

## Quality Improvement Core Curriculum Pre-Course Self Assessment

**Directions:** Using the scale provided below, assess your pre-course knowledge of the various concepts, tools and techniques associated with quality improvement. Circle the number that best represents your assessment. This information will help the instructor modify (where possible) the course to you're your needs.

|                           |          |
|---------------------------|----------|
| <b>Advanced knowledge</b> | <b>4</b> |
| <b>Average knowledge</b>  | <b>3</b> |
| <b>Limited knowledge</b>  | <b>2</b> |
| <b>No knowledge</b>       | <b>1</b> |

| Quality Improvement Concept   | Level of Knowledge |   |   |   |   |      |
|---|--------------------|---|---|---|---|------|
|   | Advanced           | ➤ | ➤ | ➤ | ➤ | None |
| <b>General Quality Improvement Concepts</b>   |                    |   |   |   |   |      |
| 1. The four steps of quality improvement: identify, analyze, develop, and test/implement.   | 4                  | 3 | 2 | 1 |   |      |
| 2. The four approaches to quality improvement, including: individual problem solving, rapid team problem solving, systematic team problem solving, and process improvement. | 4                  | 3 | 2 | 1 |   |      |
| 3. The four principles of quality improvement: client focus, understanding work as processes and systems, testing changes and emphasizing the use of data, and teamwork.    | 4                  | 3 | 2 | 1 |   |      |
| 4. The nine dimensions of quality that are often used to classify how the quality of health care can be improved.   | 4                  | 3 | 2 | 1 |   |      |
| 5. Concrete examples of how health care quality improvement initiatives have been accomplished in other facilities and contexts.  | 4                  | 3 | 2 | 1 |   |      |
| 6. How to write a problem statement.  | 4                  | 3 | 2 | 1 |   |      |
| 7. Shewart's Cycle of Continuous Improvement (PDSA).  | 4                  | 3 | 2 | 1 |   |      |

| Quality Improvement Concept   | Level of Knowledge |   |   |   |
|---|--------------------|---|---|---|
|   | Advanced           | ➤ | ➤ | ➤ |
| 8. Principles and lessons of quality improvement established by leaders of the quality improvement effort, including W. Edwards Deming, Joseph M. Juran, Avedis Donabedian, and Donald Berwick. | 4                  | 3 | 2 | 1 |
| 9. How to begin planning a quality improvement initiative.  | 4                  | 3 | 2 | 1 |
| <b>Systems and Process</b>  |                    |   |   |   |
| 10. The definition of a process.  | 4                  | 3 | 2 | 1 |
| 11. The definition of a system.   | 4                  | 3 | 2 | 1 |
| 12. The relationship between a process and a system.  | 4                  | 3 | 2 | 1 |
| 13. How to create a basic flowchart, including the correct use of various flowcharting symbols.   | 4                  | 3 | 2 | 1 |
| 14. The different types of processes for which flowcharts can be created.   | 4                  | 3 | 2 | 1 |
| <b>Measurement and Quality Improvement Tools</b>  |                    |   |   |   |
| 15. The appropriate use of various process improvement tools.   | 4                  | 3 | 2 | 1 |
| 16. The rules that should be followed to conduct or participate in a brainstorming session.   | 4                  | 3 | 2 | 1 |
| 17. How to perform a force field analysis.  | 4                  | 3 | 2 | 1 |
| 18. How to create a Gantt chart.  | 4                  | 3 | 2 | 1 |
| 19. How to create an affinity diagram.  | 4                  | 3 | 2 | 1 |
| 20. How to create a run chart.  | 4                  | 3 | 2 | 1 |
| 21. How to measure various quality improvement goals.   | 4                  | 3 | 2 | 1 |

| Quality Improvement Concept   | Level of Knowledge |   |   |   |
|---|--------------------|---|---|---|
|   | Advanced           | ➤ | ➤ | ➤ |
| 22. The definition of common cause variation.                                   | 4                  | 3 | 2 | 1 |
| 23. The definition of special cause variation.                                  | 4                  | 3 | 2 | 1 |
| 24. Rules for interpreting variation in procedures.                             | 4                  | 3 | 2 | 1 |
| 25. The six main sources of variation and change.                               | 4                  | 3 | 2 | 1 |
| 26. Quantitative and qualitative data.  | 4                  | 3 | 2 | 1 |
| <b>Teamwork</b>   |                    |   |   |   |
| 27. Behaviors conducive to being an effective team member.                      | 4                  | 3 | 2 | 1 |
| 28. The various stages of team development.                                     | 4                  | 3 | 2 | 1 |
| 29. Techniques for creating high performing teams.                              | 4                  | 3 | 2 | 1 |
| 30. How to conduct an effective meeting.  | 4                  | 3 | 2 | 1 |
| 31. The important elements of a team building exercise.                         | 4                  | 3 | 2 | 1 |
| 32. Phenomena that occur in team decision-making and how to overcome them.      | 4                  | 3 | 2 | 1 |
| <b>Client Focus</b>   |                    |   |   |   |
| 33. The difference between external and internal clients.                       | 4                  | 3 | 2 | 1 |
| 34. Techniques that can be used to solicit feedback from clients.               | 4                  | 3 | 2 | 1 |
| 35. Procedures for developing and conducting interviews.                        | 4                  | 3 | 2 | 1 |
| 36. Procedures that should be followed when creating and administering surveys. | 4                  | 3 | 2 | 1 |
| 37. Open-ended and forced-choice questions and when/how to use them.            | 4                  | 3 | 2 | 1 |

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**Quality Improvement Core Curriculum  
Post Course Knowledge Check**

**Directions:** Circle the best response for each question.

1. All of the following are principles of process improvement EXCEPT
  - a. Teamwork
  - b. Collecting data and verifying the type of variation
  - c. Client focus
  - d. Understanding work as processes and systems
  
2. Which of the following best describes the third step of quality improvement
  - a. To identify a problem
  - b. Collect data about the problem
  - c. Use data to better analyze the problem
  - d. Develop a potential solution for the problem
  
3. Shewart's Cycle of continuous improvement is used during which quality improvement step
  - a. Analyze
  - b. Test / Implement
  - c. Identify
  - d. Develop
  
4. Which of the following is the best example of the "Access to Service" Dimension of Quality
  - a. A health worker is not judgmental when speaking with a patient about their situation
  - b. A clinic provides outreach services to the community
  - c. A woman with a prolonged second stage labor receives a c-section
  - d. Patients with active TB are kept in a separate ward

5. Which of the following is the best example of the “Continuity of Services” Dimension of Quality
- a. A religious sponsored health center provides religious services to the entire population regardless of religious affiliation
  - b. All patients receive care regardless of their ability to pay
  - c. Children receive immunizations during their routine growth examinations
  - d. Good records are maintained for follow up care
6. Which of the following is the best example of the “Efficiency of Service” Dimension of Quality
- a. A child with persistent fever after initial anti-malaria treatment has a blood smear to confirm the continued presence of malaria parasites
  - b. A nurse or clinical officer is on duty at all times in a health center
  - c. The health center acquires more instruments so that they can run the sterilizer fewer times during the day
  - d. Fire and emergency exit routs are posted on the walls
7. Which approach to quality improvement would be most appropriate when the change required is usually minor and not dependent on others
- a. Rapid team problem solving
  - b. Individual problem solving
  - c. Process improvement
  - d. Systematic team problem solving
8. Which approach to quality improvement would be most appropriate when improving quality entails the use of a permanent team that collects monitors and analyzes data over time
- a. Rapid team problem solving
  - b. Individual team problem solving
  - c. Process improvement
  - d. Systematic team problem solving

9. Which approach to quality improvement uses a series of small incremental changes that are tested to verify that they result in an improvement
- Rapid team problem solving
  - Individual team problem solving
  - Process improvement
  - Systematic team problem solving
10. All of the following are desirable to include in a problem statement EXCEPT
- The process boundaries (where it starts and stops)
  - A statement as to why the problem is a priority
  - The potential solution for the problem
  - Insight into why the problem might exist
11. All of the following are important rules for brainstorming sessions EXCEPT
- Do not judge the ideas of others
  - Quality of ideas is more important than quantity of ideas
  - Do not discuss the ideas during the brainstorming session
  - Build on the ideas of others
12. All of the following are effective use of flowcharts EXCEPT
- To explain how patients move through the health facility as they receive care
  - To explain how a clinical decision is made
  - To explain why mothers don't return to the health facility for post-partum visits
  - To explain the flow of patient information across various people in the health facility
13. Which of the following quality improvement tools would best be used to help in the planning and management of a quality improvement project
- Prioritization Matrix
  - Brainstorming
  - Gantt Chart
  - Voting

14. Which of the following quality improvement tools would help you interpret if variation was due to common or special cause
- Run Chart
  - Pareto Analysis
  - Benchmarking
  - Bar Chart
15. Which of the following quality improvement tools would be helpful in understanding the environment where a quality improvement initiative might be conducted
- Fishbone Diagram
  - Force Field Analysis
  - Bar Chart
  - Flow chart
16. Which of the following quality improvement tools would be helpful in determining who should participate on a quality improvement project
- Pie Chart
  - Run Chart
  - Benchmarking
  - Flow Chart
17. Which of the following statements best describes common cause variation
- It is predictable in a stable environment, e.g., minor fluctuations in a health person's body temperature
  - It is predictable in a stable environment, it indicates that no change is required
  - It is NOT predictable in a stable environment, and often points to an improvement in a situation
  - It is NOT predictable in a stable environment, and indicates an investigation as to the cause for the variation is required
18. All of the following rules can be used to interpret variation in procedures EXCEPT
- Eight consecutive points above (or below) the center line (mean or median) suggest a shift in the process
  - Three successive trends indicates a cyclical trend
  - Fourteen successive points alternating up and down suggest a cyclical process
  - Six successive increasing (or decreasing) points suggest a trend

19. All of the following describe quantitative data EXCEPT

- a. Objectively based
- b. Used to measure cost
- c. Often incorporates peoples opinions
- d. Often referred to as hard data

20. All of the following describe qualitative data EXCEPT

- a. Used to measure perspectives
- b. Easy to measure
- c. Often behaviorally oriented
- d. Often subjective in nature

21. All of the following are examples of quantitative data EXCEPT

- a. How a patient felt about the care received
- b. Reduced staff turnover
- c. Shorter waiting room times
- d. Improved employee safety record

22. Which of the following behaviors would likely be evident during the norming stage of team development

- a. There is conflict over who will control the team
- b. People mourn the loss of camaraderie among team members
- c. Close relationships develop and the team demonstrates cohesiveness
- d. The team becomes high performing

23. All of the following have been found to be excellent reasons to have teams work on quality improvement projects EXCEPT

- a. Team accomplishments build confidence among the individual members of the team
- b. Solutions proposed by a team meet with much less resistance if the people impacted by the change have been a part of its development
- c. Individuals will likely have knowledge gaps of about a process, and a team can provide a complete picture
- d. When people work in teams they will keep silent about their misgivings, and go along with the team consensus

24. When you select people to serve on a quality improvement projects it's important to select people who

- a. You get along with and will work well together
- b. Already know the solution to the problem
- c. Have the necessary technical knowledge
- d. Have expressed an interest in being the team leader

25. All of the following are conducive to running productive team meetings EXCEPT

- a. Begin the meeting by creating an agenda
- b. Encourage people to disagree constructively
- c. Manage time devoted to each agenda item
- d. Make follow up assignments for the next meeting

26. The first step in planning and conducting an interview is to

- a. Determine the interview technique
- b. Identify the interview respondents
- c. Determine the purpose of the interview
- d. Pilot the interview

27. All of the following are good reasons for conducting an interview in lieu of administering a survey EXCEPT

- a. The respondents are not skilled readers
- b. You want to be able ask follow up questions
- c. You will be asking primarily open ended questions
- d. You will be asking primarily closed form questions

28. To encourage people to complete a questionnaire or survey it is a good idea to put easier questions

- a. At the beginning of the survey
- b. In the middle of the survey
- c. At the end of the survey
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29. All of the following are interview best practices EXCEPT

- a. Engage in small talk prior to beginning the interview to help put the respondent at ease
- b. Ask all of the forced choice questions before moving to the open ended questions
- c. Avoid the use of technical jargon
- d. Avoid nodding your head in agreement

30. A Likert-type question asks respondents to

- a. Rank statements in order of importance to them
- b. Develop their own response to a question
- c. Select from a scale that uses qualitative descriptors
- d. Select all the options that pertain to their situation

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