



Semester – III

534E8G - Operations Management in Healthcare

Question Bank

Prepared

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Question Bank

Part A: 1 Mark Questions

Unit I: Operations Management in Healthcare

- 1. What is the core focus of **Operations Management in Healthcare (HOM)**?
- 2. Name one key function of Healthcare Operations Management.
- 3. Who pioneered the use of the **structure-process-outcome** (**SPO**) **model** for evaluating healthcare quality?
- 4. What is the main purpose of Evidence-Based Medicine (EBM)?
- 5. What does the acronym **P4P** stand for in healthcare?
- 6. List one challenge faced by operations managers in healthcare.

Unit II: Planning and Scheduling

- 7. State one basic principle of **forecasting** in healthcare.
- 8. Define Capacity Planning.
- 9. What is the meaning of **Patient Flow**?
- 10. Give an example of a **Leading Capacity** strategy.
- 11. What is the goal of **Process Improvement** in healthcare?
- 12. What does **Staff Scheduling** (Rostering) in a hospital involve?

Unit III: Tools for Improvement and Quality Management

- 13. What is the central concept of **Six Sigma** in quality management?
- 14. Name one of the wastes that the **Lean Enterprise** methodology focuses on eliminating.
- 15. Name one technique used for **Root Cause Analysis (RCA)**.
- 16. What is a **Control Chart** used for in quality improvement?
- 17. What type of simulation is most common for modeling systems in healthcare?
- 18. State one step in the healthcare operations planning process.

Unit IV: Operational Metrics and Inventory Management

- 19. Define **Length of Stay (LOS)** as a key operational metric.
- 20. What is **Benchmarking** in the context of operational metrics?
- 21. What is the key objective of **Inventory Management** in a hospital?
- 22. How is Labor Productivity in healthcare often measured?



- 23. List one reason for **financial distress** from the revenue side in a hospital.
- 24. What is the importance of **Contingency Planning** in operational planning?

Unit V: Implications of Supply Chain

- 25. Define a **Supply Chain** in a general context.
- 26. Name the three main types of flows in a supply chain.
- 27. What is **Reverse Flow** in the healthcare supply chain?
- 28. What does Internal Logistics refer to in a hospital?
- 29. What is the primary function of **Inbound Logistics**?
- 30. Give one example of an Inventory Control and Replenishment System.

Part B: 5 Mark Questions

Unit I: Operations Management in Healthcare

- 1. List and briefly explain any five **key functions of Healthcare Operations**Management (HOM).
- 2. Explain the concept of **Evidence-Based Medicine (EBM)**, detailing its three core components.
- 3. Discuss any five key **trends in Operations Management** that are currently transforming the healthcare industry.
- 4. Explain the structure and **potential benefits of Pay-for-Performance (P4P)** in healthcare.

Unit II: Planning and Scheduling

- 5. Discuss the **Basic Principles of Forecasting** that must be followed by operations managers in a healthcare setting.
- 6. Explain the importance and key considerations for **Forecasting Patient Demand and Volumes**, distinguishing between inpatient and outpatient needs.
- 7. Describe the three main strategies for **Aligning Capacity with Demand** in a healthcare system: Leading, Lagging, and Matching Capacity.
- 8. Explain the different **Types of Scheduling in Healthcare**, such as Patient Scheduling and Resource Scheduling, and highlight the challenges involved.

Unit III: Tools for Improvement and Quality Management

- 9. Explain the purpose and application of **Root Cause Analysis (RCA)** in healthcare, along with its associated techniques like the **"5 Whys"** or **Fishbone Diagram**.
- 10. Differentiate between the quality management methodologies of **Six Sigma** and **The Lean Enterprise** in the context of healthcare operations.

- 11. Discuss how **Simulation** is used as a powerful tool for problem-solving and decision-making in hospital operations management.
- 12. Explain the role of **Data and Statistical Tools** (like Descriptive Statistics and Hypothesis Testing) in evidence-based operations improvement.

Unit IV: Operational Metrics and Inventory Management

- 13. Discuss the different factors contributing to **Financial Distress in Healthcare** from both the revenue and cost perspectives.
- 14. Explain the concept of **Benchmarking** and describe different types of analysis (e.g., Drill-Down Analysis) used with operational metrics in a hospital.
- 15. Describe the key aspects of **Productivity in Healthcare** (Labor, Resource, and Process Productivity) and its measurement.
- 16. Outline the key objectives and activities of the **Purchasing** function within a healthcare organization.

Unit V: Implications of Supply Chain

- 17. Explain the concept of a **Hospital Supply Chain** and describe the movement of the **three primary flows** (Product, Information, and Financial).
- 18. Discuss the major **challenges** associated with **Forecasting for Supply Chain Management** in hospitals.
- 19. Explain the role of a robust **Supply Chain Strategy** for hospitals and its objectives.
- 20. Describe the importance of effective **Inventory Control and Replenishment Systems** in hospital logistics, citing examples.

Part C: 10 Mark Questions

Unit I: Operations Management in Healthcare

- 1. Discuss in detail the comprehensive set of **Goals for the Operations Manager** in a healthcare facility, explaining how these goals contribute to optimizing patient care and achieving organizational objectives.
- 2. Analyze the **History of Performance Improvement in Healthcare**. Trace its evolution from early pioneers like Nightingale and Codman to modern approaches like Continuous Quality Improvement (CQI) and Value-Based Purchasing Programs.

Unit II: Planning and Scheduling

3. Explain the concepts of **Process Improvement and Patient Flow** in healthcare. Discuss key strategies and tactics, such as bottleneck identification, load

- balancing, and standardization, used to optimize patient flow throughout the hospital system.
- 4. Analyze the critical relationship between **Scheduling and Capacity Management** in a hospital. Discuss how effective coordination of patient, staff, and resource scheduling minimizes wait times and improves overall efficiency and patient experience.

Unit III: Tools for Improvement and Quality Management

- 5. Discuss the two primary quality management methodologies, **Six Sigma** and **The Lean Enterprise**, in the context of healthcare. Explain the core philosophy of each and how their combined application (Lean Six Sigma) can drive significant operational and quality improvements.
- 6. Explain the steps involved in the **Planning Process** for healthcare operations (Analyze, Implement, Measure, and Revise). Illustrate how various **Tools for Problem Solving and Decision Making** are strategically utilized throughout these steps to achieve operational goals.

Unit IV: Operational Metrics and Inventory Management

- 7. Elaborate on the various **Key Operational Metrics** used in hospitals, categorizing them by Access & Throughput, Quality & Safety, and Financial performance. Explain how proactive monitoring of these metrics is essential for **Operational Planning** and detecting financial distress.
- 8. Discuss **Productivity** in healthcare, defining its various aspects (Labor, Resource, Process Productivity) and the internal and external factors that affect it. Explain the direct relationship between enhancing productivity and effective **Operational Planning**.

Unit V: Implications of Supply Chain

- 9. Analyze the significant **Implications of Supply Chain Management on Operations and Logistics Management** of a hospital. Discuss how efficient logistics (Inbound, Internal, Outbound) impacts core operational objectives like patient care, cost control, and emergency preparedness.
- 10. Elaborate on the importance of **Forecasting in Supply Chain Management** for hospitals. How can accurate forecasting be integrated with a robust supply chain strategy to optimize inventory management and ensure the continuous, cost-effective delivery of patient care?