Advanced Medical Supply Chain and Inventory Control Training Course



23 - 27 Nov 2026

Kuala Lumpur

5200 € (Per Person)

Ref: #HSM1515_106340

Course Introduction / Overview:

The global healthcare landscape demands a supply chain that is not just efficient, but also resilient, compliant, and patient-centric. This course provides a comprehensive exploration of the principles and practices governing the modern medical supply chain. We will delve into the intricate network that ensures life-saving drugs, devices, and supplies reach their destination safely and on time. Drawing upon foundational concepts from experts like Dr. Anne Snowdon on healthcare supply chain innovation, participants will learn to navigate the complexities of procurement, inventory control, logistics, and risk management within a highly regulated environment. The curriculum moves beyond theory, referencing practical frameworks discussed in texts such as "Managing the Global Supply Chain" to address real-world challenges like demand forecasting for pandemics, maintaining cold chain integrity, and implementing traceability technologies. At BIG BEN Training Center, we have designed this program to empower professionals with the strategic foresight and operational skills needed to optimize their organization's supply chain, reduce costs, enhance patient safety, and build a system robust enough to withstand future disruptions. This is a critical discipline for ensuring the continuity and quality of care in any healthcare system.

Target Audience / This training course is suitable for:

- Supply Chain and Logistics Managers.
- Hospital and Clinic Administrators.
- Procurement and Purchasing Officers.
- Pharmaceutical Supply Chain Professionals.
- Medical Device Inventory Planners.
- Warehouse and Distribution Supervisors in Healthcare.
- Public Health Officials and Planners.
- Operations Managers in Healthcare Facilities.
- Clinical Department Heads.
- Regulatory Affairs Specialists.

Target Sectors and Industries:

- Hospitals and Healthcare Systems.
- Pharmaceutical Manufacturing and Distribution.
- Medical Device Manufacturing Companies.
- Third-Party Logistics (3PL) Providers Specializing in Healthcare.
- Biotechnology and Life Sciences Companies.
- Governmental Health Ministries and Public Health Agencies.
- Non-Governmental Organizations (NGOs) in Health Services.
- Retail Pharmacy Chains.
- Diagnostic Laboratories.

Target Organizations Departments:

- Supply Chain Management.
- Procurement and Purchasing.
- Logistics and Distribution.
- Warehouse and Inventory Management.
- Pharmacy Services.
- Hospital Administration and Operations.
- Finance and Cost Control.
- Quality Assurance and Regulatory Compliance.
- Surgical and Clinical Departments.
- Information Technology (IT) for SCM systems.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop robust strategies for medical procurement and strategic sourcing.
- Implement advanced inventory control models like JIT and EOQ in a clinical setting.
- Master the principles of cold chain logistics for temperature-sensitive products.
- Analyze and mitigate risks within the healthcare supply chain.
- Ensure compliance with key regulatory standards like GS1 and UDI for traceability.
- Leverage technology to enhance supply chain visibility and efficiency.
- Optimize warehouse and distribution operations for medical supplies.
- Conduct effective demand forecasting for pharmaceuticals and medical devices.
- Improve vendor relationship management and negotiation outcomes.
- Design a resilient and sustainable healthcare supply chain framework.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and directly applicable to the participant's professional environment. This course moves beyond traditional lectures to create a dynamic learning ecosystem. Each session combines expert-led instruction with intensive case study analysis, examining real-world successes and failures in medical supply chain management from leading global healthcare organizations. Participants will engage in collaborative group workshops to solve complex problems, such as designing a disaster response supply plan or optimizing operating room inventory. Interactive discussions and debates will encourage the sharing of diverse experiences and perspectives on topics like ethical sourcing and technology adoption. Practical exercises, including demand forecasting simulations and inventory optimization modeling, will provide hands-on experience with key tools and techniques. Continuous feedback from the instructor and peers is a core component, ensuring that participants can confidently apply their new skills to drive tangible improvements in efficiency, cost-effectiveness, and patient safety within their own organizations upon their return to the workplace.

Course Agenda (Course Units):

Unit One: Foundations of the Modern Healthcare Supply Chain

- Introduction to Healthcare Supply Chain Management (HSCM).
- The role of supply chain in patient safety and quality of care.
- Key stakeholders and their functions in the medical supply ecosystem.
- The global regulatory landscape for medical products.
- Ethical considerations and social responsibility in healthcare sourcing.
- Understanding the flow of goods, information, and finances.
- Core metrics and Key Performance Indicators (KPIs) for HSCM.
- Challenges and opportunities in the post-pandemic supply chain.

Unit Two: Strategic Procurement and Vendor Management

- The strategic sourcing process for medical supplies and pharmaceuticals.
- Developing effective procurement policies and procedures.
- Supplier selection, evaluation, and performance management.
- Negotiation strategies and contract management in healthcare.
- The role and impact of Group Purchasing Organizations (GPOs).
- Managing relationships with manufacturers and distributors.
- Principles of value analysis in product selection.
- E-procurement and automation in the purchasing cycle.

Unit Three: Advanced Medical Inventory Control and Forecasting

- Principles of inventory management in a clinical environment.
- Inventory classification techniques (e.g., ABC, VED analysis).
- Economic Order Quantity (EOQ) and Reorder Point (ROP) models.
- Just-in-Time (JIT) and Lean inventory strategies for hospitals.
- Demand forecasting methods for medical and surgical supplies.
- Managing perishable, high-value, and consignment inventory.
- Specialized inventory management for operating rooms and emergency departments.
- Strategies for reducing stockouts and managing expired products.

Unit Four: Medical Logistics, Warehousing, and Distribution

- Best practices in healthcare warehouse design and layout.
- Receiving, storage, and order-picking processes for medical products.
- Cold chain management for pharmaceuticals and biologics.
- Transportation and last-mile delivery challenges in healthcare.
- Reverse logistics and management of medical returns and waste.
- Network design and optimization for healthcare distribution.
- Compliance with storage and transportation regulations.
- Technology in the medical warehouse (WMS, automation).

Unit Five: Risk, Technology, and the Future of Healthcare Supply Chains

- Identifying and assessing risks in the healthcare supply chain.
- Developing risk mitigation and business continuity plans.
- Implementing traceability technologies (Barcoding, RFID, UDI).
- The potential of Blockchain and AI in HSCM.
- Data analytics for supply chain optimization and decision-making.
- Building a resilient and agile supply chain.
- Sustainability and green initiatives in healthcare logistics.
- Future trends shaping the evolution of medical supply chains.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

In an era of increasing global disruptions, how can healthcare organizations balance the cost-efficiency of Just-in-Time inventory with the resilience required for Just-in-Case scenarios?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing on the strategic integration of supply chain principles within the unique, high-stakes context of patient care. Unlike programs that offer a generic overview of logistics, this curriculum is meticulously tailored to address the specific regulatory, ethical, and operational challenges of the medical sector. We move beyond simply teaching inventory models to exploring their practical application in diverse clinical settings, from managing high-value surgical implants to ensuring the integrity of temperature-sensitive biologics. The course places a significant emphasis on contemporary issues, dedicating substantial time to building supply chain resilience in a post-pandemic world, navigating complex traceability regulations like the UDI, and evaluating the real-world impact of emerging technologies like AI and blockchain. Participants will not just learn theories; they will engage with complex case studies and simulations that challenge them to make critical decisions balancing cost, efficiency, and patient safety. The focus is on cultivating a forward-thinking mindset, equipping leaders to build supply chains that are not only efficient today but also agile and robust enough to meet the unforeseen challenges of tomorrow.