National Institute of Technical Teachers' Training & Research, Bhopal

Capacity- Building Program on

Health Care Supply Chain Management

(Program Code-PMGS 13)

1. Rationale:

In the age of competition, no industry can survive without pondering much about reducing expenditures wherever possible. The same is true for health care industry, which is witnessing sharp rise in price in almost all its products and services. Supply chain in this industry being a significant driver of cost is therefore grabbing all the attention from industry stakeholders.

Under the PM Gati-Shakti Project of Govt. of India, the focus of capacity building of 75000 professional of various sectors are on the top agenda. Around eighteen areas have been identified for capacity building mission, and the "Healthcare Supply Chain Management" is one of those areas. The main purpose of the healthcare supply chain is to deliver products in a timely manner, in order to fulfil the needs of stakeholders. Based on their functions, stakeholders in the healthcare supply chain can be divided into three major groups: producers, purchasers, and providers. Supply chain management in healthcare should ensure complete end-to-end visibility of information among suppliers, manufacturers, distributors and customers. It is imperative to look into the supply chain management aspects and identify areas in which they can improve the quality of service for efficient patient care.

This five-day online training program assumes the significance in view of the above aspects and aims to impart practical knowledge on healthcare supply chain and operations to teachers so that they can upskill students and thereby enable them to become effective healthcare supply chain management professionals. The programme also plan to impart skill related with the tools and techniques for improving healthcare supply chain performance, which will result in reducing the cost of the logistics, thereby giving a boost to the India's economy.

2. Program Outcomes

The participant will be able to:

- 1. Explain the importance of PM Gati Shakti initiative in logistics and supply chain.
- 2. Describe the processes of a managing the healthcare supply chain logistics keeping cost optimization techniques in focus.
- 3. Apply the principles of the Inventory management systems for medical and pharmaceuticals supplies.
- 4. Identify the potentials of state-of-the-art technologies in health care supply chain management.
- 5. Devise approaches to use modern concepts of safety and security to manage the health care supply chain activities.
- 6. Elaborate the need for Quality management Systems for healthcare supply chain operations.

7. Prepare an Action plan for planning & organizing activities and training programmes on health care supply chain management

3. Programme Contents:

Module 1: Overview of Healthcare Supply Chain Management:

- > Concepts of Healthcare Supply Chain Management
- ➤ Need, Selection of Supplier
- Supply Chain Coordination
- Criteria for Selection
- Vendor Rating
- Vendor Management Inventory
- Cutting costs

Module 2: Inventory management systems and Logistics for Medical and pharmaceuticals supplies:

- > Hospital Supply Chain Management
- > Procurement of Medical Equipment
- Procurement of Pharmaceuticals Supplies
- ➤ Handling & Storage
- > Replenishment
- Stock Counting & Management
- > Cold Chain for Drug Transportation
- > Automation used in Storage and Handling Equipment

Module 3: Technology and Innovation in Health Care Supply Chain Management:

- ➤ Information Technology in the Supply Chain
- > Information Systems
- ➤ Enterprise Resource Planning
- > Telemedicine
- GIS and GPS
- > E-commerce
- Digitization and Data Analytics
- > Challenges in Health Care Management
- > Best Practices in Health Care Management

Module 4: Safety and Security in Health Care Management:

- ➤ Bar-coding, tagging, tracking and monitoring techniques
- Use of RFID
- Risk Assessment
- > Fire Safety

Module 5: Quality Management for Health Care:

- > 5S for Health Care
- Kaizen for Health Care
- > TQM for Health Care
- Action plan for planning & Organizing Programmes

4. Instructional Strategy:

Following training strategies is planned to be used: Lectures, Input-cum-Discussions, analogies, Interactive learning, team teaching, assignments, Case study, presentation.

5. Learning Assignments / Activities / Tasks:

- Deriving roles of a health care manager.
- Identify elements of a robust health care supply chain management system.
- Perform ABC analysis in medical inventory management
- Analyze the given case on health care supply chain management.
- Compare good practices of health care supply chain management processes of other countries.
- Analyze the given case on (QMS) through Kaizen and TQM for health care management
- Prepare an action plan to sensitize teachers and students on the PM Gati Shakti Initiatives at their organizations.

6. Assessment & Grading:

- Group Assignments
- Individual Tasks
- Presentations
- Portfolio
- Achievement Test

7. Target Group:

The faculties from AICTE recognized technical Institutions and professional working in the relevant industries.

8. Program Team:

- Prof. Susan S Mathew-Coordinator Associate Professor, DCEEE, NITTTR, Bhopal (Emailssmathew@nitttrbpl.ac.in) (Mobile - +919425649673)
- Dr. Anju Rawlley, Professor, DCDAE, NITTTR, Bhopal (Email-<u>arawlley@nitttrbpl.ac.in</u>) (Mobile - +919406947814)
- Experts in the area of Health Care Supply Chain Management

9. Programme Schedule:

<u>Tentative Programme Schedule</u>

Day	Session I 10.0 - 11.30	Session II 11.45-1.15	Session III 2.15 - 3.45	Session IV 4.00- 5.30
1.	RegistrationIntroductionProgramme briefSupply chain basics	PM Gatishakti: Initiatives and objectives	Module 1: Overview of healthcare supply chain management	Learning Assignment
2.	Module 2: Inventory management systems for pharmaceuticals and medical supplies	Learning Assignment	Hospital supply chain management	
3.	Cold chain management for pharmaceutical products	Learning Assignment	Module 3: Technology and innovation in health care supply chain management	Learning Assignment
4.	Challenges & Best practices in supply chain management for pharmaceutical products	Learning Assignment	Module 4: Safety and security in health care management	
5.	Module 5: Quality management for health care	Task: Case study	Activity: Presentation Task: Preparation of an action plan	Achievement Test Feedback Valedictory