

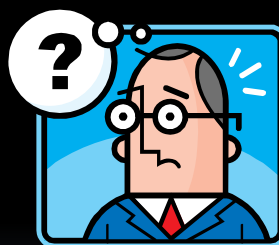


YOU WON'T FALL... WITH RUN CHARTS

KATRINA STROWBRIDGE, RN
ST. LUKE COMMUNITY HOSPITAL

Questions?

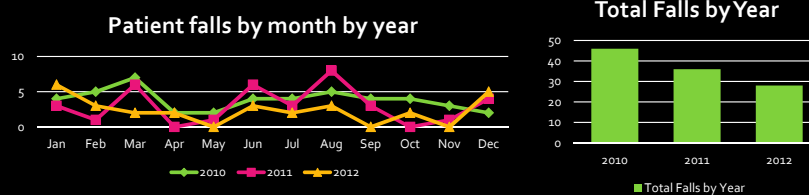
- How many of you currently use run charts?
- How many of you can create a run chart?
- How many of you currently use your run chart to tell your "QI" story?
- How many of you know if a run chart is the appropriate chart to use?



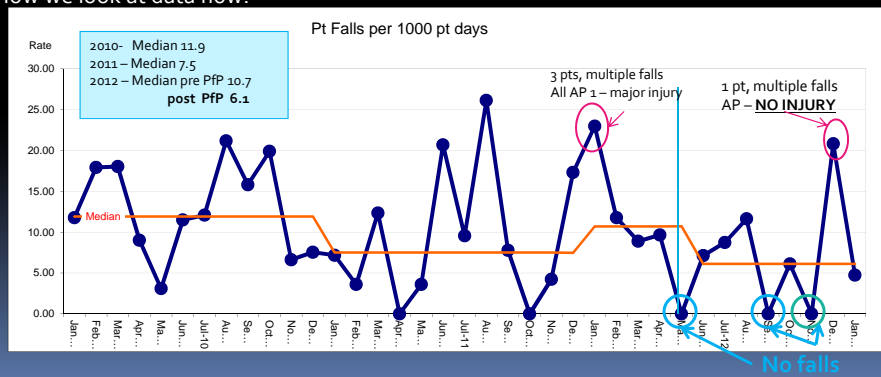
Objectives

- Why run charts
- Basics of run charts
- Easy tools for creating run charts
- Interpretation of run charts

Our fall data story.....



How we look at data now:



Why run charts??????

“Why run charts?”

- Helps you track over time
- Clearly illustrates improvement (or not)
- Helps you determine if you met your goal/aim
- Gives you direction
- Helps you identify variation
- Helps you understand.....
 - Variation

Aggregated data
presented in tabular formats
or with summary statistics
will not
help you measure
the impact
of process improvement efforts.
Aggregated data can only lead to
judgment, not improvement. (IHI)

But....I am NOT a statistician,
I am a QI Coordinator....

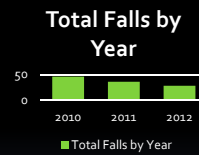
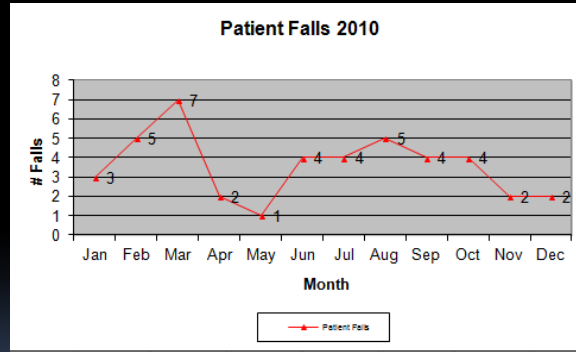


Basics of run charts

- Data – 15 or more points
- Draw the vertical and horizontal axis
- Label the axis
 - Y is up and down and is number being measured or rate or percent...
 - X is time or sequence for data collected
- Plot data
- Draw lines to connect dots
- Calculate the mean or median and draw it in
- Title the chart
- Add a goal line
- Annotate the chart



In the beginning...

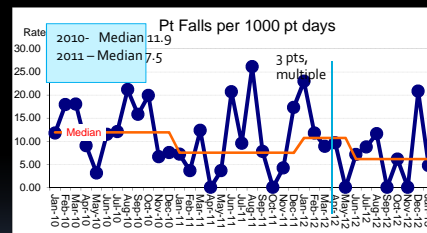
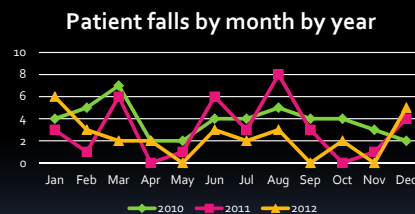


Transitions

How does this



Get to that?



Templates!

- Excel
 - Or
- Excel based
 - Run chart template
 - Days between template

Institute for Healthcare Improvement aka IHI

The screenshot displays the IHI website's 'Run Chart Tool' page. The header includes the IHI logo and navigation links like 'Welcome, Katrina', 'My IHI', 'Log Out', 'About IHI', 'Contact Us', and a search bar. The main navigation bar has tabs for 'KNOWLEDGE CENTER', 'IHI OFFERINGS', 'USER COMMUNITIES', and 'EXPLORE BY INTEREST'. The 'My Filters' sidebar on the left lists categories like 'Knowledge Center', 'How to Improve', 'Measures', 'Changes', 'Improvement Stories', and 'Tools'. The main content area is titled 'Run Chart Tool' and includes social media links, a 'Last Modified' date of 07/07/2011, and a brief description of run charts. It lists three benefits: helping teams formulate aims, determining true improvements, and giving direction. A 'Background' section mentions the tool was developed by Richard Koultou, PhD. A 'More on This Topic' sidebar on the right lists related articles like 'Sampling Considerations in Health Care Improvement' and 'WHTI: Special Preview of IHI's National Forum'.

Developed by Richard Scowile, PhD (richard@scowile.net)

Vertical Axis Label **# Days**

Graph Label **Days between falls**

Observation **Value** **Median** **Goal** **End Median**

Date /	Observation	Value	Median	Goal	End Median
1/5/2012	1	4.5	4.5		
1/6/2012	2	4.5	4.5		
1/9/2012	3	4.5	4.5		
1/18/2012	4	4.5	4.5		
1/21/2012	5	4.5	4.5		
1/26/2012	6	4.5	4.5		
1/28/2012	7	4.5	4.5		
2/25/2012	8	4.5	4.5		
2/27/2012	9	4.5	4.5		
2/29/2012	10	4.5	4.5		
3/2/2012	11	4.5	4.5		
3/3/2012	12	4.5	4.5		
4/5/2012	13	4.5	4.5		
4/6/2012	14	4.5	4.5		
6/1/2012	15	4.5	4.5		
6/4/2012	16	4.5	4.5		
7/6/2012	17	4.5	4.5		
7/26/2012	18	4.5	4.5		
8/25/2012	19	4.5	4.5		
10/7/2012	20	4.5	4.5		
10/16/2012	21	4.5	4.5		

#Days

Days between falls

Enter dates or observation numbers into the green cells at right (clear the sample data before you begin)

Enter your data values into the blue cells. Goal values are optional.

Don't leave any blank cells in the Date/Observation columns

Enter an "X" into the End Median column to mark the last row to be included in the median

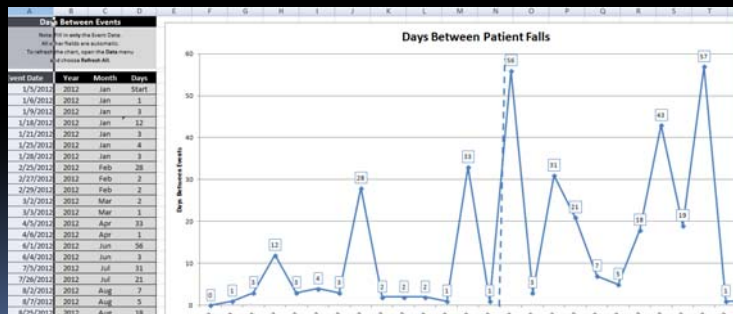
Enter your graph title and y axis label into the cells provided.

Use regular Excel commands to configure the graph.

What if ...

- Rate is low – all of the time
- Events are rare

Use the DAYS BETWEEN



Why run charts?

- They help you focus on the 1
- They give you credit for work that is done
- They help you see the “run”

Interpretation of run charts

- A phenomenon will be said to be controlled when, through the use of past experience, we can predict, at least within limits, how the phenomenon may be expected to vary in the future”
 - Dr. Walter Shewhart – Economic Control of Quality of Manufactured Product 1931



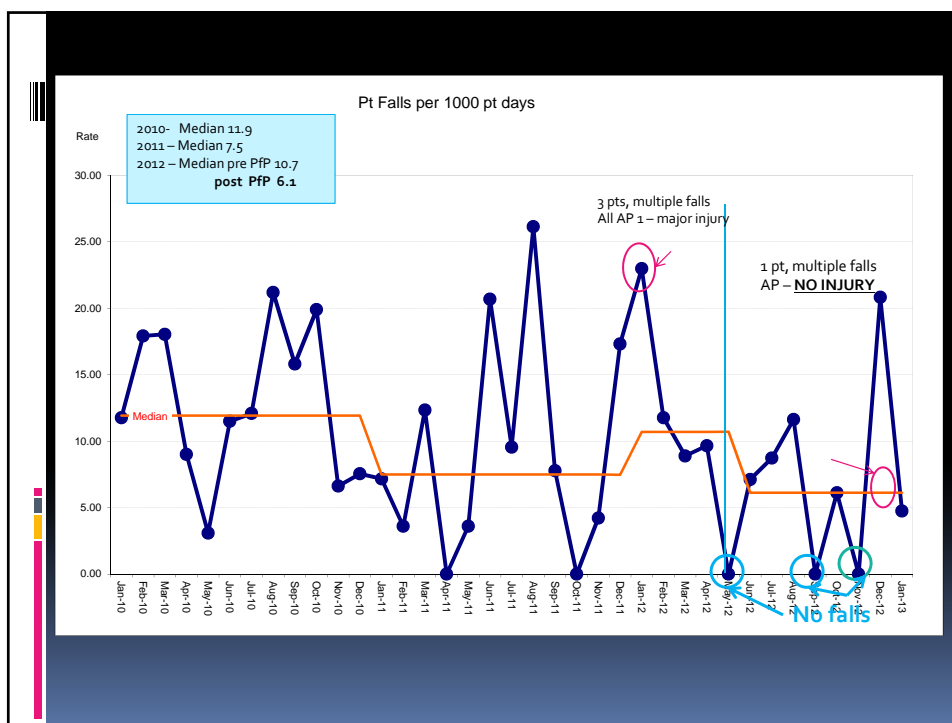
Understanding variation

Common Cause

- Inherent to the process (part of design)
- Is due to regular, natural, ordinary causes
- Affects all of the outcomes of the process
- Results in a stable process that is predictable
- Also known as random or unassigned variation

Special Cause

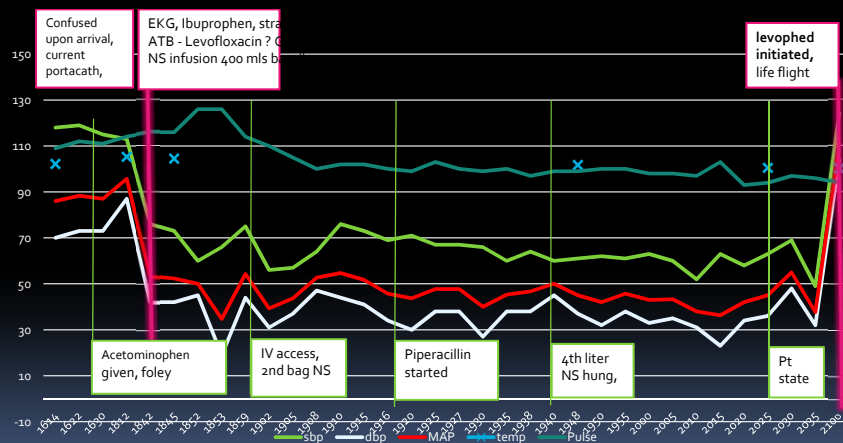
- Due to irregular or unnatural causes that are not inherent in the process
- Affect some but not necessarily all aspects of the process
- Result in an unstable process that is not predictable
- Also known as non-random or assignable variation



But they don't get it...
Then change your style!



Other ways to use run charts



References & Sources:

- Institute for Healthcare Improvement found at www.ihp.org
- Run chart template:
<http://www.ihp.org/knowledge/Pages/Tools/RunChart.aspx>

