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Quality in Healthcare

A Lean Six Sigma Project Approach

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CHAPTER 1

QUALITY FIRST

1. **What is value in healthcare?**

   A. Higher profits

   B. Higher number of revenue streams

   C. Higher revenue

   *D. Health outcome per dollar spent

   E. Higher reimbursements from private insurers

   Answer: D

   Rationale: *Value is a ratio of cost over quality. In healthcare, quality is health outcomes, and cost is the amount spent.*

2. **What is the primary focus of value-based healthcare?**

   A. Increasing patient volume

   B. Reducing health insurance premium costs

   *C. Improving health outcomes relative to costs

   D. Expanding healthcare facilities

   E. Increasing the number of healthcare providers

   Answer: C

   Rationale: *Because value is quality over cost, the ways to increase value include increasing healthcare quality, decrease healthcare (not insurance premium) costs, or do both at the same time.*

3. **Which organization was founded in 1847 to push for medical scientific research and improvement of medical education?**

   A. American Hospital Association

   B. Centers for Disease Control and Prevention

   C. The Joint Commission on Accreditation of Hospitals

   D. Institute of Medicine

   *E. American Medical Association

   Answer: E

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Rationale: *Of the organizations mentioned in the answer choices, only the American Medical Association was founded in the 19th century.*

4. The purpose of The Joint Commission on Accreditation of Hospitals (JCAH) was to provide

A. mandatory accreditation

B. partial accreditation

*C. voluntary accreditation

D. accreditation legislation

E. accreditation enforcement

Answer: C

Rationale: *The JCAH was created to provide voluntary accreditation.*

5. Which one of the following is a primary factor contributing to the high healthcare costs in the United States?

A. Low utilization of healthcare services

*B. High administrative costs

C. Low quality of care

D. Lack of healthcare facilities

E. High number of healthcare providers

Answer: B

Rationale: *The U.S. system is complex, resulting in excessive administrative costs.*

6. Which of the following is a major challenge for U.S. healthcare today?

A. Insufficient regulation

B. Poor training of clinicians

*C. Administrative complexity

D. Healthcare facilities in poor conditions

E. Excessive number of healthcare providers

Answer: C

Rationale: *Administrative complexity is very high in the United States, resulting in higher costs.*

7. What does the acronym STEEEP stand for in healthcare quality improvement?

*A. Safety, Timeliness, Efficiency, Equity, Effectiveness, Patient-centeredness

B. Safety, Technology, Efficiency, Equity, Effectiveness, Patient-centeredness

C. Safety, Timeliness, Efficiency, Equity, Effectiveness, Professionalism

D. Safety, Timeliness, Efficiency, Equity, Empathy, Patient-centeredness

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E. Safety, Timeliness, Efficiency, Equity, Effectiveness, Precision

Answer: A

Rationale: *The Institute of Medicine identified six aims for quality: safety, timeliness, effectiveness, efficiency, equity, patient-centeredness.*

8. Which of the following is NOT one of the six aims for healthcare quality improvement specified by the Institute of Medicine?

A. Safety

B. Timeliness

C. Efficiency

*D. Profitability

E. Patient-centeredness

Answer: D

Rationale: *Profitability is not one of the six aims for quality proposed by the Institute of Medicine.*

9. A major component of patient-centered care is

A. clinical specialization

*B. communication

C. timeliness

D. efficiency in addressing the diagnosis

E. economical payment rates

Answer: B

Rationale: *Patient-centered care involves compassion and empathy to respond to the patient's needs and preferences. To understand those needs and preferences, the provider must be able to communicate effectively with the patient.*

10. Which of the following is the main goal of the Hospital Value-Based Purchasing (VBP) program?

A. Increase hospital profits

*B. Improve the quality, efficiency, and safety of care

C. Expand hospital facilities

D. Reduce the number of hospital staff

E. Increase the number of hospital beds

Answer: B

Rationale: *VBP incentivizes hospitals to provide efficient and safe quality care.*

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11. What does the term "Total Quality Management" (TQM) emphasize?

A. Reducing costs at all levels

*B. Continuous improvement and customer satisfaction

C. Increasing the number of healthcare providers

D. Expanding access to specialists

E. Providing total healthcare

Answer: B

Rationale: *The first and third principles of TQM emphasize customer satisfaction and continuous improvement, respectively.*

12. Which one of the following is a key principle of systems thinking in healthcare?

A. Focusing on individual elements in detail

B. Periodically revamping the healthcare system

C. Prioritizing information and clinical technology to provide better care

*D. Recognizing patterns and trends

E. Streamlining the healthcare system

Answer: D

Rationale: *Systems thinking is a way of viewing interconnections and patterns of change—as opposed to discrete and static elements—in the structures and processes of a whole entity.*

13. Systems thinkers

A. try to understand the entire system and how elements within the system interact

B. identify cause-and-effect relationships and the influences that alter these relationships

C. test assumptions and are willing to change the course of action as needed

D. foster collaboration

*E. All of the above

Answer: E

Rationale: *Systems thinkers study the whole system, recognize patterns and trends, identify cause-and-effect relationships, test assumptions, and promote the ability to work with others.*

14. Which one of the following is the purpose of the SWOT analysis in business strategy development?

*A. To identify strengths, weaknesses, opportunities, and threats

B. To identify processes needing improvement

C. To identify supplies, working conditions, opportunities, and teams

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D. To identify competitors

E. To increase healthcare quality

Answer: A

Rationale: *SWOT stands for strengths, weaknesses, opportunities, and threats.*

15. A SWOT analysis

A. is a quick, easy way to analyze internal strengths before collecting outside information

*B. provides the framework to formulate feasible business strategies

C. is usually performed by the operations manager and presented to the stakeholders

D. is usually performed by the CEO and presented to the operations manager

E. is usually performed by a stakeholder group and presented to the operations manager

Answer: B

Rationale: *The SWOT analysis helps the organization formulate alternative, feasible strategic options that improve the chances of gaining and/or sustaining market dominance and ensuring financial success.*

16. Most healthcare companies

A. select one business strategy and use it exclusively

B. have limited success when mixing business strategies

*C. purposely do not adopt a strictly pure business strategy

D. find it impossible to mix business strategies

E. try out one strategy in a given month and then switch to another the next month in order to remain flexible

Answer: C

Rationale: *Few organizations adopt a strictly pure strategy. Many times, there will be "spillovers" from one to the other.*

17. Functional strategies are designed to

A. offer alternatives to the business strategies

B. offer alternatives to the corporate strategies

*C. support the business strategy

D. all of the above

E. both A and B, but not C

Answer: C

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Rationale: *Functional strategies specify HOW the business strategy is going to be executed. They support the business strategy.*

18. Which is NOT one of the competitive priorities of an operations strategy?

A. quality

*B. service

C. timeliness

D. cost

E. flexibility

Answer: B

Rationale: *The competitive priorities of an operations strategy include quality, cost, timeliness, and flexibility. Service is not one of them.*

19. In the cumulative model,

A. trade-offs among the competitive priorities are acknowledged

B. cost-cutting is seen as a threat to the quality of clinical outcomes

*C. increasing quality is seen as a cost-saving option

D. both A and B are correct, but not C

E. both A and C are correct, but not B

Answer: C

Rationale: *The cumulative model is the practice of accumulating capabilities, starting with quality. Higher quality decreases the costs associated with failures.*

20. Which of the following is an example of a care delivery model that contributes to value-based healthcare?

A. Fee-for-service

*B. Medical homes

C. Private insurance

D. Direct-to-consumer advertising

E. Pharmaceutical sales

Answer: B

Rationale: *Care delivery models that promote value include medical homes, accountable care organizations, hospital value-based purchasing, and the merit-based incentive payment system.*

21. Which of the following is the main focus of Lean Six Sigma in healthcare?

*A. Increasing value

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B. Slashing the workforce

C. Green healthcare

D. Adjusting patient volume to capacity

E. Increasing the mix of patients and services

Answer: A

Rationale: *Lean Six Sigma emphasizes higher quality and efficiency (less waste), resulting in higher value.*

22. Which of the following is the main goal of the Merit-based Incentive Payment System (MIPS)?

A. Expand the fee-for-service payment model

*B. Reward clinicians for high-value care

C. Increase the number of services provided by physicians

D. Tie reimbursement to the percentage of generic drugs being prescribed

E. Increase patient volume

Answer: B

Rationale: *MIPS rewards clinicians providing high-quality, high-value care with higher payments.*

23. To what does the term "health disparity" refer?

*A. Differences in health status linked to social, economic, and/or environmental disadvantage

B. Lower insurance coverage

C. Fewer treatments for some conditions

D. Lack of healthcare specialties

E. Higher payments to rural healthcare providers

Answer: A

Rationale: *Health disparity refers to the difference in health status due to social, economic, and/or environmental disadvantage.*

24. Which of the following is an example of an external failure cost in healthcare?

A. Training programs

*B. Readmissions

C. Process improvement efforts

D. Maintenance of records

E. Collecting patient information

Answer: B

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Rationale: *External failure costs are the costs of errors that are detected too late and affect the customer (e.g., readmissions).*

25. Which of the following is an example of an internal failure cost in healthcare?

A. Training programs

B. Inspections and audits

*C. Rework to correct errors

D. Process redesign

E. Collecting patient information

Answer: C

Rationale: *Internal failure costs are the costs of fixing errors before the customer is affected (e.g., rework).*

26. What are the stages in the Deming Wheel?

*A. Plan, Do, Study, Act

B. Plan, Do, Sell, Act

C. Plan, Develop, Study, Act

D. Plan, Do, Study, Analyze

E. Plan, Develop, Study, Analyze

Answer: A

Rationale: *The Deming Wheel is also know as the Plan-Do-Study-Act cycle.*

27. What is the primary goal of the Deming Wheel (PDSA cycle)?

A. To increase the use of statistical process control

B. To phase out ongoing quality projects

C. To analyze healthcare financial records

D. To speed up process improvement projects

*E. To seek continuous improvements

Answer: E

Rationale: *The PDSA cycle demonstrates that the pursuit of improvement never ends.*

28. What does the term "health cocreation" refer to in the context of healthcare?

*A. The collaboration between patients and providers to achieve better value

B. The creation of health cooperatives

C. The creation of wellness programs

D. The joint collaboration of the Centers for Medicare & Medicaid and healthcare providers

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E. The joint collaboration of private insurers and the Centers for Medicare & Medicaid

Answer: A

Rationale: *Health co-creation reflects the joint participation of provider and patient in achieving higher value in healthcare.*

29. Support services in a hospital include

A. anesthesiology

B. pediatrics

C. neurology

D. oncology

*E. registration

Answer: E

Rationale: *Support services are not clinical. An example is registration.*

30. Main clinical services in a hospital include

A. physical therapy

B. pathology

C. radiology

*D. surgery

E. informatics

Answer: D

Rationale: *Surgery is a primary clinical service. The others mentioned in the list are either support or auxiliary services.*

31. What is a process?

A. The transformation of services into goods

B. The transformation of goods into services

C. The analysis of the competitive landscape

*D. The transformation of inputs into outputs

E. The number of handoffs in delivering care

Answer: D

Rationale: *A process is generally defined as the transformation of inputs into outputs.*

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