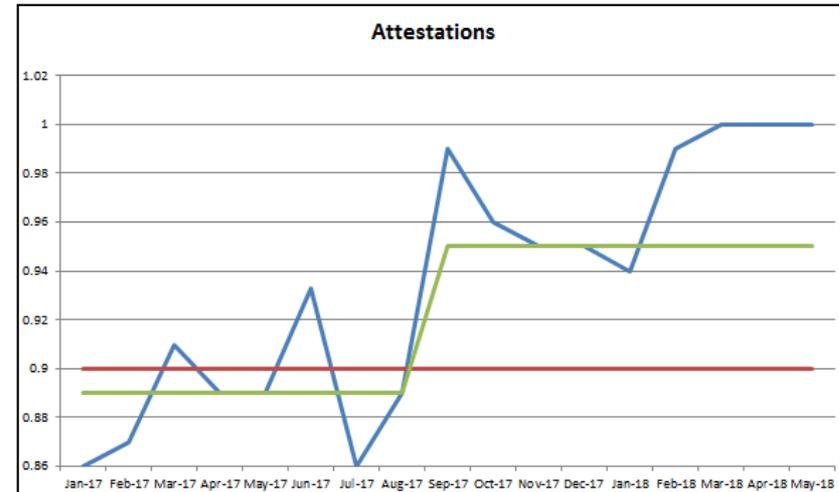


Data Display: Formatting Best Practices

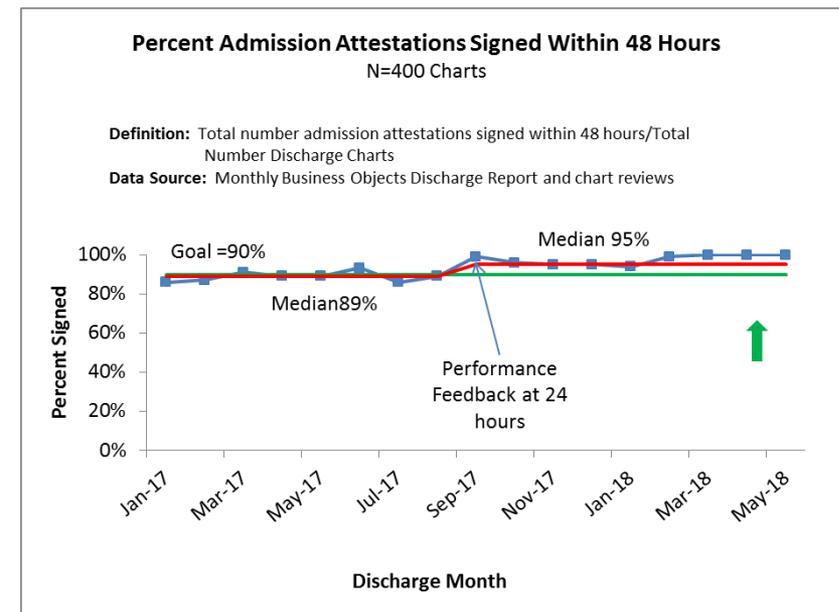
Good graphs tell a story and are quickly, accurately interpreted. Building an effective graph is part art, part science:

- Key components:
 - Title- use just enough detail to provide an understanding of the measure's scope
 - N (number) contained in the data set so the reader can evaluate depth of audit (for example 20 vs 400 charts)
 - Numerator/Denominator Definitions
 - Data Source
 - X axis label- label when not self evident
 - Y axis label- label when not self evident
 - Delete trailing zeros (Correct =85%, Incorrect = 85.0%)
 - Centerlines (run=median, control=mean)- label with value
 - Target/goal line- label with value. Note: balancing measures typically do not have goal lines
 - Green arrow indicating desired direction of data movement
 - Control Charts- include type of chart (e.g. p, c, t, etc.)
 - Control Charts- label UCL (upper control limit) and LCL (lower control limit) with sigma level
- The Y Axis is truncated **only when absolutely necessary** to tell the story. Truncating can mislead the reader regarding scale of improvement. When truncating ensure scale is legible.
- Delete gridlines. They make charts harder to read
- Annotate significant PDSAs. All centerline shifts should be annotated with the attributed cause
- Annotate with minimal verbiage
- Graphs should be legible from the back of the room when projected on a screen. Font size and color is critical. Suggested font size:
 - Title: 18 font
 - Axis title, labels, annotation 12 font and larger whenever possible
 - Data points size: 5 points
- When design is complete, get input from others regarding graph readability and style.

Poor Graph



Better Graph



Sources:

Dr. Christine Walsh-Kelly, UNC Professor of Pediatrics, Pediatric Emergency Medicine
 Heiser, KE, and Brill, RJ. Nationwide Children's Hospital. (2015). Quality Improvement Essentials Course: A Guide for Driving Improvement. Self Published.