

What is the priority index?

The priority index is a way of combining two very important pieces of information: (1) the actual score achieved on a particular question, and (2) the degree to which that particular question is associated with overall satisfaction. Combining these two pieces of information helps a facility to know where efforts should be placed for quality improvement. For example, one item might be very low in score (e.g., quality of food) but not particularly associated with overall satisfaction. Because it is not highly associated with satisfaction, the facility might choose to place quality improvement resources elsewhere. Conversely, an item might be very highly associated with overall satisfaction (e.g., overall cheerfulness of hospital) but not low in score. Attempting to raise the score would probably be difficult and may perhaps be unnecessary if most of your patients are very satisfied already.

How is the priority index calculated?

The priority index is derived through a three step process. For the purpose of this example, let's assume that the survey has 50 questions.

1. SCORE RANK

Questions are ordered from the highest score down to the lowest score. Each question is then given a score rank; the highest score gets a rank of 1, the second highest score gets a rank of 2, the third highest score gets a rank of 3 and so on down the line until the lowest score is given a rank of 50. It may help to remember the meaning of the score rank to think of a high score as a small issue and a big score as a big issue — something the facility should be concerned about. The high score, a small issue, has a small score rank (e.g., 1, 2, 3...). Conversely, a low score, a big issue of concern, has a big score rank (e.g., 48, 49, 50). The score rank for each question appears in parentheses to the right of the mean score column on the priority index page.

PRIORITY INDEX	=	SCORE RANK	+	CORRELATION RANK
High Priority (Top of priority index page)	=	☹ A big issue! Big score rank (Low actual score)	+	☹ A big issue! Big correlation rank (High correlation with satisfaction)
Medium Priority (Middle of priority index page)	=	☹ A big issue! Big score rank (Low actual score)	+	☺ A small issue! Small correlation rank (Low correlation with satisfaction)
	or...	☺ A small issue! Small score rank (High actual score)	+	☹ A big issue! Big correlation rank (High correlation with satisfaction)
Low Priority (Bottom of priority index page)	=	☺ A small issue! Small score rank (High actual score)	+	☺ A small issue! Small correlation rank (Low correlation with satisfaction)

2. CORRELATION RANK

Next, questions are ordered from the least correlated with overall satisfaction to the most associated with overall satisfaction. Each question is then given a correlation rank; the question that is the least correlated with satisfaction gets a rank of 1, the question that is the second least correlated with satisfaction gets a rank of 2 and so on down the line until the question that is the most correlated with satisfaction gets a rank of 50. Again it helps to keep in mind what would be a small issue vs. what would be a big issue. A question that is not very correlated with satisfaction would be a small issue, so it would have a small rank (e.g., 1, 2, 3...), whereas a question that was highly correlated with satisfaction would be a big issue — something to pay attention to — and would have a big rank (e.g. 48, 49, 50). The correlation rank for each question appears in parentheses to the right of the correlation coefficient column on the priority index page.

3. COMPUTING THE PRIORITY INDEX

The priority index is derived by adding the score rank (from step 1) to the correlation rank (from step 2). The questions are then ordered on the priority index page with the largest priority index score coming first on down to the lowest priority index score coming last. In order to be first in the priority index list a question would have to have two big issues: a big score rank (that means a low score) and a big correlation rank (that means a high association with satisfaction). Questions that appear at the bottom of the priority index list would have two small issues, a high overall score (which gets a small score rank) and a low association with satisfaction (which gets a small correlation rank). Questions that appear in the middle of the priority index list would likely have just one big issue (either a low score or a high association with satisfaction). ▼

Correction:

In the last issue, the "Statistical Stories: Correlations" article contained an error in the formula. The division signs that appeared should have been radical signs, as shown to the right:

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$