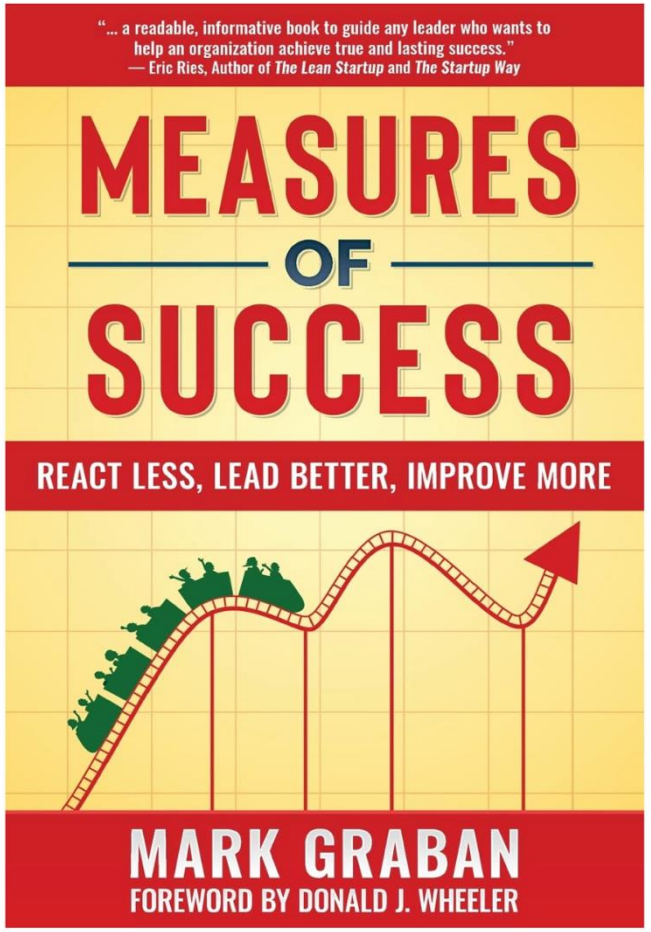
Measures of Success:
React Less, Lead Better, Improve More

Mark Graban, MS, MBA



More Resources:
https://www.markgraban.com/measuresworkshop

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Why Are We Here?

"To learn… and to have fun!

And to make a difference…"

W. Edwards Deming
(1900-1993)

Why Does Deming Matter in Lean?

"There is not a day I don't think about what Dr. Deming meant to us.

Deming is the core of our management."

Shoichiro Toyoda
Honorary Chairman and Director of Toyota

Deming Quotes to Think About

- "Tell me how you measure me and I will tell you how I will behave."

- "If you can get a 10% improvement this year just by asking for it, you should have had it last year."

“What gets measured, gets managed.”

How do we manage?

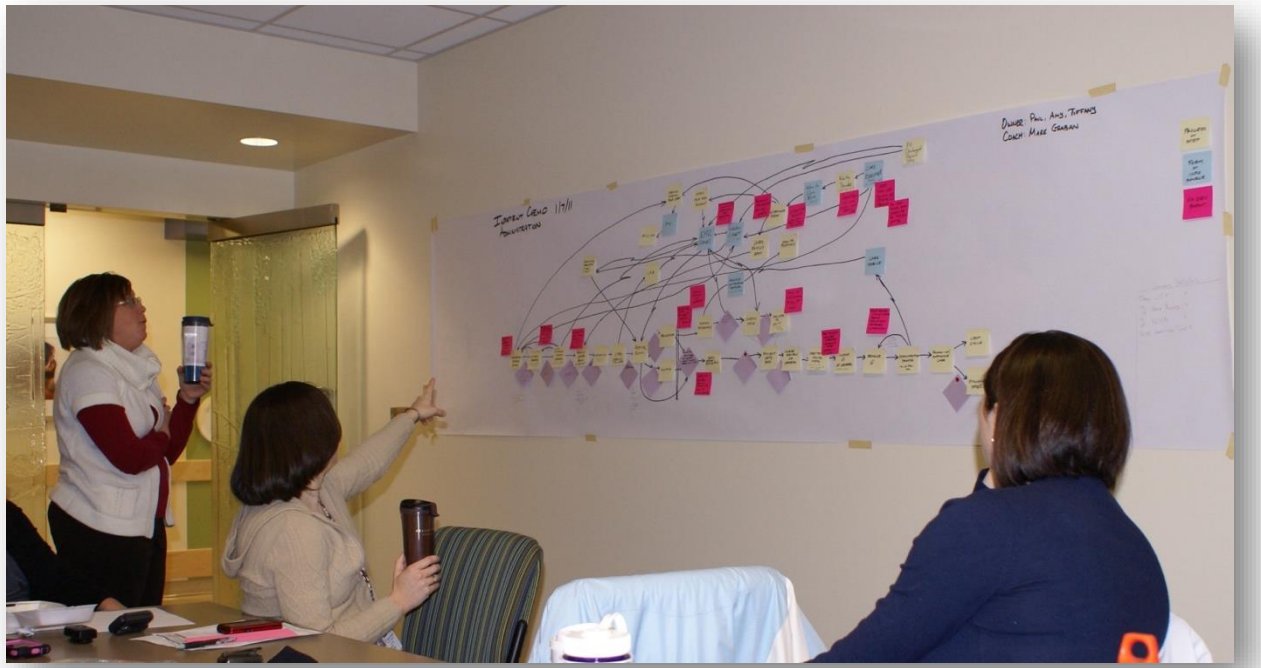
“No data have meaning apart from their context.”

From datum driven to data driven…

Strategy Deployment & Lean Management

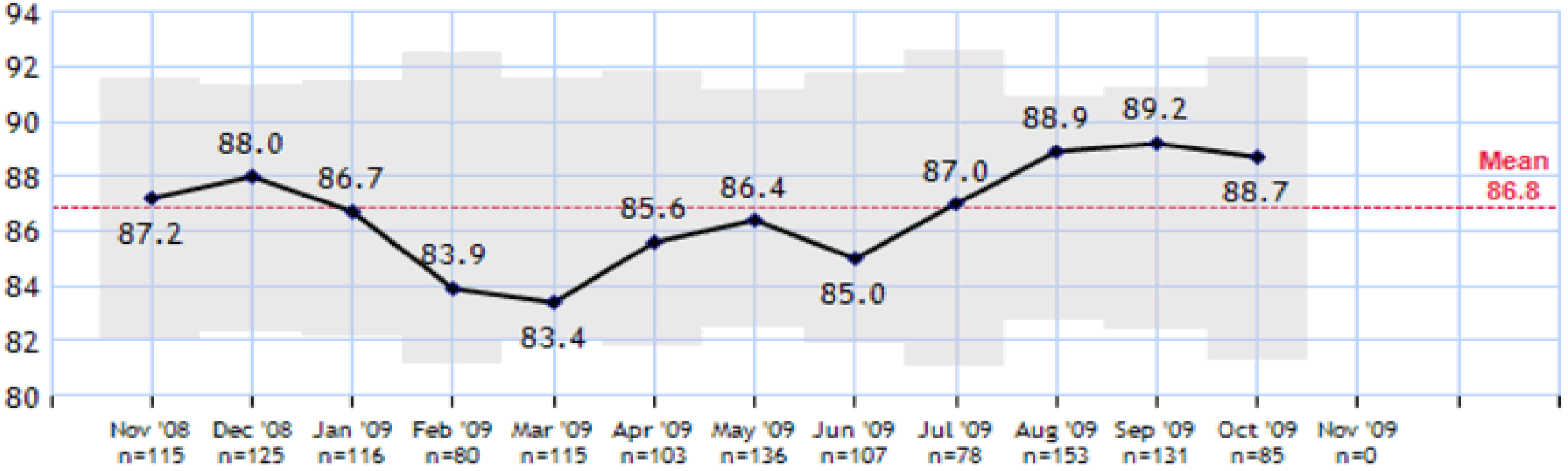
Source: Thinking Lean at ThedaCare (DVD)

Improvement Projects



Need to Avoid Bad Conclusions

"The average patient satisfaction increased from 87.2 to 89%"



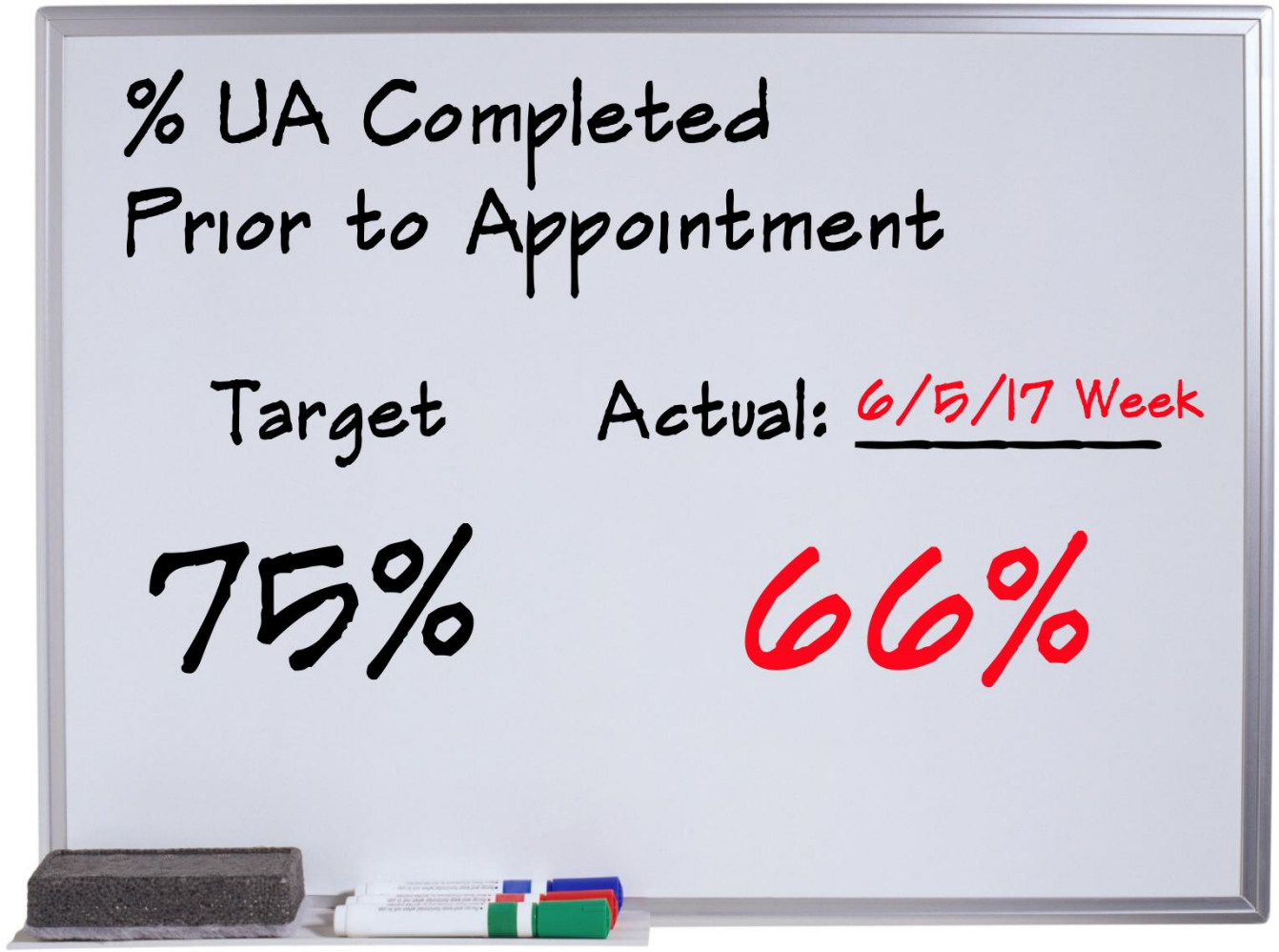
% UA Completed Prior to Appointment

Target

Actual: 6/5/17 Week

75%

66%



Three Key Questions

1. Are we achieving our target or goal?
2. Are we improving?
3. How do we improve?

More Key Questions

1. Are we achieving our target?
   - Are we doing so occasionally?
   - Are we doing so consistently?
2. How is our performance trending?
   - Are we improving?
   - Are we getting worse?
   - Are we staying the same?
   - How do we know?
3. How do we improve performance?
   - What methods should we use?
   - How will know if we've improved?

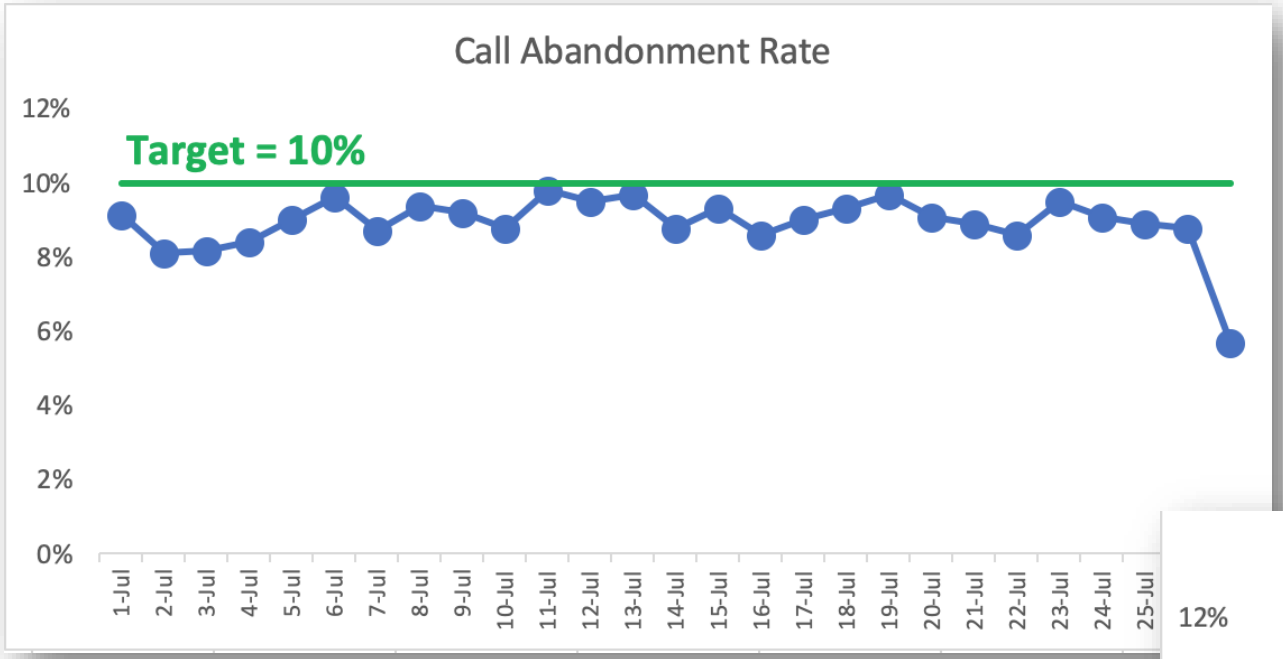
"Bowling Chart" or "Bowler"

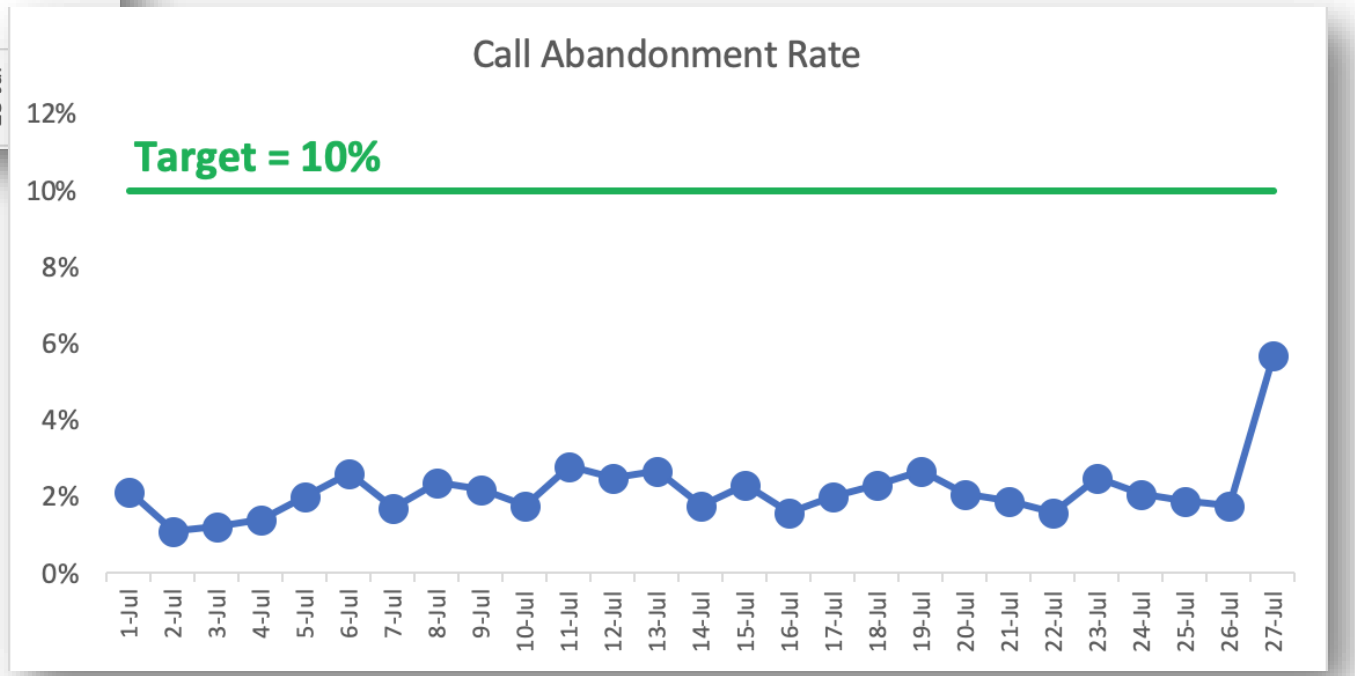
True North Pillar	Metric	Desired Direction		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
Quality & Safety	Falls with Severe Injury	DOWN	Actual	0	1	0	0	1	0	0	0	0			
			Target	0	0	0	0	0	0	0	0	0	0	0	0
Quality & Safety	CLABSI	DOWN	Actual	0	0	1	0	0	1	2	0	0			
			Target	0	0	0	0	0	0	0	0	0	0	0	0
Quality & Safety	CAUTI	DOWN	Actual	1	0	0	0	0	0	0	1	1			
			Target	0	0	0	0	0	0	0	0	0	0	0	0
Team Engagement	Necessary Information Available Survey	UP	Actual	67%	50%	48%	70%	46%	40%	60%	70%	50%			
			Target	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%	80.00%
Patient Experience	Likelihood to recommend	UP	Actual	76.40%	78.40%	80.50%	70.00%	46.00%	40.00%	60.00%	70.00%	50.00%			
			Target	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%	79.90%
Patient Experience	Hospital rating	UP	Actual	76.40%	77.70%	77.60%	77.60%	77.20%	77.60%	77.00%	75.00%	63.00%			
			Target	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%

Goal Comparison Example

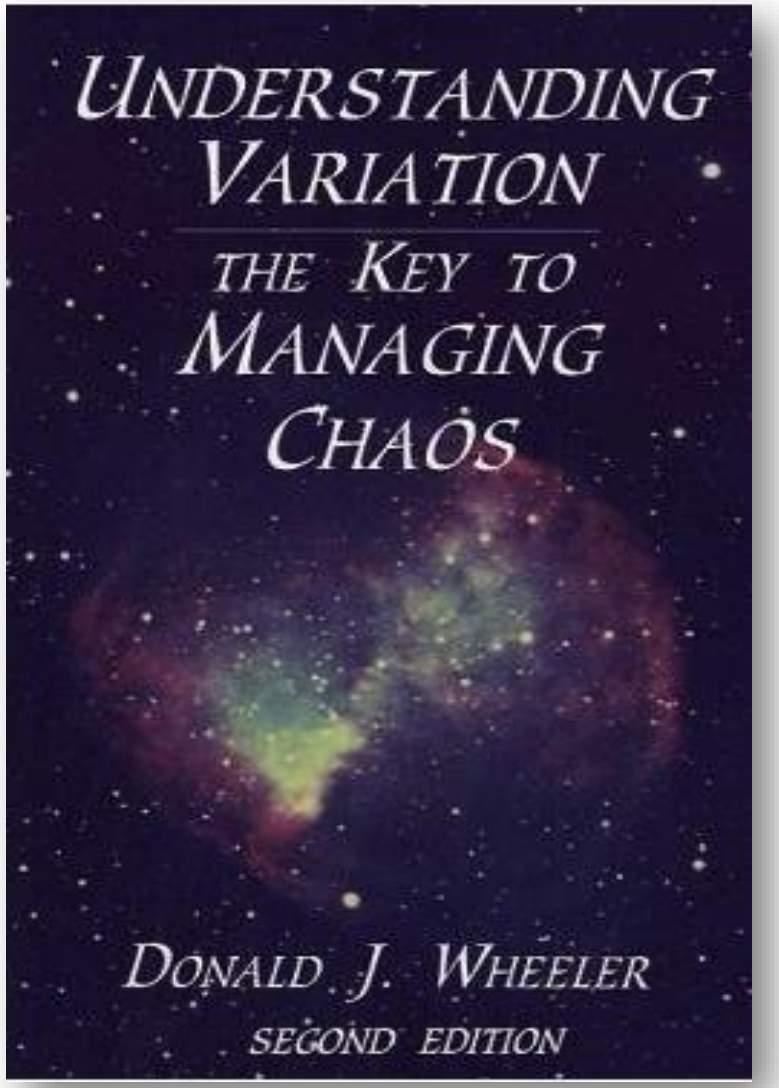
"…the results are OK because it's below our goal."

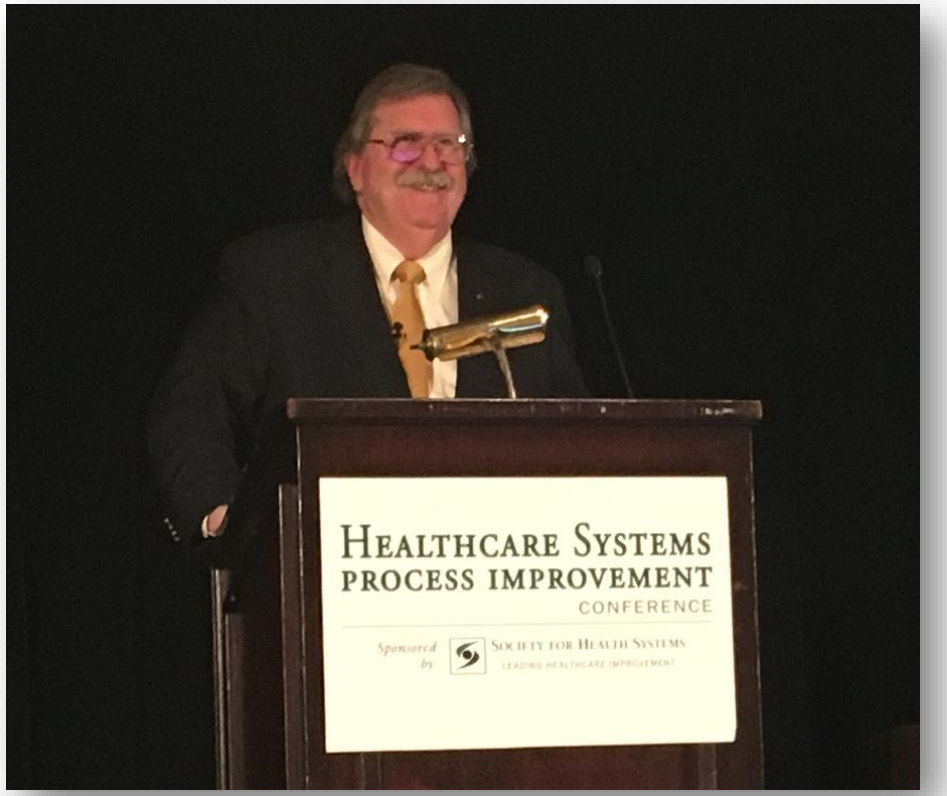
Call Abandonment Run Chart





My Most Favorite Book Ever





Donald J. Wheeler, Ph.D.

http://www.spcpress.com/

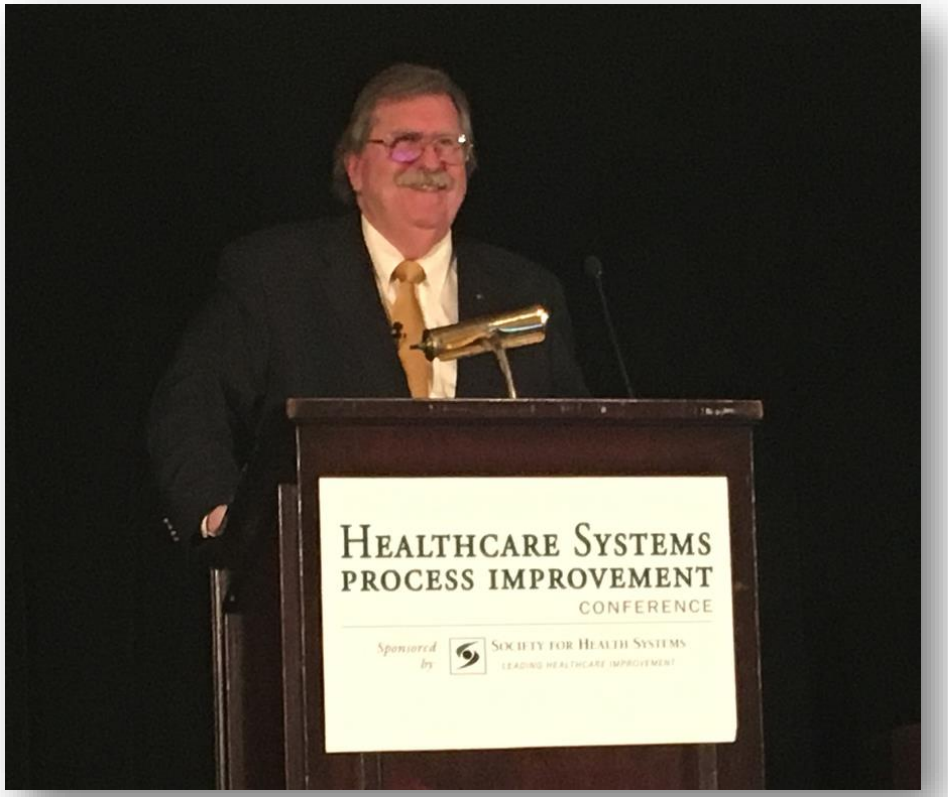
Amazon: http://bit.ly/wheeler-book

Method We Are Here to Learn & Practice

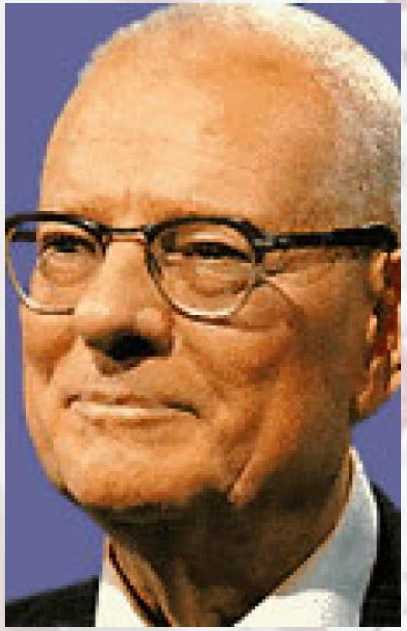
- **"SPC Chart"**
  - Statistical Process Control
- **"Control Chart"**
- **"XmR Chart"**
- **"Process Behavior Chart"**
- **The "Has the Process Changed Chart?"** (via Wheeler)
- **The "Is It Time to Fix It Chart?"** (via Wheeler)

Wheeler Says

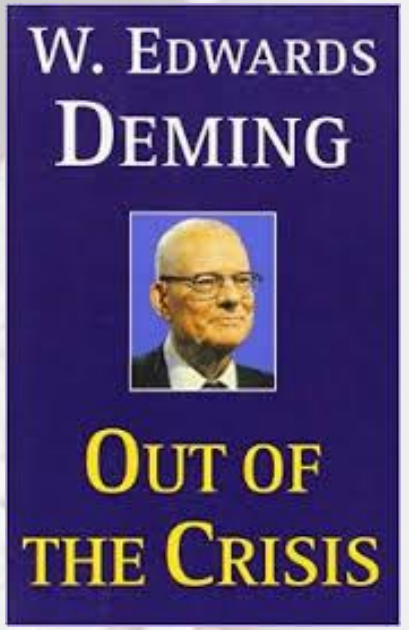
"SPC is a way of thinking, with some tools attached."



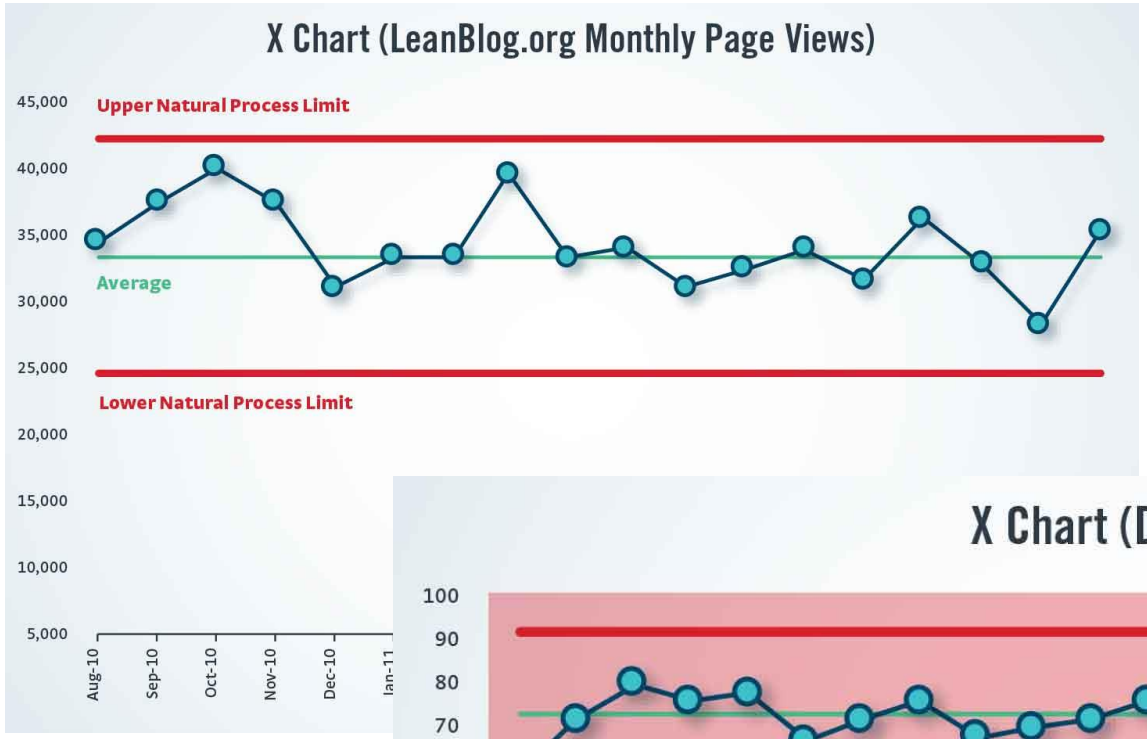
Dr. Deming's Red Bead Game

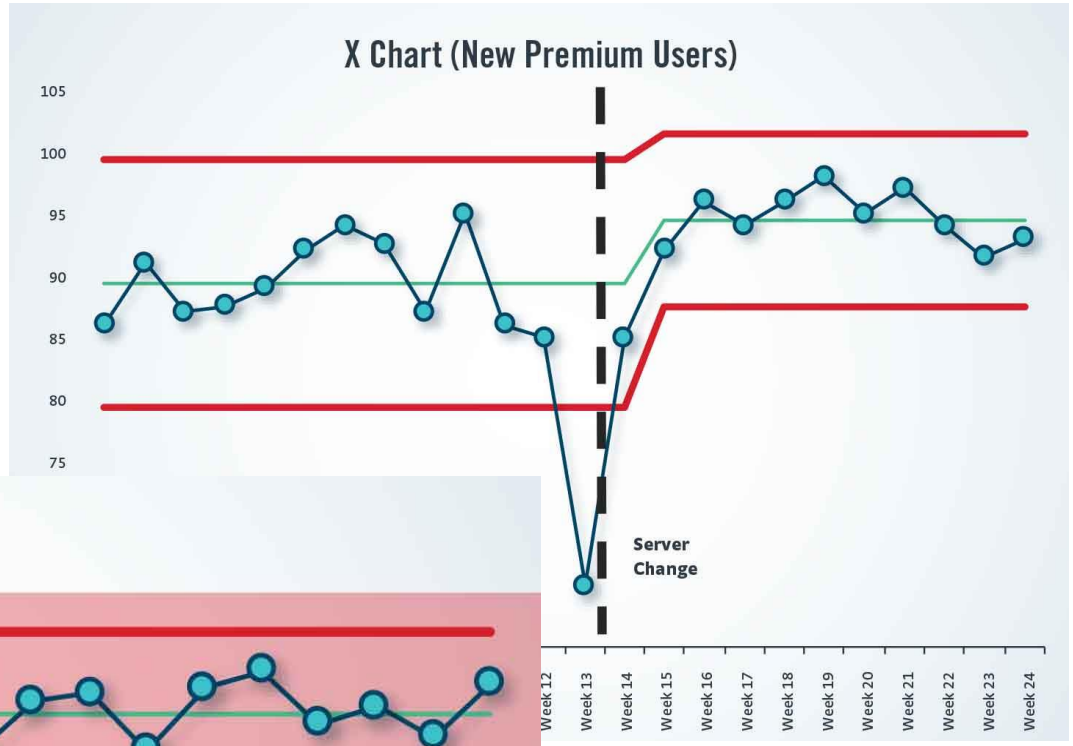


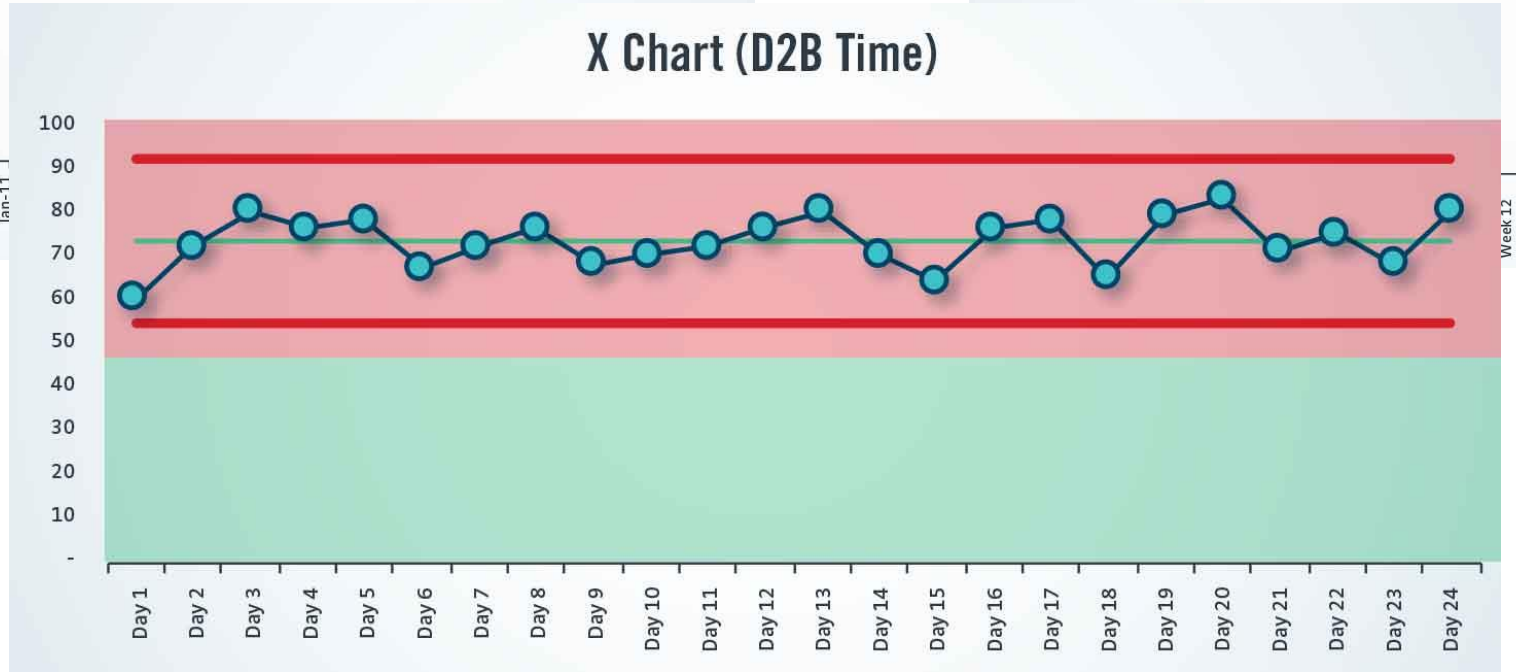
See Notes & More:
MarkGraban.com/redbead



Process Behavior Charts





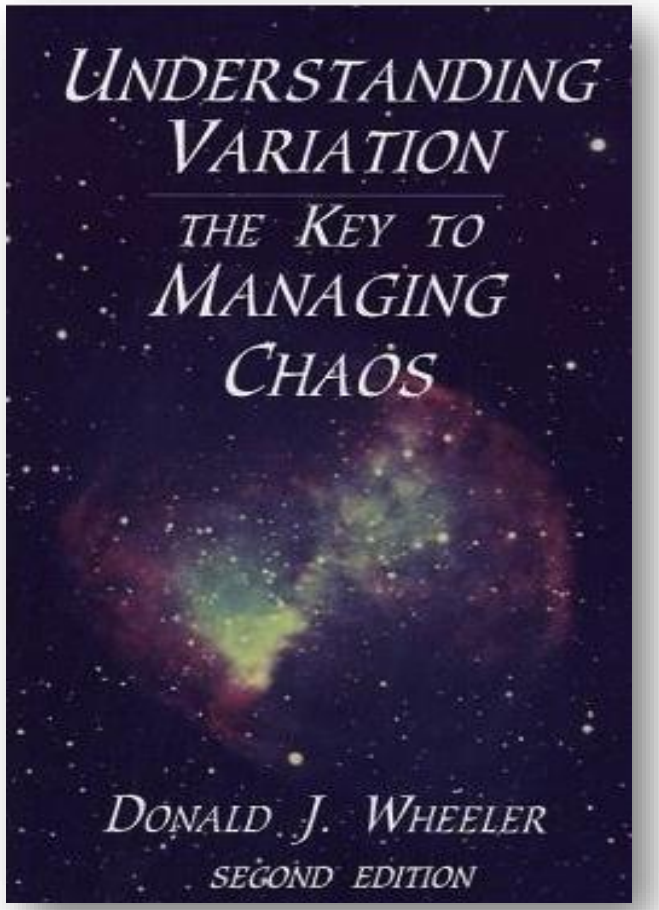


History of the Red Bead Game

- Created at HP as a gift for Dr. Deming in 1982 by William (Bill) Boller
- Deming used the “Red Bead Experiment” or “Red Bead Game” in his seminars

What We'll Do & See – "Bead Production"

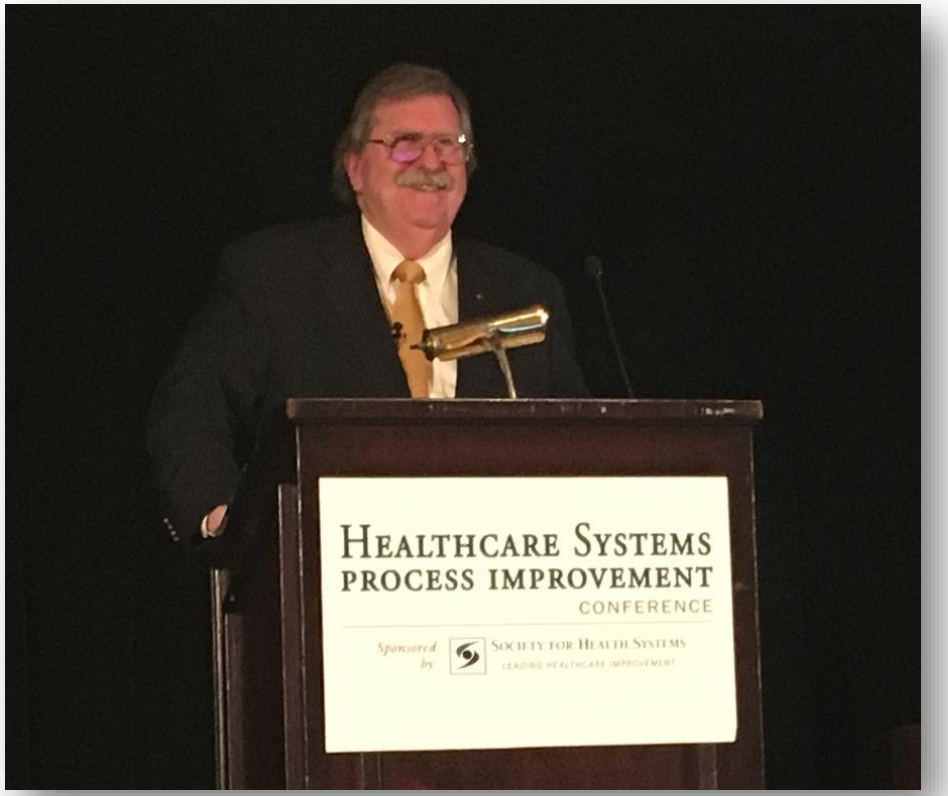
Signal vs. Noise?



"While every data set contains noise,
some data sets may contain signals.
Therefore, before you can detect a signal
within any given data set,
you must first filter out the noise."

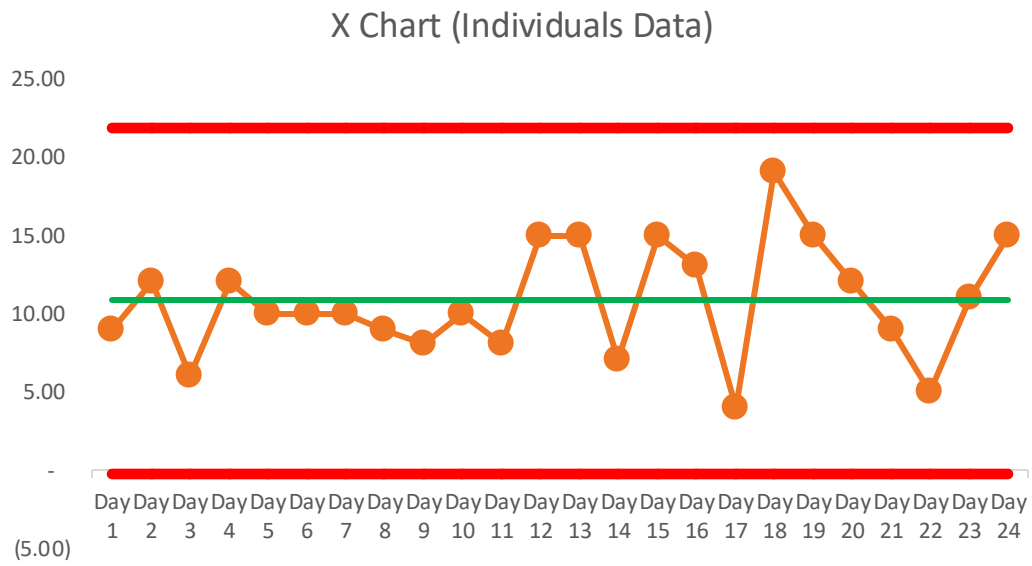
Wheeler Says

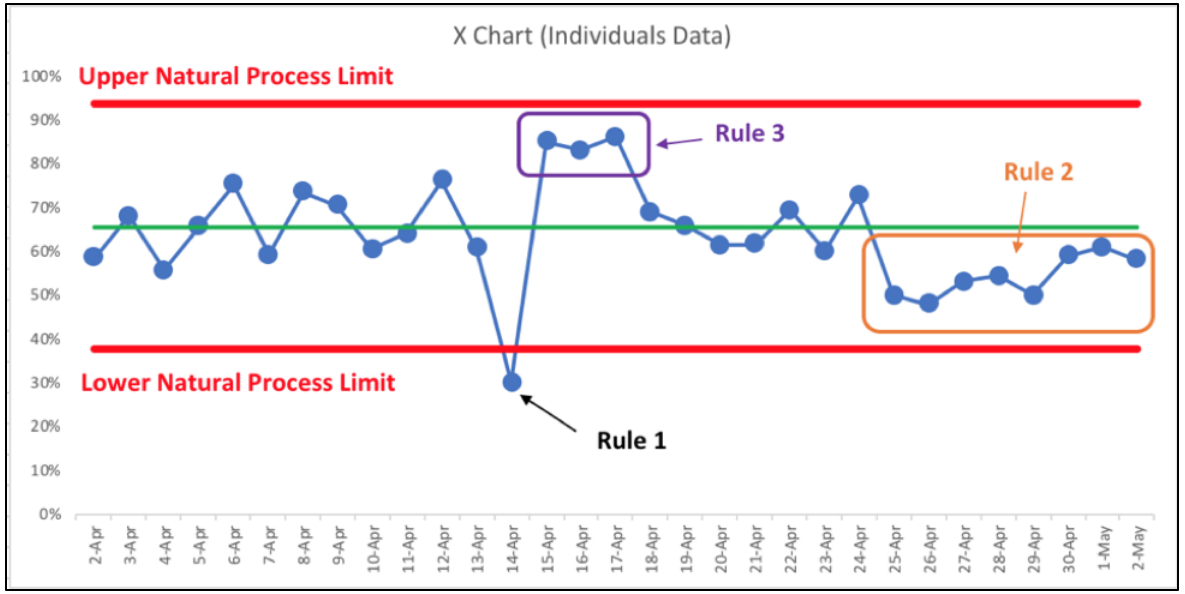
- Process behavior charts "will filter out virtually ALL noise in the system."



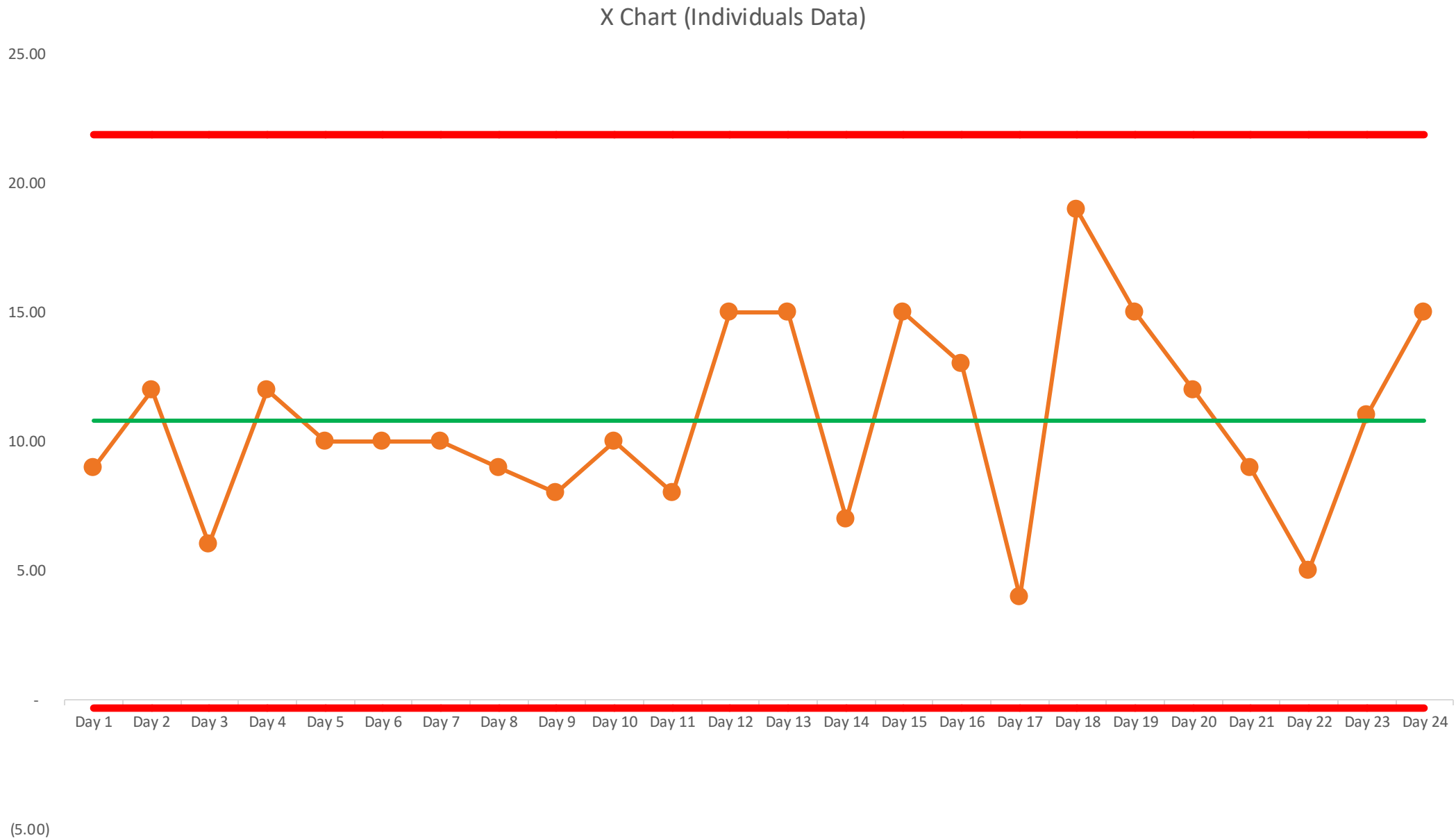
Which Type of Cause?

Common	Special
Routine	Exceptional
Noise	Signal





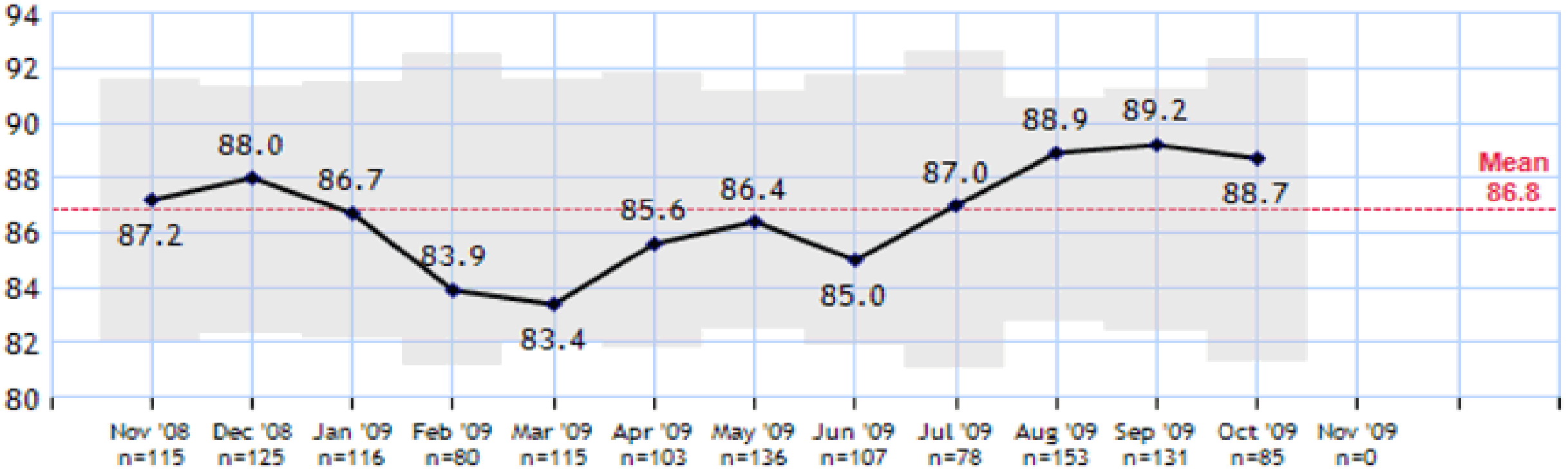
Typical Red Bead Process Behavior Chart



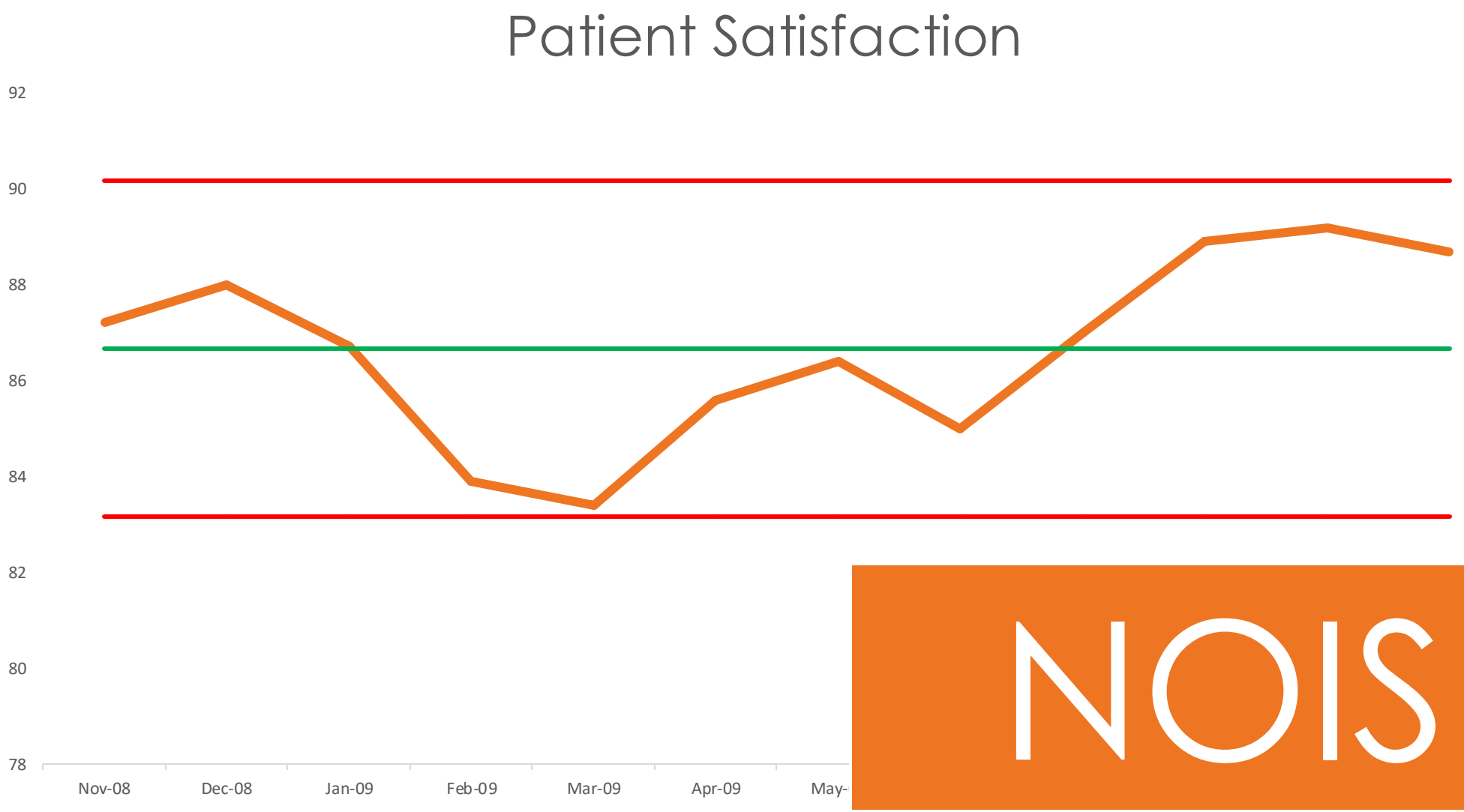
Using Process Behavior Charts

Patient Satisfaction Run Chart

"The average patient satisfaction increased from 87.2 to 89%"

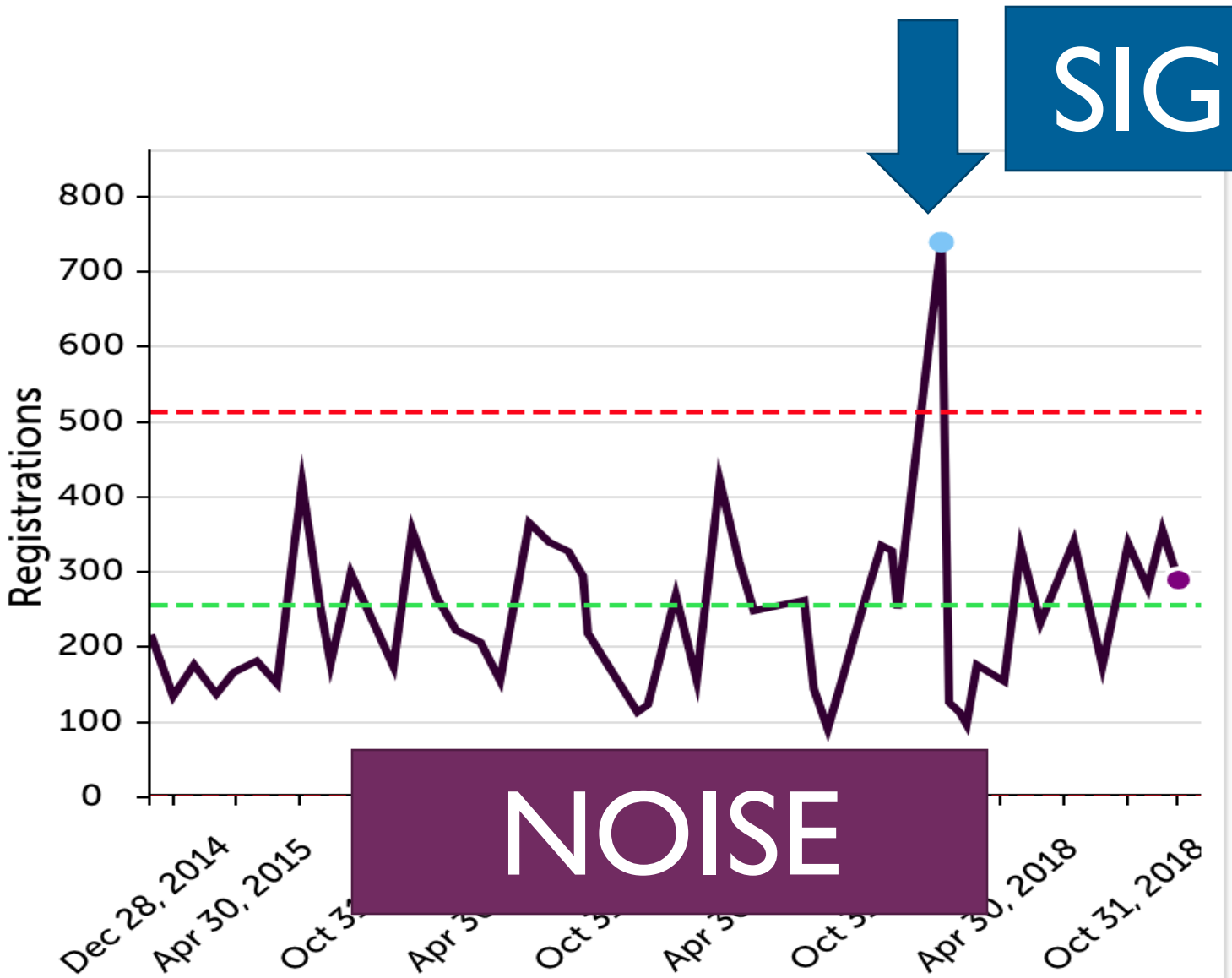


Process Behavior Chart:



NOISE

KaiNexus Webinar Registrations

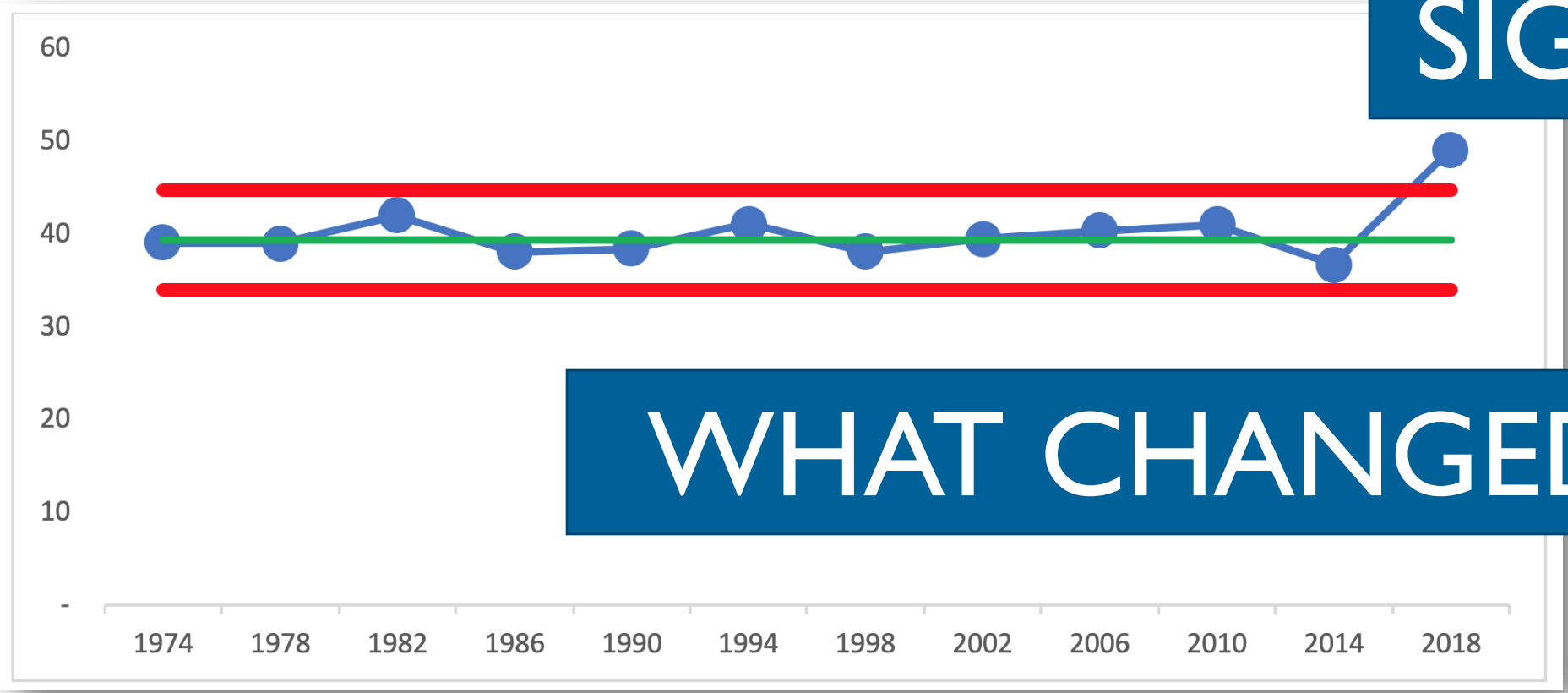


WHAT CHANGED?

CAN WE RECREATE IT?

Midterm Elections

Americans Turned Out to Vote in the Midterms at a Level Not Seen in More Than a Century



SIGNAL

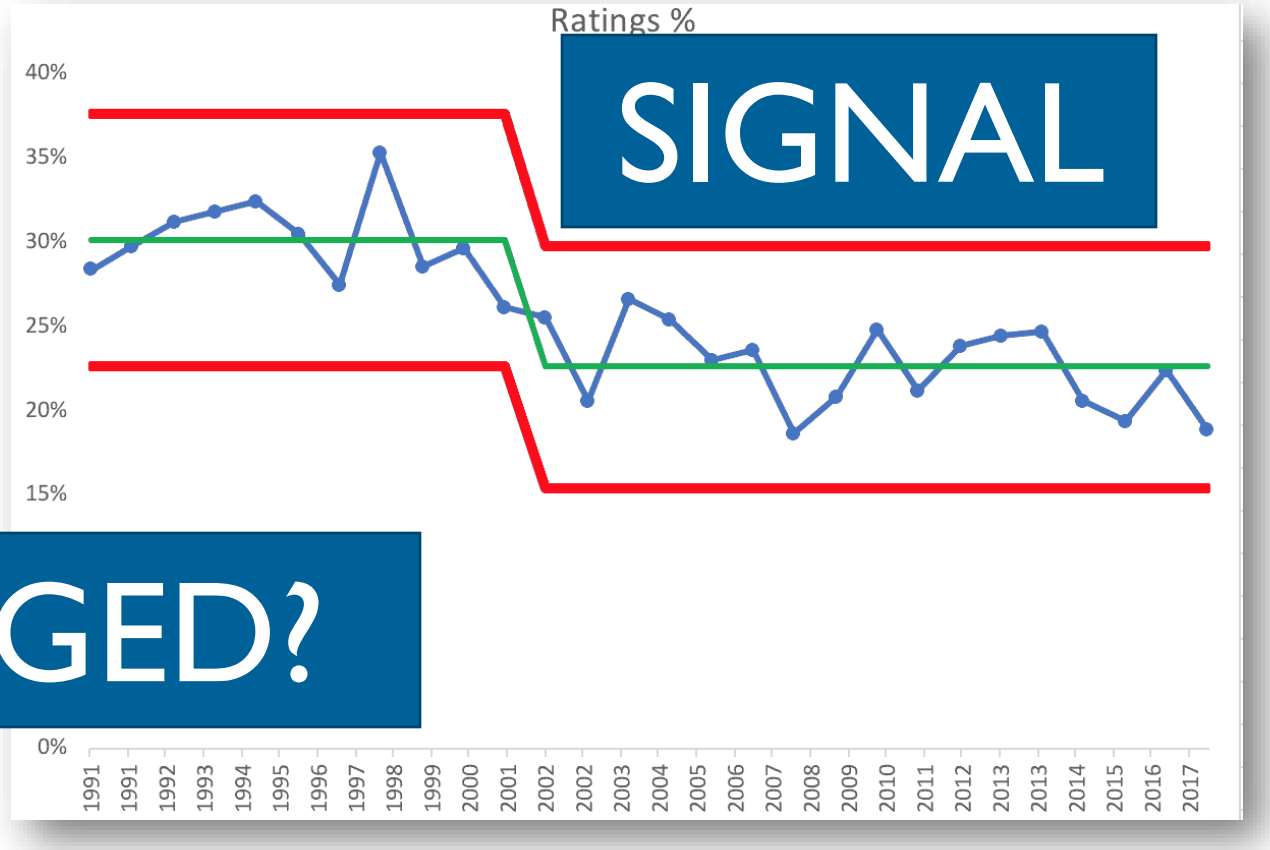
WHAT CHANGED?

Oscars Ratings

BUSINESS | MEDIA & MARKETING

Academy Awards Pull In Record-Low Ratings

Television audience for Oscars on ABC falls 19% to 26.5 million



WHAT CHANGED?

"Bowling Chart" or "Bowler"

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Quality & Safety	CLABSI	DOWN	Actual	0	0	1	0	0	1	2	0	0			
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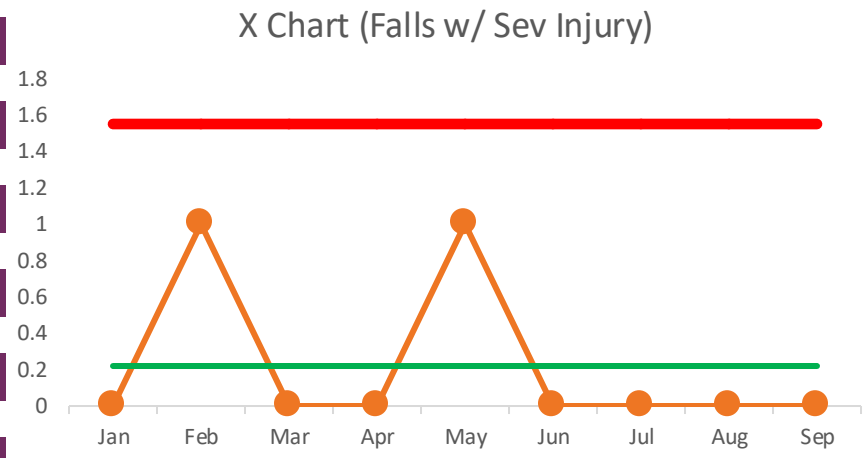
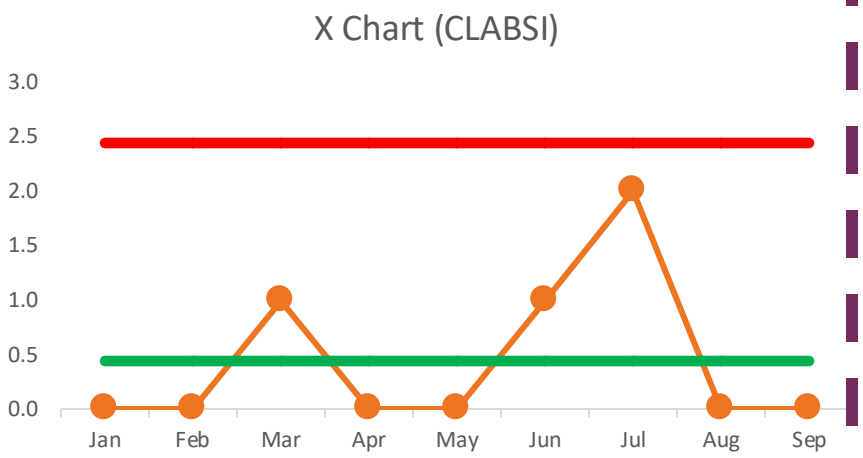
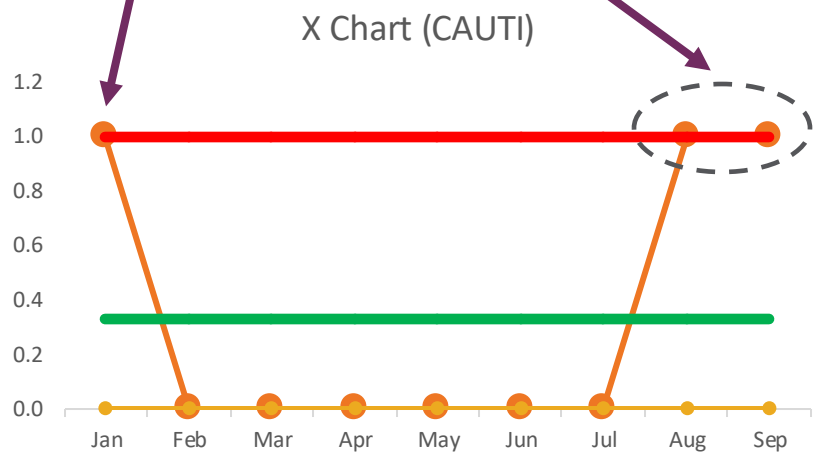
Patient Experience	Hospital rating	UP	Actual	76.40%	77.70%	77.60%	77.60%	77.20%	77.60%	77.00%	75.00%	63.00%			
			Target	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%	77.50%

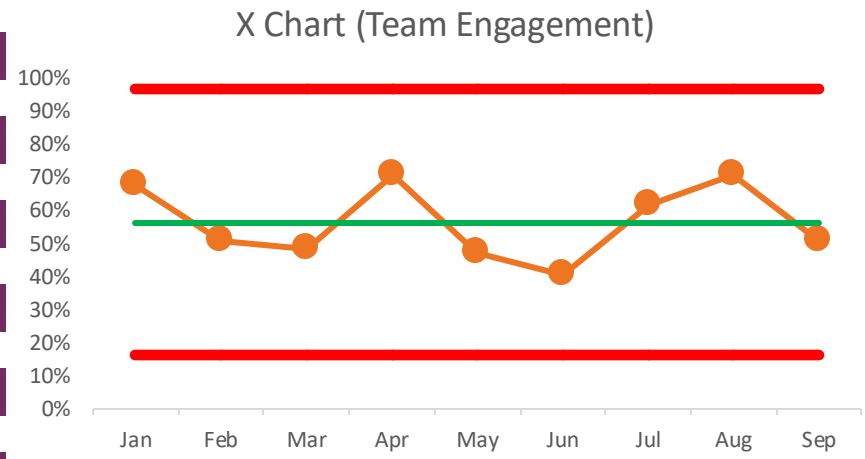
Bowling Chart as PBCs

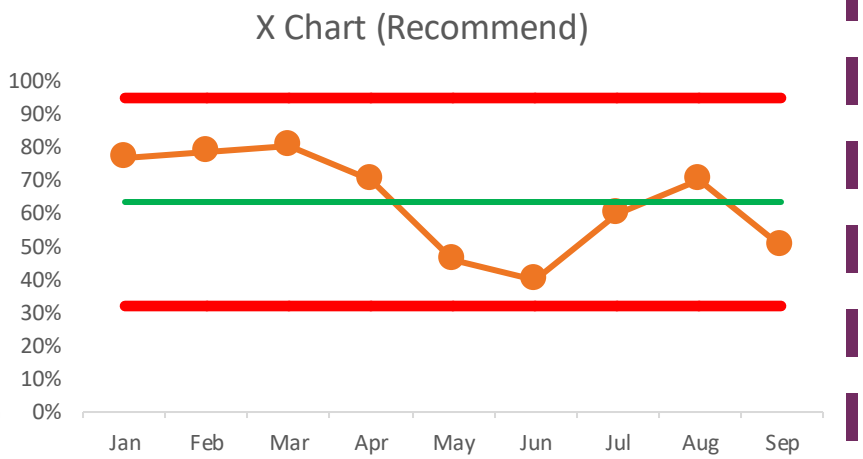


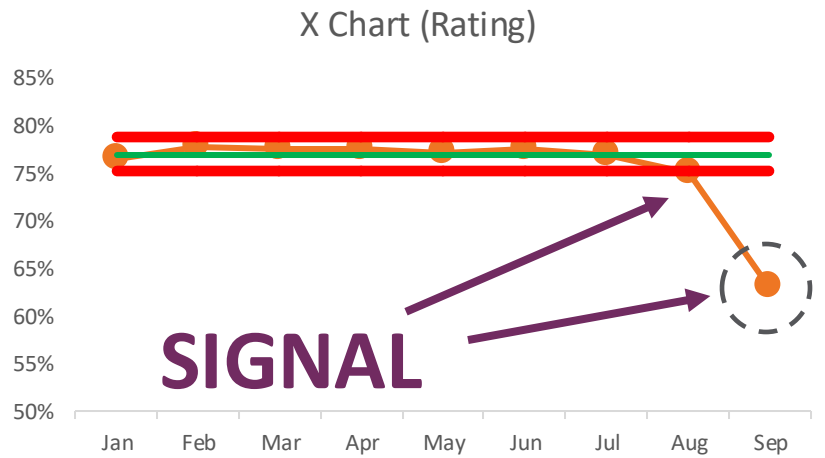


SIGNAL







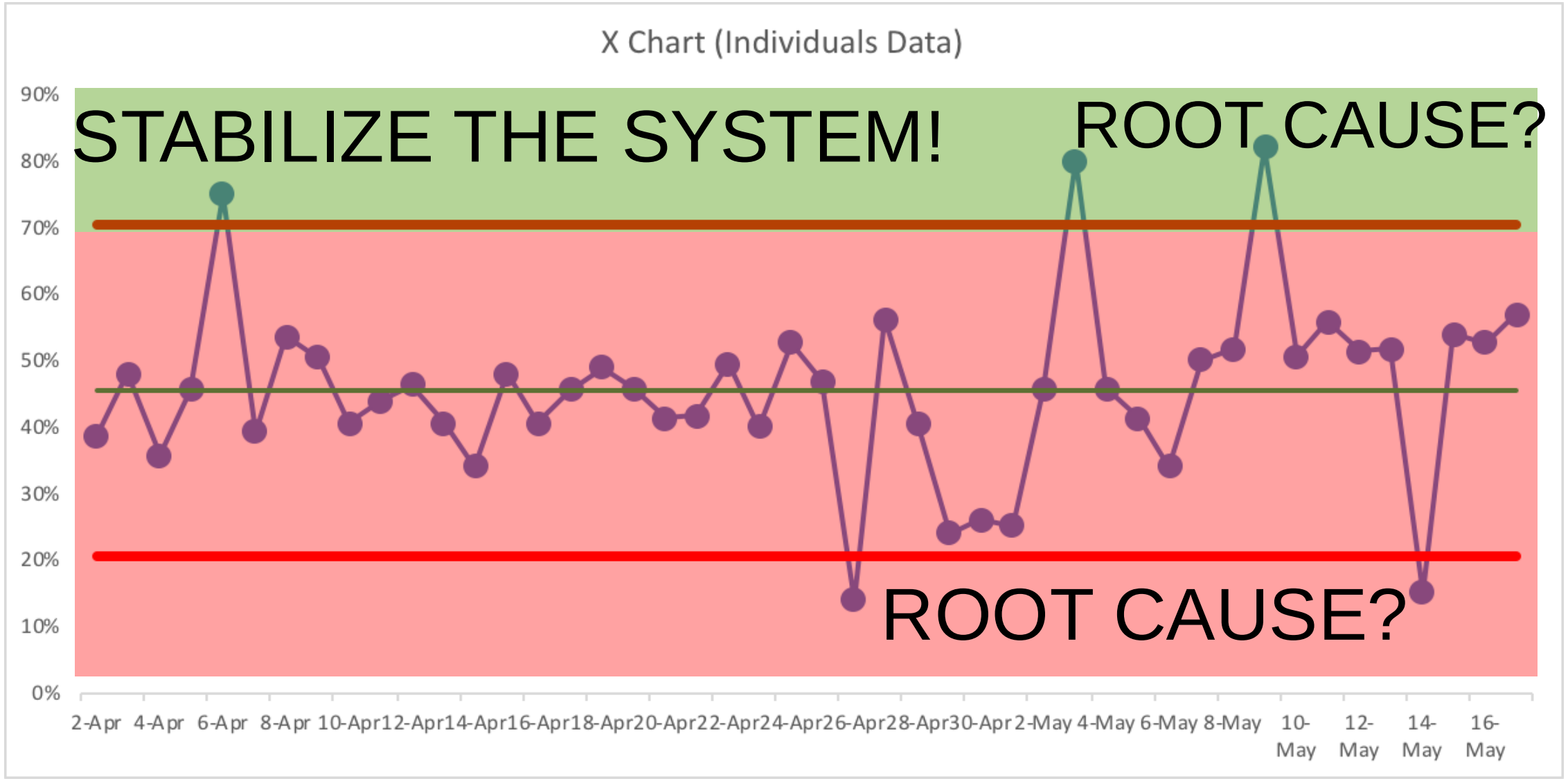


NOISE

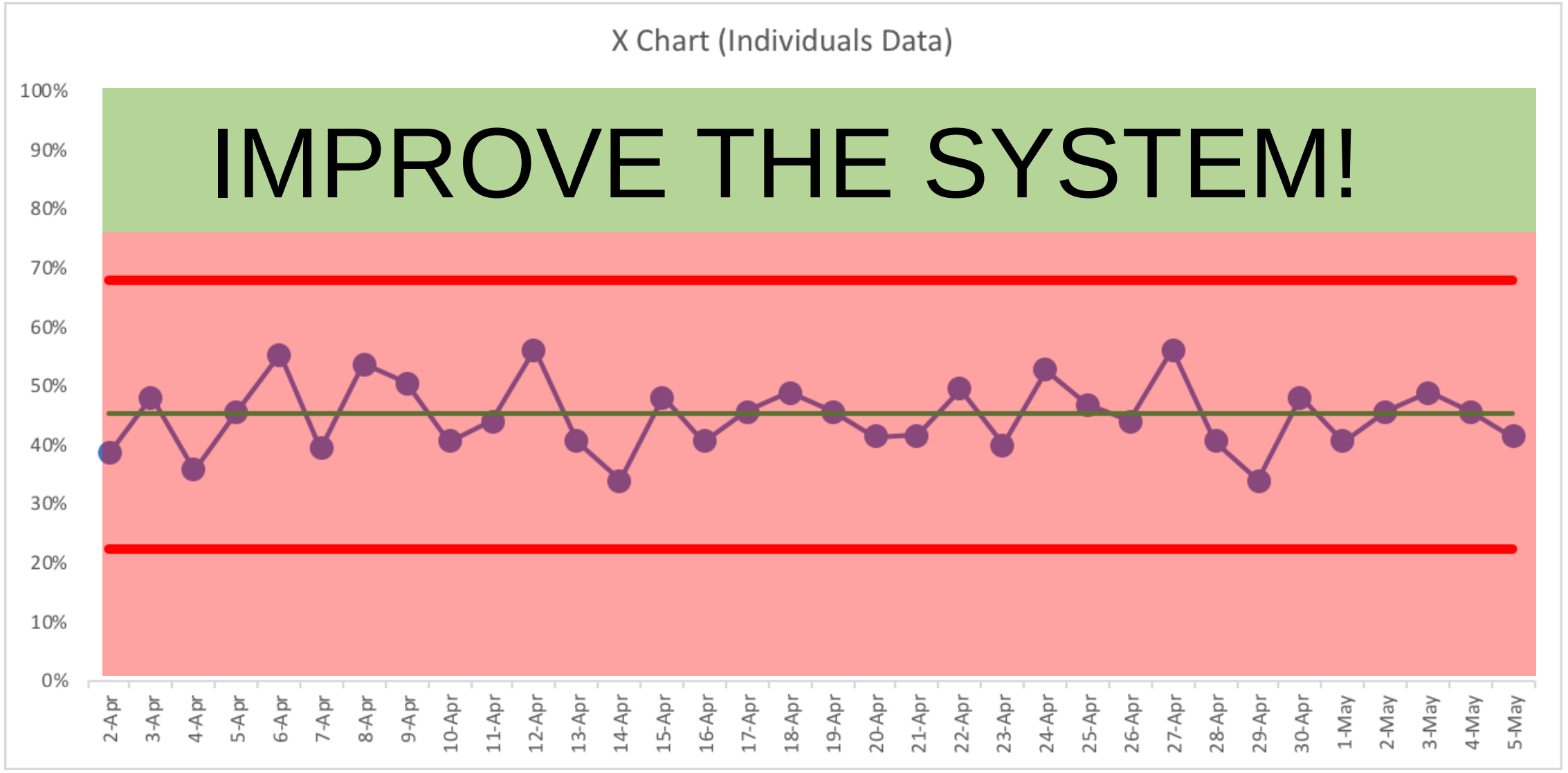
Bowling Chart as PBCs with Red/Green

NOISE

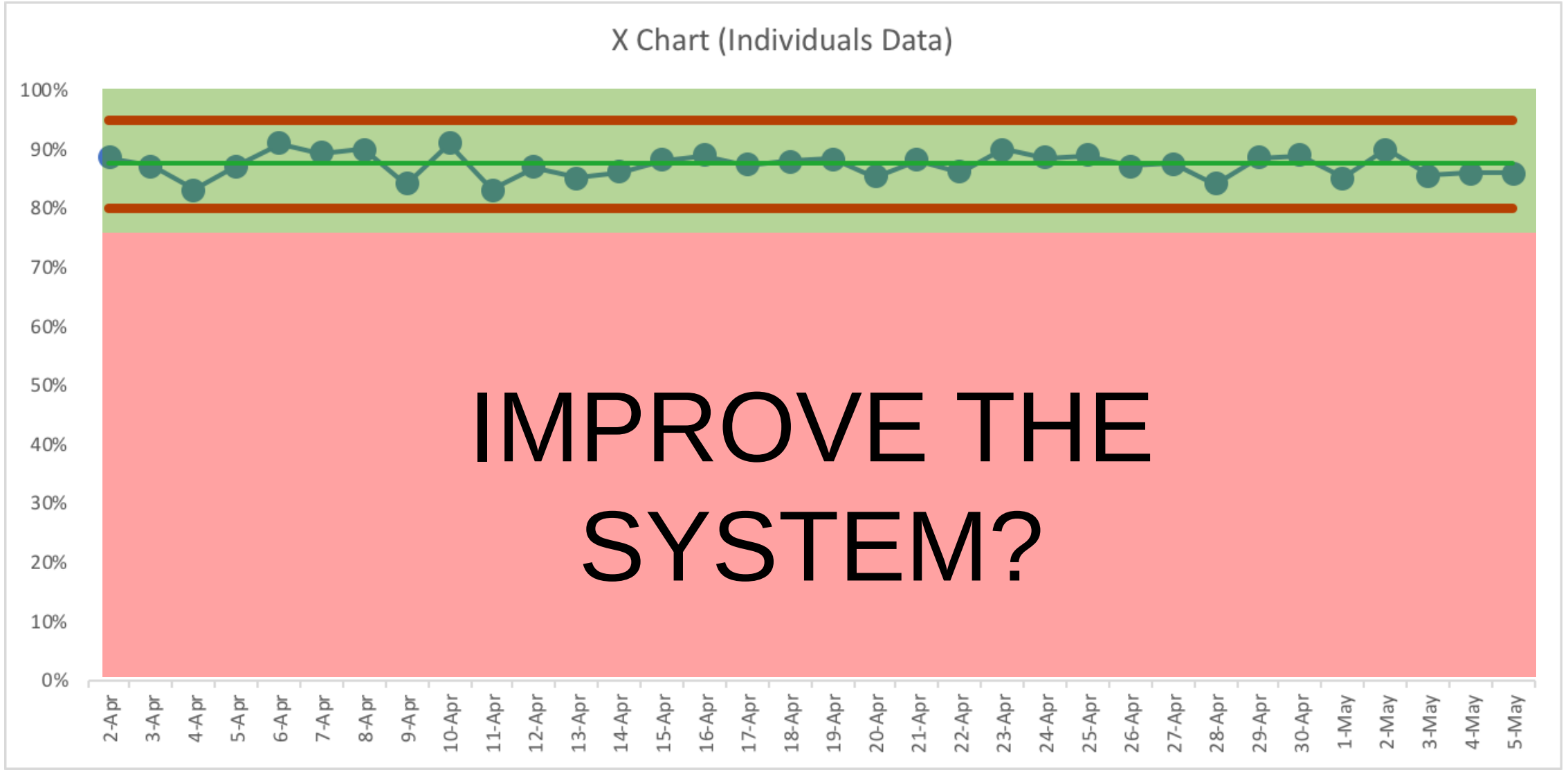
Unpredictable & Not Meeting Target



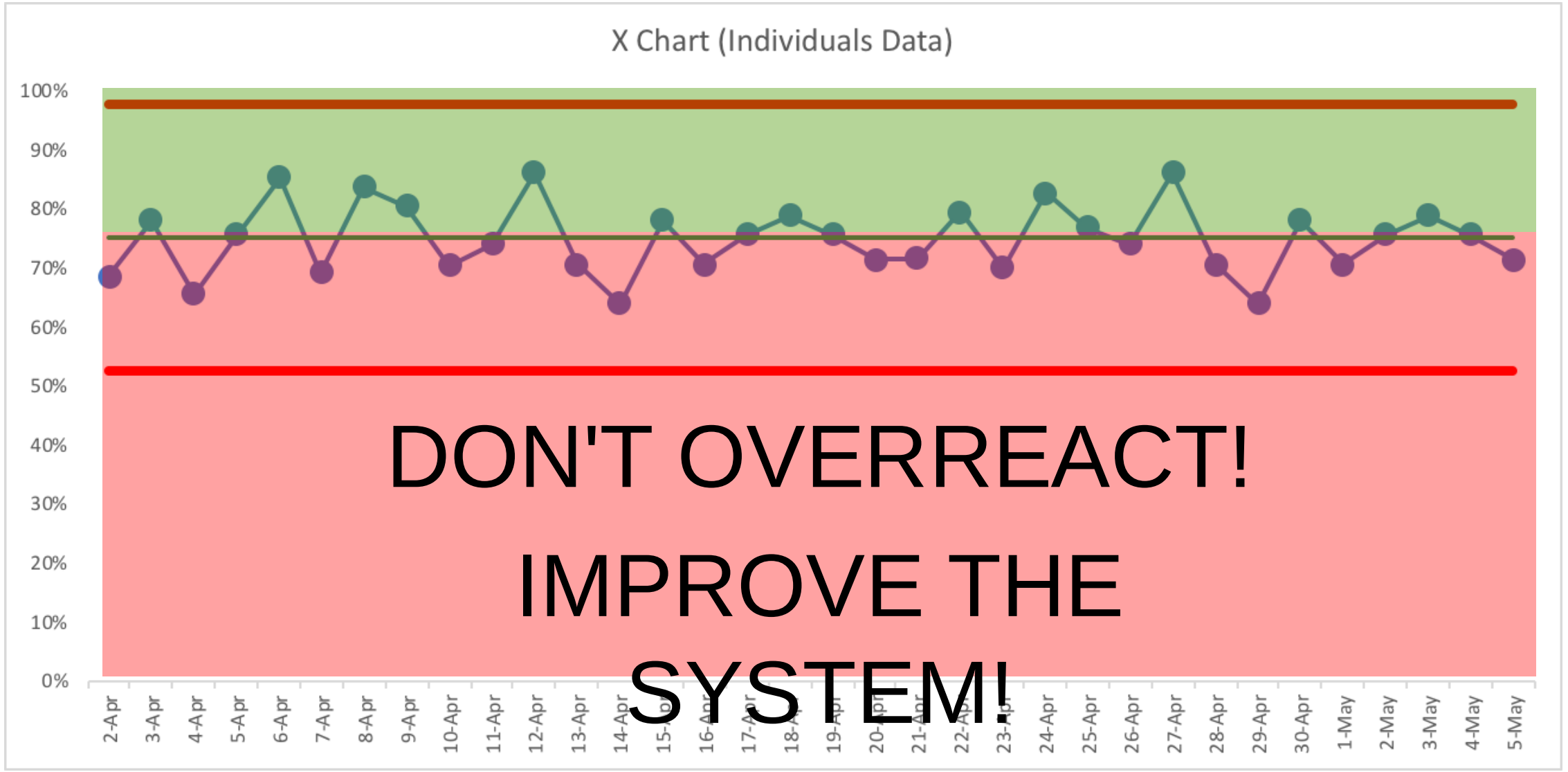
Predictable & Not Meeting Target



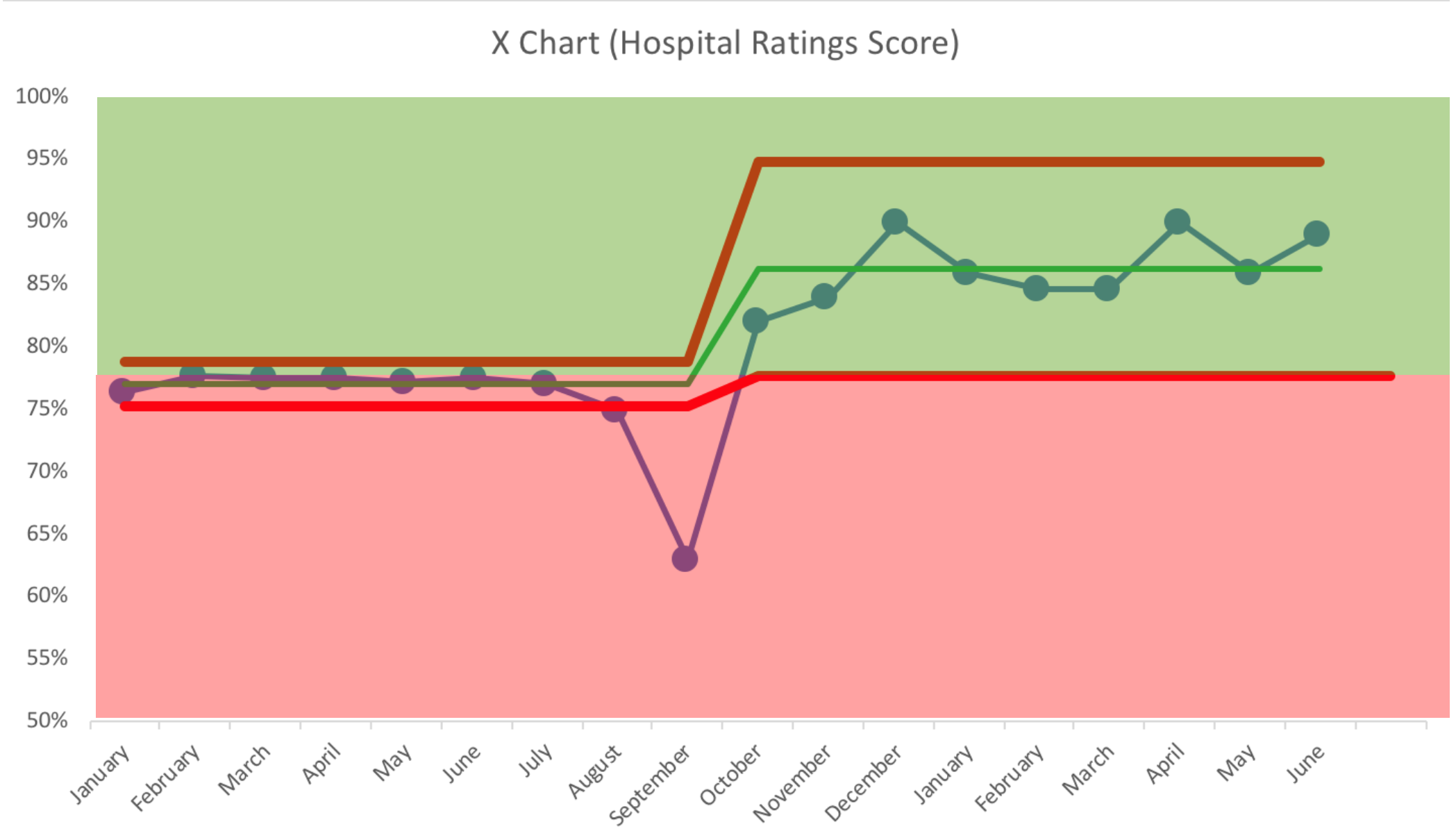
Predictable and Always Meets Target



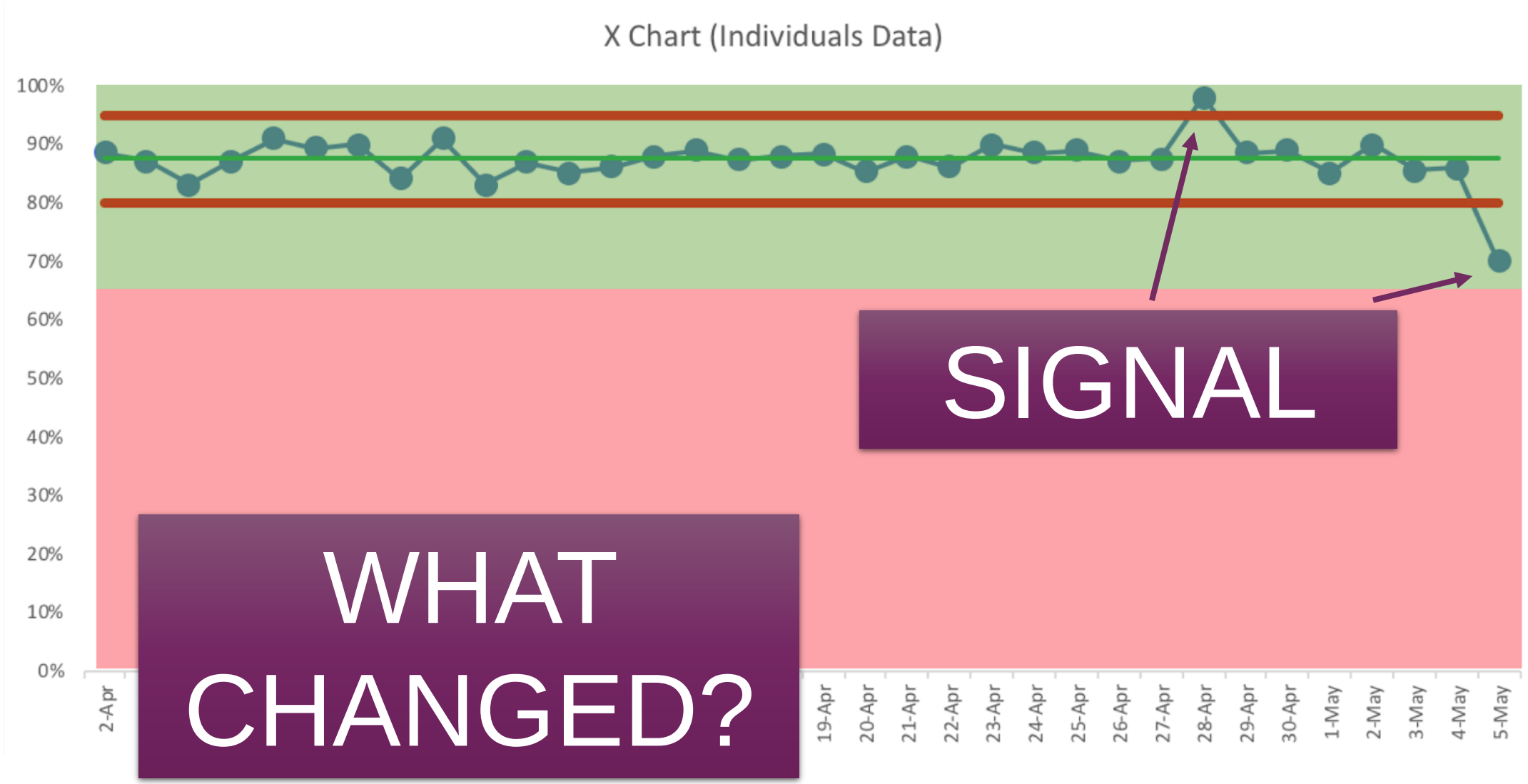
Predictable and Sometimes Meets Target



Shifting into the Green

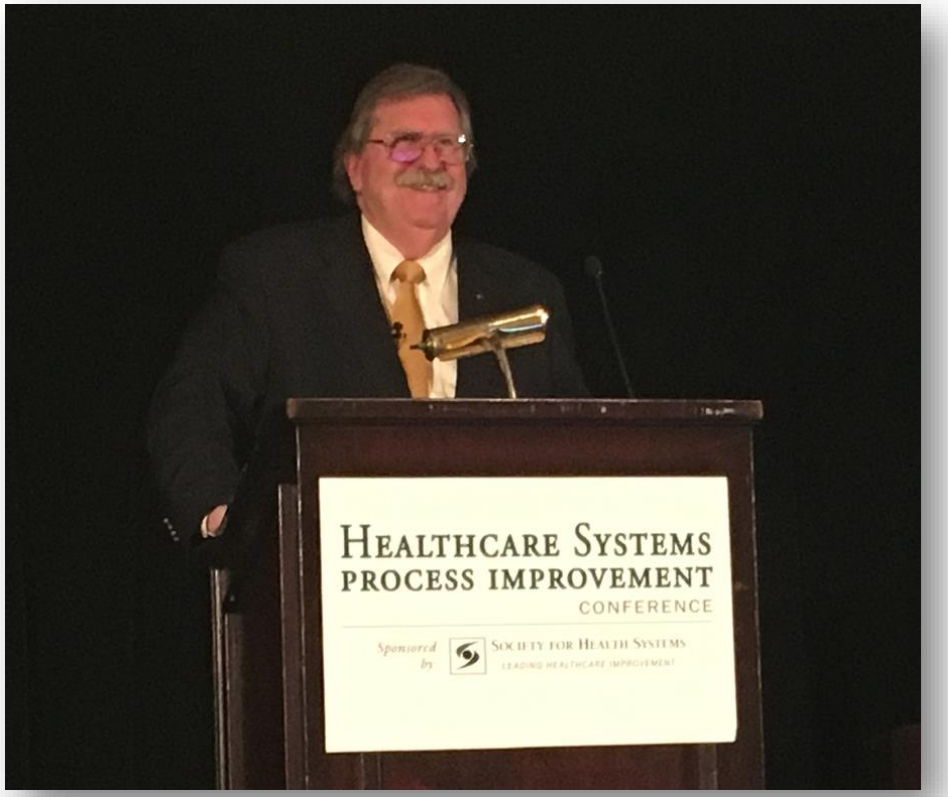


Looking for Signals in a Metric That Meets Target



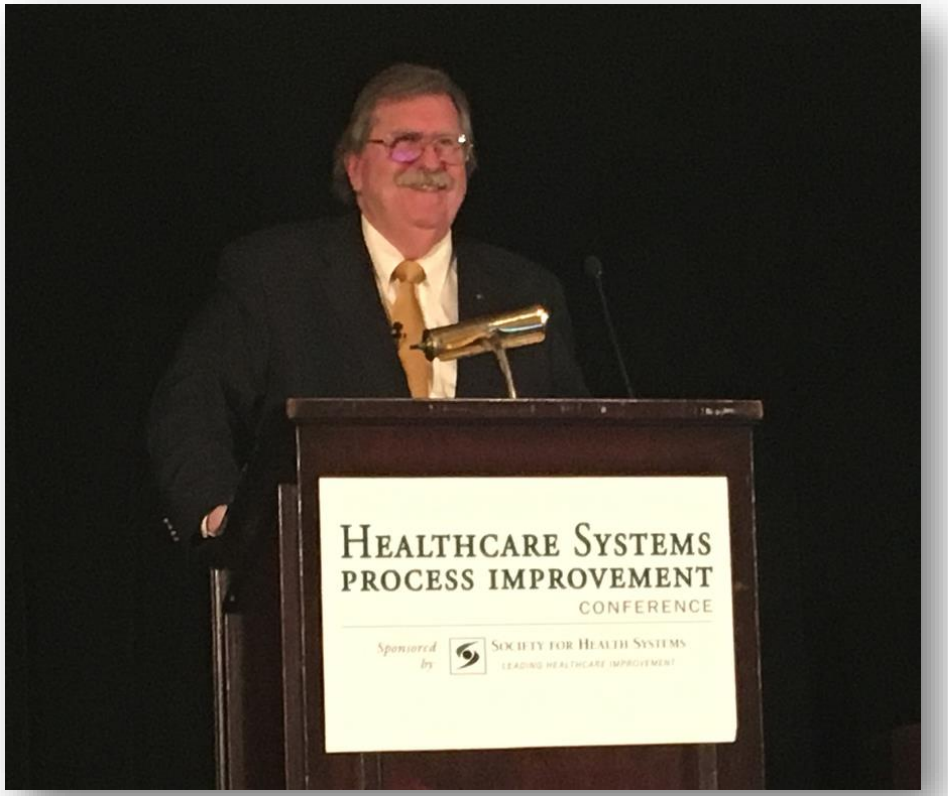
Wheeler Says

- "The question is not whether these methods work... only if you can make them work."

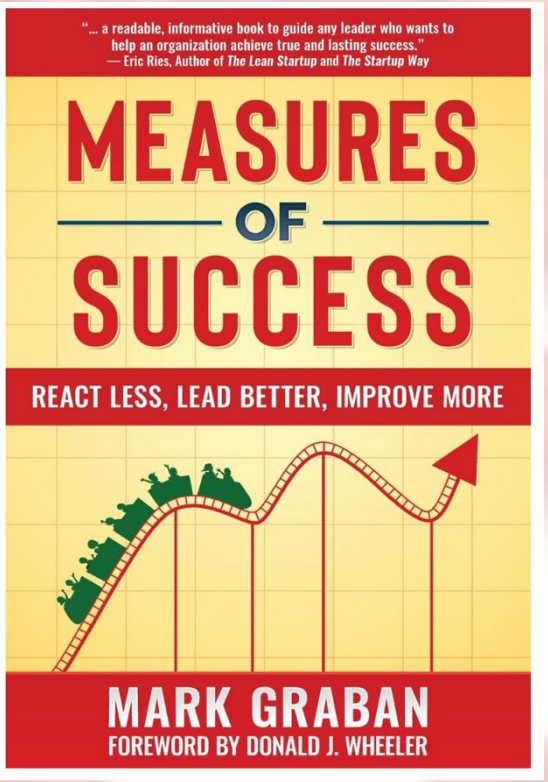


Wheeler Says

- "Those who do not use process behavior charts have no advantage over those who can't!"



Resources: https://www.markgraban.com/measuresworkshop

Q&A and Contact Info

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