:
	Random sample counting (5% of total items)
	System vs. physical stock comparison
	Supplier payment reconciliation
	Expiry date verification





Quarterly Audits: Complete physical stock count ABC analysis review Supplier performance evaluation Cost analysis and margin review 15.2 External Audit Requirements Regulatory Audits: Annual drug inspector visit GST compliance audit Professional body inspection (if applicable) Preparation Checklist: All records up to date Physical stock matches system records License documents current Staff training records available Controlled substances register complete 15.3 Audit Documentation Required Records: Purchase invoices and receipts Sales register and prescription copies Stock movement registers Temperature monitoring logs Supplier contracts and agreements





Equipment calibration certificates



Staff training certificates

16. INVENTORY BUDGETING



16.1 Budget Planning Process

Annual Budget Allocation:		
	70% for prescription medicines	
	20% for OTC products	
	5% for medical devices	
	3% for consumables	
	2% for emergency stock	
Мо	nthly Budget Review:	
	Compare actual vs. budgeted purchases	
	Analyze category-wise spending	
	Adjust procurement plans based on sales trends	
	Maintain 3-month rolling forecast	
Мо	nthly Budget Review:	
	Compare actual vs. budgeted purchases	
	Analyze category-wise spending	
	Adjust procurement plans based on sales trends	
	Maintain 3-month rolling forecast	
16	.2 Financial Controls	
Pu	archase Approval Limits:	
	Assistant: Up to ₹5,000	
	Pharmacist: Up to ₹15,000	
	Senior Pharmacist: Up to ₹25,000	
	Manager: Above ₹25,000	







Payment Terms Management: Negotiate minimum 30-day credit terms Take advantage of early payment discounts (2/10 net 30)Maintain good credit rating with suppliers Monitor credit limits regularly 16.3 Cost Optimization Strategies Bulk Purchase Benefits: Negotiate better rates for higher volumes Seasonal stocking for monsoon-related medicines Festival season advance procurement Generic substitution where applicable **Inventory Turnover Targets:** Category A items: 12x per year (monthly turnover) Category B items: 6x per year (bi-monthly turnover) Category C items: 4x per year (quarterly turnover) 17. HEALTH, SAFETY, AND COMPLIANCE 17.1 Workplace Safety Measures Personal Protective Equipment: Disposable gloves for handling medicines Face masks when dealing with powdered medications Safety glasses for chemical handling First aid kit readily available





Fir	re Safety:
	Fire extinguishers in all storage areas Smoke detectors with alarm system Emergency evacuation plan posted Monthly fire drill practice
17	.2 Regulatory Compliance
Lic	ense Requirements:
	Drug license renewal (every 5 years) GST registration maintenance Professional registration updates Building and fire safety certificates
Rec	ord Keeping Requirements:
	Maintain all records for minimum 3 years Digital backup of critical documents Controlled substances records for 10 years Temperature logs for cold chain items
17.	3 Staff Health and Safety Training
Qu	arterly Training Topics:
	Proper lifting techniques Chemical spill response Emergency procedures Personal protective equipment usage
	Infection control measures









Annual Training Requirements: Continuing education for pharmacists First aid certification Fire safety training Regulatory updates 18. CONTINUOUS IMPROVEMENT AND REVIEW 18.1 Performance Metrics **Key Performance Indicators:** Inventory turnover ratio: Target >8 times per year Stock-out incidents: <2% of total SKUs per month Expired product loss: <0.5% of total inventory value Customer satisfaction score: >95% Supplier delivery performance: >98% 18.2 Monthly Review Process Review Meeting Agenda: Previous month's performance analysis Inventory turnover and aging analysis Supplier performance review Customer feedback analysis Cost optimization opportunities Process improvement suggestions



Training needs identification



18.3 Continuous Improvement Initiatives



Pro	ocess Optimization:
	Regular review of minimum and maximum stock levels
	Automation opportunities identification
	Supplier consolidation benefits
	Space utilization optimization
	Technology upgrade planning
Que	ality Enhancement:
	Customer feedback integration
	Staff suggestion program
	Best practices sharing
	Industry benchmark comparison
	Professional development planning
19	. EMERGENCY PROCEDURES
19	.1 Emergency Contact List
	Pharmacy Manager: [Mobile Number]
	Drug Inspector: [Office Number]
	Police Station: 100
	Fire Department: 101



Electricity Board: [Local Number]

Security Agency: [24/7 Number]

Ambulance: 108

19.2 Emergency Response Procedures



Po	wer Failure:
	Switch to UPS backup immediately Check refrigerator temperature Contact electricity board for restoration time
	If extended outage, transfer critical medicines to backup location
Fire	e Emergency:
	Evacuate all personnel immediately Call fire department (101) Do not attempt to fight large fires Secure controlled substances if safely possible
The	ft/Burglary:
	Do not resist if confronted Call police (100) immediately after incident Check controlled substances inventory File insurance claim within 24 hours
19	.3 Business Continuity Planning
Alt	ternative Supplier Arrangements:
	Maintain relationships with 3-4 backup suppliers Emergency stock agreements with nearby pharmacies Mutual aid agreements with pharmacy association members





Da	ta Backup and Recovery:
	Daily automatic backup to cloud storage Weekly physical backup to external drive Monthly full system backup Quarterly disaster recovery testing
20	. APPENDICES
Ap	pendix A: Forms and Checklists
	Daily Stock Review Checklist Receiving Inspection Form Physical Count Sheet Discrepancy Report Form Supplier Performance Scorecard
Ap	pendix B: Contact Information
	Supplier Contact Directory Emergency Contact List Regulatory Authority Contacts Professional Network Contacts
Ap	pendix C: Reference Documents
	Drugs and Cosmetics Act provisions GST rates for pharmaceutical products Storage requirement guidelines Disposal regulations for expired medicines



DOCUMENT CONTROL

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