

# ASSESSMENT TOOL 5 – SAMPLE QIKAT-R OF QI COMPETENCIES

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[Access the online version of the tool.](#)

## Quality Improvement Knowledge Application Tool Revised (QIKAT-R)

**NOTE TO TEACHER:** If you plan to administer the tool to the same residents pre and post curriculum, it is recommended that different case studies be used in the second QIKAT-R. It is also recommended that three (3) scenarios be used in each test.

SCENARIO 1 WAS DEVELOPED BY THE AUTHOR FOR THE QI CURRICULUM HE DEVELOPED AT UBC. FOR OTHER SCENARIOS, YOU MIGHT WISH TO CONTACT DR. MAMTA K. (MIMI) SINGH, CO-DIRECTOR, CENTER OF EXCELLENCE IN PRIMARY CARE EDUCATION (COEPCE), LOUIS STOKES CLEVELAND VA MEDICAL CENTER, AND ASSOCIATE PROFESSOR OF MEDICINE AT CASE WESTERN RESERVE UNIVERSITY.

**Instructions:** Please read each of the following scenarios and then answer the questions that follow. We recognize that there may be many areas to improve. Be brief and complete in your answers. We request that you attempt each question, even if you are unsure.

### Scenario 1

You are a general surgeon who is conducting ward rounds on a Saturday morning. You come across a patient on the surgical ward, who is a 72 year-old female with right-sided pleural effusion of unknown etiology. The patient developed respiratory compromise during the previous night, and the on-call surgical resident performed a bedside thoracentesis for therapeutic and diagnostic reasons. The patient developed a right-sided pneumothorax after the procedure, and as a result, the patient now has a chest tube inserted into the right thorax for drainage.

When you speak with the ward nurses about this patient incident, the nurses tell you that this is the third incident over the past two weeks that involved a complication associated with bedside thoracentesis. The nurses are concerned and so are you.

As you reflect after your ward rounds, you recall that there is literature that shows the patient safety benefit of ultrasound guidance in performing a number of bedside procedures such as thoracentesis. Specifically the risk of thoracentesis-related pneumothorax can be reduced with ultrasound guidance.

## QUESTIONS FOR SCENARIO 1

Please answer each of the following questions as if you were developing a program to investigate and address the problem presented above.

1. What would be the aim?
2. What would you measure to assess the situation?
3. Identify one change that might be worth testing.

## Scenario 2

### QUESTIONS FOR SCENARIO 2

Please answer each of the following questions as if you were developing a program to investigate and address the problem presented above.

1. What would be the aim?
2. What would you measure to assess the situation?
3. Identify one change that might be worth testing.

## Scenario 3

### QUESTIONS FOR SCENARIO 3

Please answer each of the following questions as if you were developing a program to investigate and address the problem presented above.

1. What would be the aim?
2. What would you measure to assess the situation?

3. Identify one change that might be worth testing.

This is the end of the QIKAT-R. Thank you for your time.

## QIKAT-R Scoring Rubric

THE SCORING RUBRIC IS USED WITH PERMISSION (SINGH MK, G OGRINC, KR COX, M DOLANSKY, J BRANDT, LJ MORRISON, B HARWOOD, G PETROSKI, A WEST, LA HEADRICK. THE QUALITY IMPROVEMENT KNOWLEDGE APPLICATION TOOL REVISED (QIKAT-R). ACADEMIC MEDICINE 2014 OCT; 89(10):1386–91.)

When scoring, please consider the following factors:

- Do the answers incorporate improvement fundamentals (customer focus, process knowledge, small tests of change/PDSA cycle)?
- Do the three elements (aim, measure, change) bear some relationship to each other?
- Each item receives one point if the response adequately addresses the item and zero points if it does not. The total possible score is 9 points for each scenario.

3 points for the AIM. The AIM...	
A1	is focused on the system-level of the problem presented.
A2	includes direction of change (increase or decrease).
A3	includes at least one specific characteristic such as magnitude (% change) or time frame.
3 points for the MEASURE. The MEASURE...	
M1	is relevant to the AIM.
M2	is readily available so data can be analyzed over time.
M3	captures a key process or outcome
3 points for the CHANGE. The CHANGE...	
C1	is linked directly with the AIM.
C2	proposes to use existing resources.
C3	provides sufficient details to initiate a test of change.