



Healthcare Supply Chain and Procurement: Medical Supplies, Pharmaceuticals and Equipment



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Introduction:

In the healthcare supply chain a missing catheter, an expired vaccine or a delayed infusion pump reaches the patient, not just the budget. Hospitals still buy by habit, carry duplicate products chosen by individual clinicians, lose stock to expiry on the wards and discover shortages when a theatre list is already running. This Core Concept course gives procurement, pharmacy and materials staff the methods to forecast, standardise, tender, store and track medicines, consumables and equipment. Working on hospital cases, participants build a Hospital Supply Assurance Plan for a product family in their own facility.

Course Objectives:

- Map the flow of medicines, consumables and medical devices from manufacturer to point of care and locate where cost, delay and waste enter it
- Forecast demand for medicines and clinical consumables using consumption and morbidity methods and set ward par levels from the results
- Run product standardisation and formulary reviews with clinicians through a value analysis process backed by evidence and total cost
- Prepare specifications, tender documents and evaluation criteria for medical devices and pharmaceuticals that balance clinical, technical and commercial factors
- Control cold chain storage, expiry, recalls and shortages with written procedures and records that follow good storage and distribution practices
- Measure supplier and supply chain performance with healthcare KPIs and assemble a Hospital Supply Assurance Plan for a product family

Target Audience:

- Procurement staff who buy medicines, medical consumables and medical devices for hospitals and clinics
 - Pharmacy staff who manage medicine ordering, storage, formulary lists and distribution to wards
 - Materials management and medical stores staff who run receiving, storage, ward top-up and issues
 - Biomedical and clinical engineering staff who take part in equipment purchasing and asset records
 - Contract and supplier coordinators who monitor delivery, quality complaints and supplier scorecards for healthcare products
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Course Outline:

Day 1: Healthcare Supply Chain Structure and Current-State Review

- Healthcare Supply Chain Tiers: Manufacturer, Distributor, Group Purchasing and Point of Care
- Product Families: Pharmaceuticals, Medical Consumables, Implants and Capital Equipment
- Hospital Supply Cost Structure and Total Cost of Ownership per Clinical Procedure
- Roles of Procurement, Pharmacy, Materials Management and Clinical Users
- Hospital Supply Chain Current-State Mapping Template

Day 2: Demand Planning, Formulary and Product Standardisation

- Consumption-Based and Morbidity-Based Forecasting for Medicines
- Procedure-Driven Demand Planning for Theatre and Catheter Laboratory Consumables
- Formulary Management and Therapeutic Substitution Review Workflow
- Value Analysis Committee Charter and Product Evaluation Form
- Clinical Product Standardisation Matrix with Clinician Sign-Off

Day 3: Sourcing and Tendering for Medical Devices and Pharmaceuticals

- Medical Device Technical Specification Writing and Clinical Trial Evaluation
- Pharmaceutical Tender Lots, Registration Evidence and Shelf-Life Clauses
- Weighted Tender Evaluation Matrix: Clinical, Technical and Commercial Scores
- Consignment, Vendor-Managed Inventory and Framework Agreements for Hospital Supplies
- Medical Equipment Life-Cycle: Needs Assessment, Installation, Maintenance and Decommissioning

Day 4: Storage, Cold Chain, Inventory Control and Supply Risk

- Good Storage and Distribution Practices for Medical Products as WHO Describes Them
- Cold Chain Temperature Mapping, Data Loggers and Excursion Handling Procedure
- Ward Par Levels, Two-Bin Top-Up and Point-of-Use Inventory Controls
- Expiry Monitoring by FEFO and Product Recall Execution Log
- Drug Shortage Response Protocol and Alternative Supplier Qualification

Day 5: Supplier Performance, KPIs and the Hospital Supply Assurance Plan

- Healthcare Supplier Scorecard: Fill Rate, Lead Time and Quality Complaints
 - Supply Chain KPI Set: Stock-Out Rate, Expired Stock Value and Inventory Days
 - Case Study: Theatre Consumables Overstock and Ward Expiry Losses
 - Case Study: Critical Medicine Shortage and Cold Chain Failure
 - Hospital Supply Assurance Plan Drafting and Peer Review Panel
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Skills You Will Gain:

- Healthcare Demand Forecasting
- Formulary and Value Analysis
- Medical Device Specification
- Pharmaceutical Tender Evaluation
- Cold Chain Control
- Par Level Setting
- Recall and Shortage Handling
- Healthcare Supplier Scorecarding

Why Attend This Course:

- Return with a Hospital Supply Assurance Plan for a product family in your own facility, with baseline KPIs
- Cut expired and duplicate stock by agreeing standard products and par levels with clinicians on evidence
- Handle recalls, cold chain excursions and medicine shortages with tested procedures rather than improvisation
- Compare hospital supply practice with pharmacy, procurement and materials staff from public, private and non-profit providers

Conclusion:

Patients depend on the right medicine, device or consumable being available, in date and at the correct temperature when care is given. The course moves from the structure and cost of the healthcare supply chain, through forecasting, formulary and value analysis, to tendering for devices and pharmaceuticals, equipment life-cycle, cold chain, par levels, expiry, recalls and shortages. The final day applies this to hospital cases and produces a Hospital Supply Assurance Plan ready for review by pharmacy, procurement and clinical leads.