

## Chapter 1: Operations Management and Decision Making

### True or False Questions

1. True or False? Health care operations is about management of interconnected processes, or systems.

- a. True
- b. False

Answer: True

2. Inputs to production of health care services include labor and capital, including cash, technology, personnel, space, equipment, and information.

- a. True
- b. False

Answer – True

3. The healthcare industry has been a leader in the United States in demonstrating how best to manage the processes and systems required to produce patient care services.

- a. True
- b. False

Answer – False – Others outside of the healthcare industry have identified weaknesses in how healthcare managers manage the processes and systems

4. Finding waste, improving utilization, and generally stabilizing and reducing the overall cost of delivering services are essential functions for a healthcare manager.

- a. True
- b. False

Answer – True

5. The healthcare industry has a great deal of parallel with airlines in terms of how business processes can be managed quickly and efficiently.

- a. True
- b. False

Answer – True

6. Clinical, financial, and other goals for a healthcare organization are clear, with little ambiguity.

- a. True
- b. False

Answer – False – Healthcare has multiple, ambiguous priorities that make goals much less acute than in other industries

7. Evidence-based healthcare can be applied in logistics and operations in a healthcare organization.

- a. True
- b. False

Answer – True

### **Multiple Choice Questions**

1. Which of the following is not an input to the production of healthcare services?

- a. Labor
- b. Supplies
- c. Outpatient visits
- d. Technology

Answer – c

2. Which of the following is a key function or issue in healthcare operations management?
- a. Supply chain and logistics management
  - b. Maximizing investment of idle cash
  - c. Developing methods to accelerate depreciation to reduce operating margins
  - d. None of these is a key function or issue in healthcare operations management

Answer – **a**

3. The goals for operations managers in a hospital include:
- a. Increase variability
  - b. Reduce costs
  - c. Increase space used for inventories
  - d. All of these are goals for hospital operations managers

Answer – **b**

4. Hospitals can learn about operations management effectiveness from which of these industries?
- a. Retail
  - b. Chemicals
  - c. Electronics
  - d. All of these are industries that can inform hospital operations managers

Answer – **d**

5. Which of the following is a consideration for operations management in assessment of workflow process?
- a. Are floor layouts designed to eliminate redundancy?
  - b. Where should appropriate par locations be positioned?

- c. How many manual processes exist?
- d. Should we operate “just in time”?

Answer – **c**

6. The most dominant parties in the production of health care are:

- a. Insurers
- b. Nurses
- c. Government regulators
- d. Physicians

Answer – **b**

7. The role of technology in a production function is:

- a. Automate manual processes
- b. Increase human oversight of transactions
- c. Reduce the speed of production to increase quality
- d. Diversify the types of output to increase marketability

Answer – **a**

### **Short Answer Questions**

1. Describe the scientific school of management and how it can be applied to healthcare operations management

Answer - Many of the analytical concepts of scientific management remain vital to healthcare operations management. First, scientific management suggests the need for a strong understanding of processes, their costs and resource utilizations, constraints, and cycle times. Second, scientific management encourages an initial focus on understanding expected outcomes and subsequently designing management systems and business processes around this operational strategy. Third, the variability of processes has to be smoothed out and consistently managed. Finally, scientific management shows that in many cases, quantitative approaches can help create mathematically optimal results for common management decisions and problems

2. How do the characteristics of a healthcare organization influence decision making in these types of organizations?

Answer – In health care, however, there is incomplete alignment of goals between different agents, or managers, in the organization because of three issues:

- Goals are unclear. There are clinical goals, financial goals, educational or academic goals in some cases, societal goals, community goals, and so on. The ambiguity that exists in terms of priorities and focus makes goals much less acute than in other industries.
- Organizations are complex. In industrial organizations, the organization is focused clearly on the key aspects of buying, making, selling, and moving products to the marketplace. In health care, reporting relationships often involve complex matrices and dual-reporting structures.

This is definitely not the “command and control” structure, focused on speed and efficiency of decision-making that might work in other places.

- Relationships are ambiguous. Many business units in health care are interconnected, but they often behave as if they were not. Independence of departments and providers helps create an environment that is less team focused than in other industries, making relationships important for purposes of mutual support as allies. Also there are continuous power struggles in the healthcare arena between different factions of employees. This creates ambiguity in decision-making.

3. List some current trends in healthcare operations management and their importance to hospitals.

Answer – Outsourcing, which allows hospitals to focus on their core competencies and pay less attention to less mission centric functions. Integrated service delivery will require hospitals to share information, share patient care resources, collaborate with other providers and redesign business processes to work in a collaborative fashion. Supply chain management can help hospitals improve sourcing in inventory techniques and lower overall supply expense ratios. Globalization will require Health care operations management too consider the possibility of outsourcing opportunities in other countries to obtain lower costs but will require some adjustments in the use of technology and work processes. Standardization of procedures resources and services can ensure alignment among departments, promote familiarization, reduce the number of transactions processed which will result in lower costs and higher productivity. Finally, evidence-based healthcare with its

use of quantitative methods can comprehensively analyze operations resulting in measurable improvements.

4. Describe the four key functions of management and give an example of how they can be implemented to enhance management control.

Answer – The four key functions of management are planning, organizing, leading, and controlling. Planning involves the establishment of goals and a strategy to achieve these goals. In health care, planning can be strategic (such as deciding which geographic region to invest in a new facility), or it can be operational (such as how many employees to have on staff for each shift). Organizing includes making decisions about what tasks will be done, where, when, and by whom. Organizing uses a variety of tools, such as an organization chart to manage people's roles and reporting relationships, process flow charts for improving activities, and Gantt charts for managing projects. Leading includes motivating employees, building support for ideas, and generally getting things done through people. Providing direction and clarification to expectations, as well as the role of change management, or preparing the organization for changes to come, are instrumental to providing leadership in hospital operations management. Controlling includes all tasks to monitor and track progress toward goals, ensure performance improvement, and make corrective changes in strategy where necessary. The use of status reports, budgets, and procedures are ways that managers can control operations in a business – including a health care business.