9 STEPS TO CREATE A STORYTELLING RUN CHART



A run chart tells a story.

It's a visual aid that helps your team see how your small tests of change are working. Those plotted data points aren't dry dots on paper—they're expressing our patients' experience and letting us know how well we're delivering on our mission to provide the best care and service at an affordable price. Follow these steps to create one:

1. Paper, pen, ruler.

Get some paper—make it big, so you can post it on a wall and everyone on the team can see it—a ruler, and a pen or pencil.

2. Line it up.

Draw and label the vertical and horizontal lines. The vertical line is the y axis and shows the measure to be tracked (quantity, percent, etc.). The x axis is the horizontal line and shows the time interval (day, week, month) for data collection or a sequence (for example, patient 1, patient 2, and so on). Typically, teams will want to collect information by shift, or hourly, daily or weekly.

3. Name it!

Give your chart a title. Begin with "Run chart," then include the measure you're tracking, and a location or other identifying information.

4. Baseline data.

Put your baseline data points on the chart and label them. The data might come from a computer-generated report (HEDIS scores for adolescent immunizations) or it may be information collected by UBT members (how long patients are spending in the clinic). (In the example above, the baseline is the information about the first 15 patients.)



5. Determine the median.

Figure out the median for your baseline data and draw a horizontal line at that value.

The median is the middle number (not the average) in a series of numbers arranged in order of size. If you have an odd number in the series, it's the number in the middle; so, for example, in the series 2, 5, 8, 9, 12, the median is 8. If there's an even number of values in the series, take the two middle values, add them together and divide by two—in the series 2, 5, 10, 15, 17, 23, you'd add 10+15 (the two middle values) to get 25, and divide that by 2 to determine the median is 12.5 (25÷2=12.5).

6. Post the chart.

Choose a spot where the whole team can see it.

7. Keep collecting data and updating the chart.

As the team collects data, get it posted right away—keep the chart up to date. A run chart is a living document, not a finished work of art.

8. Mark it up.

Make a note on the chart—an annotation—when you conduct a small test of change (like the note "Test: prepare the day before" in the illustration above). Watch what happens to your data points after the change to see what effect the change is having. Figure out the median for this new set of data (collected after the change) and draw that new median on the chart.

9. Adapt, adopt, abandon.

If the new median is better than the old median, you may want to adopt the change straightaway. Or you may want to adapt the change to see if you can get even more improvement; in that case, make a new note on the chart about the change and start a new round of observation. Alternatively, the results may show it's time to abandon the change and move on to your next test.

Why is it called a run chart?

A "run" is a string of data points above or below the median. The longer the run, the greater the likelihood what you're observing is a significant effect, not normal variation.

Thanks to the UBT Resource Team in the Northwest, which provided source information used here. For more about run charts and how to create, use and understand them, visit **LMPartnership.org** and type run chart in the search box. $(L+M)^{P}$