WELCOME!

While we wait….

- Have your improvement cycle documentation ready to share.

Be ready to share…

- How you determined your SMART goal.
- Any progress you have made on implementing your project.

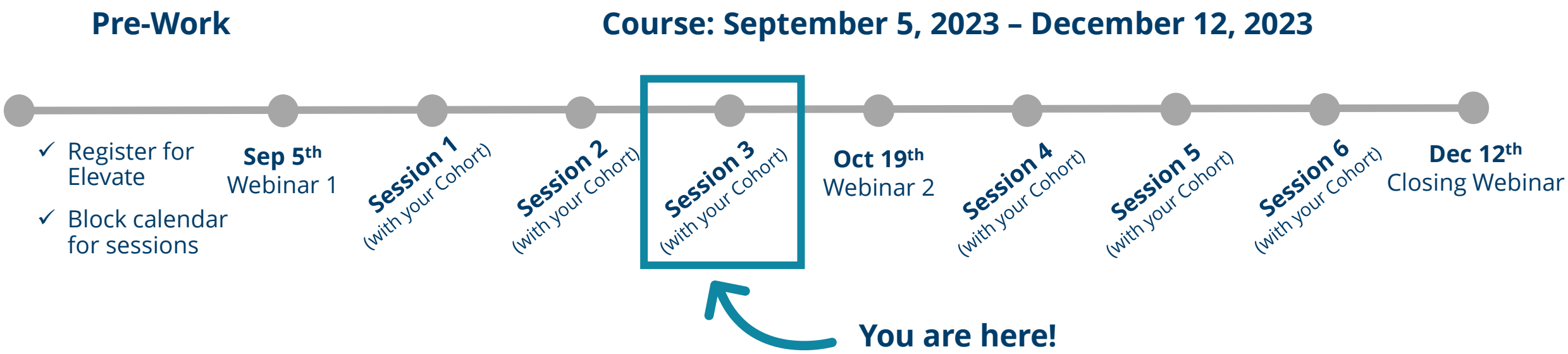
NATIONAL ASSOCIATION OF Community Health Centers®

HEALTH CENTER PROFESSIONAL DEVELOPMENT PROGRAM

QI TRAINING, POWERED BY REGLANTERN

QI TRAINING: COHORT B - LIVE SESSION 3
OCTOBER 10, 2023
2:00 – 3:30 PM ET

QI Training: Course Timeline

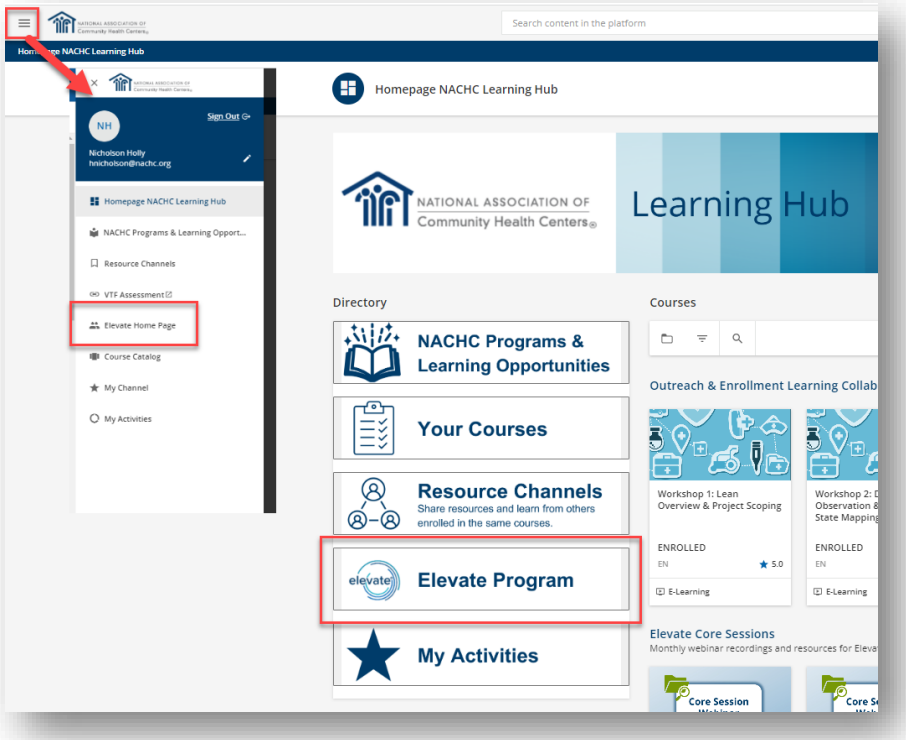


NACHC's Online Learning Hub

Session will be recorded and available in the Learning Hub

If you already have a 'NACHC One' login (the login used for NACHC conferences), use this to sign in.

*If you do not yet have a 'NACHC One' login, **register for free**!*



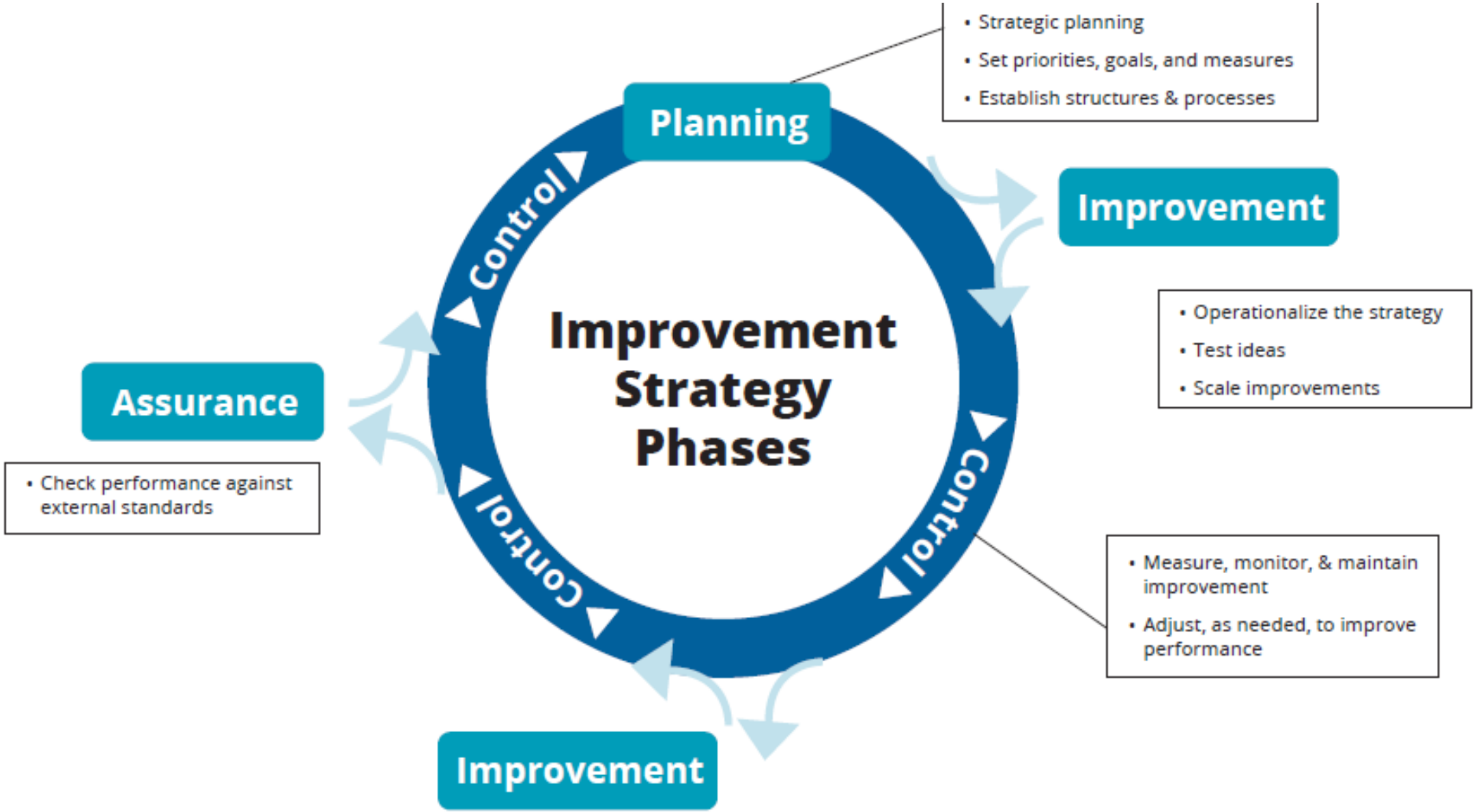
Access NACHC's Learning Hub at
https://nachc.docebosaas.com/learn/signin

Quick Break Out!

In small groups of 2-3, share the following:

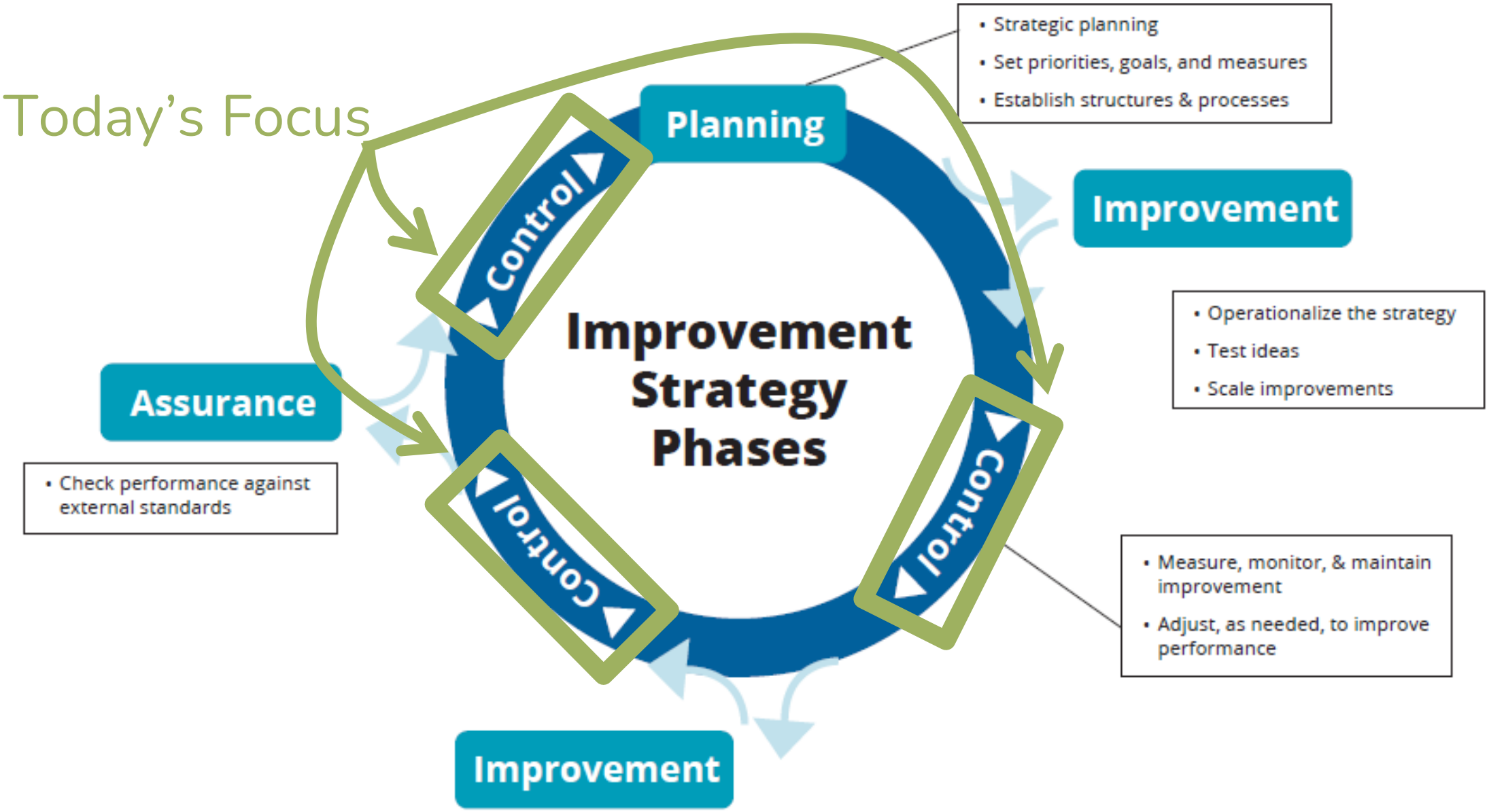
- Your SMART goal for your improvement cycle.
- The steps in the plan section of your improvement cycle.
- Any progress you have made in the implementation of the improvement cycle.
- Provide any feedback about the ideas to your group members.

10 Minutes



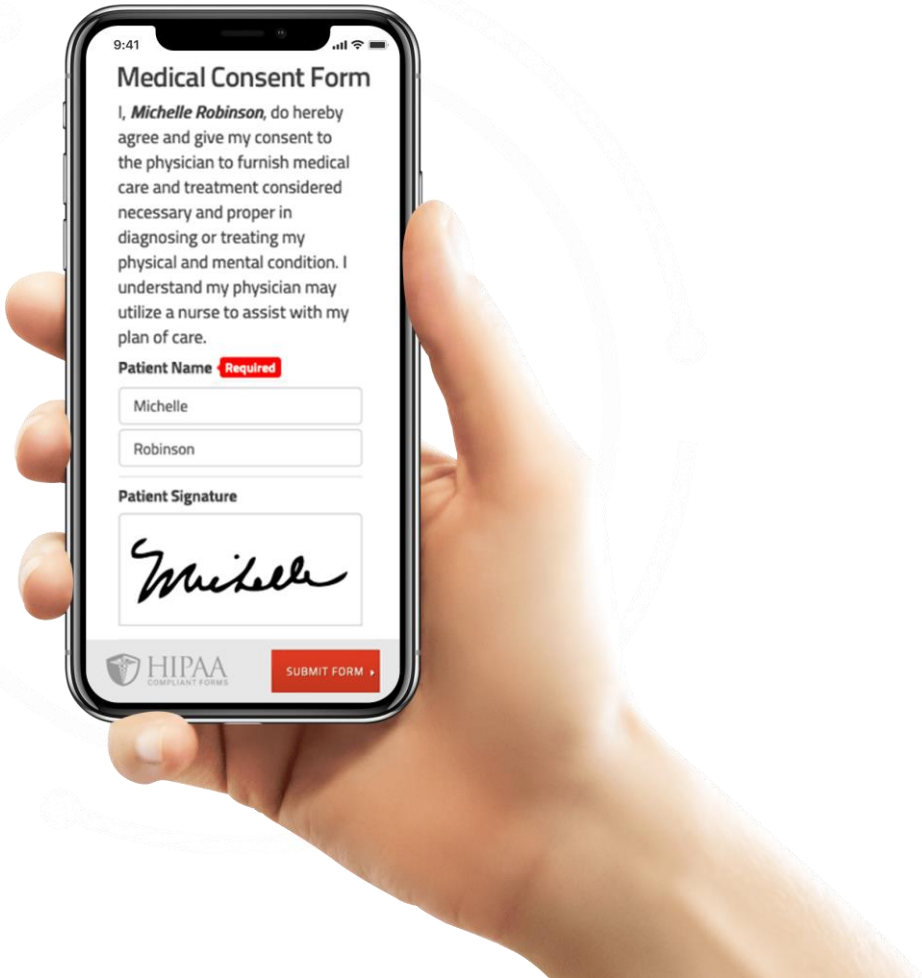
https://www.nachc.org/wp-content/uploads/2023/07/Action-Guide_Improvement-Strategy.pdf

Today's Focus



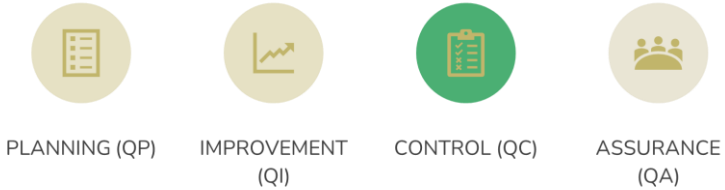
https://www.nachc.org/wp-content/uploads/2023/07/Action-Guide_Improvement-Strategy.pdf

A Case Study in Quality Control



REGLANTERN

Quality Control



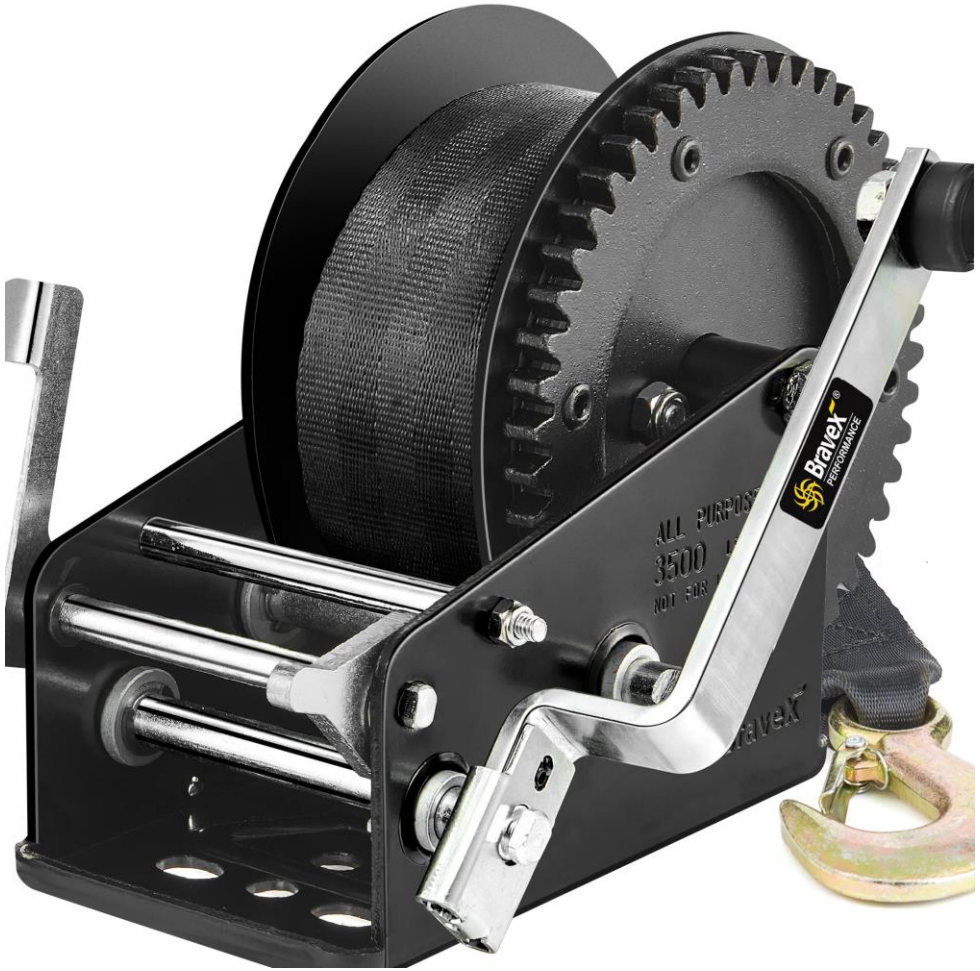
- **Measuring** improvement
- **Maintaining** over time
- **Occurs daily** within teams
- **Adjust** as needed

Session Objectives

1. Differentiate between Quality Control (QC) and Quality Improvement (QI).
2. Clarify who conducts QC and for what audience.
3. Learn how to conduct QC audit to validate data and detect changes.
4. Learn to make and use Run Charts according to statistical rules.
5. Use Root Cause Analysis to answer the 5 Why's for a specific measure.

Quality Control - Overview

Quality Control – Back Stops in Place



Quality Improvement vs. Quality Control

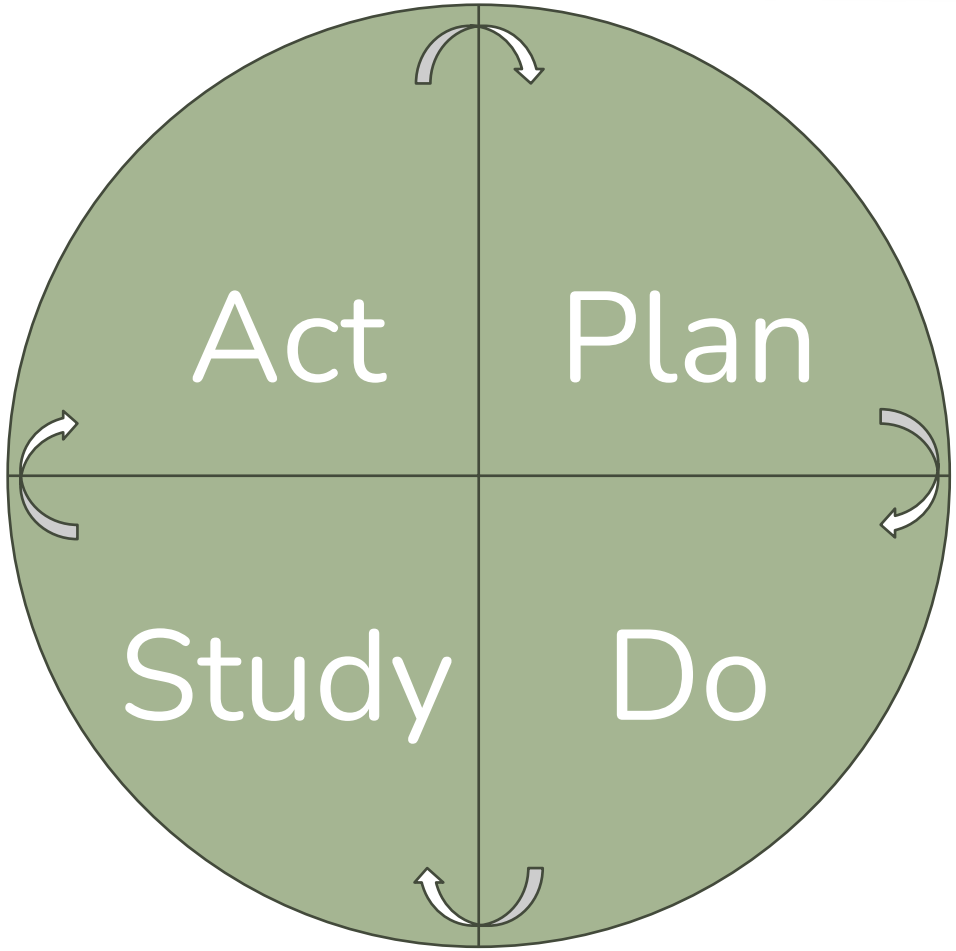
Quality Improvement

- Let's make this better.
- Achieving new levels of performance.
- Identify opportunities for improvement through new features or removing problems.
- Improving.

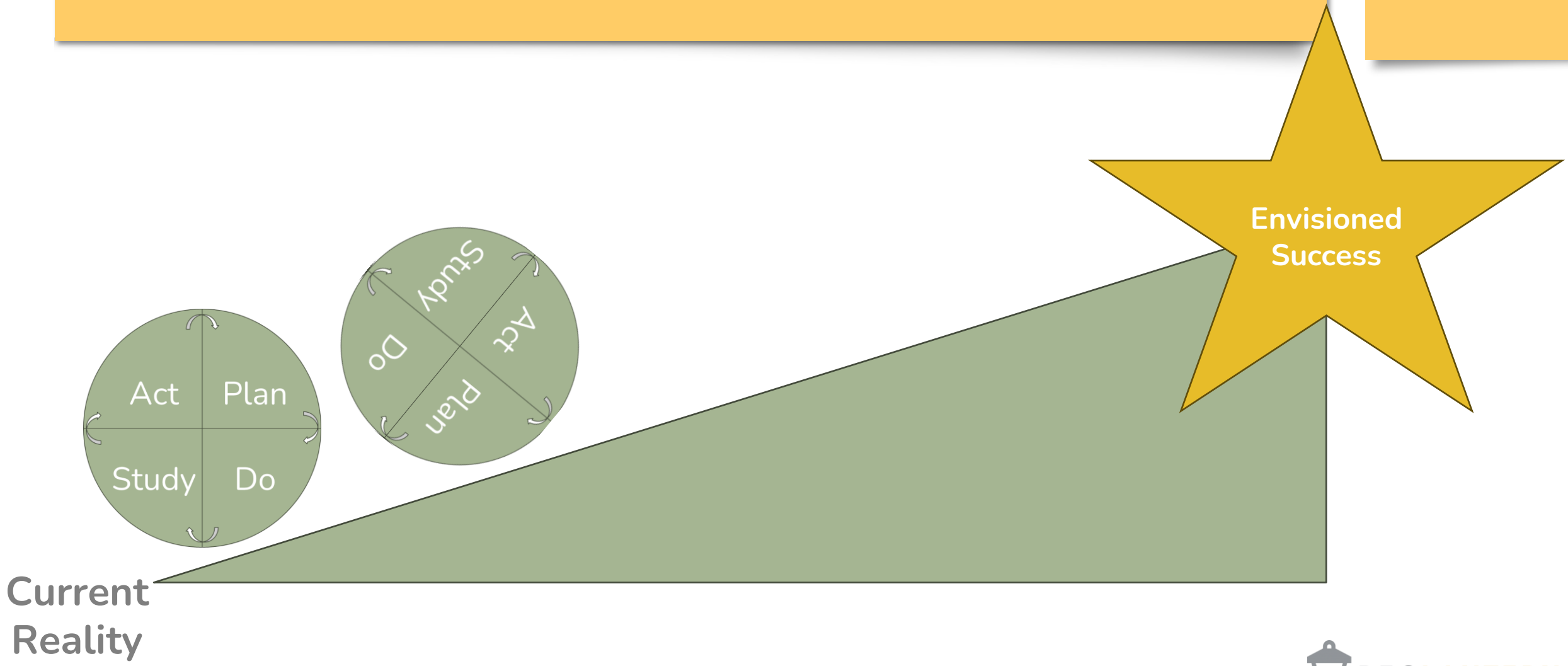
Quality Control

- Inspect what you Expect
- Ensure our services meet benchmarks.
- Identify exceptions to the process that need to be addressed.
- Maintaining.

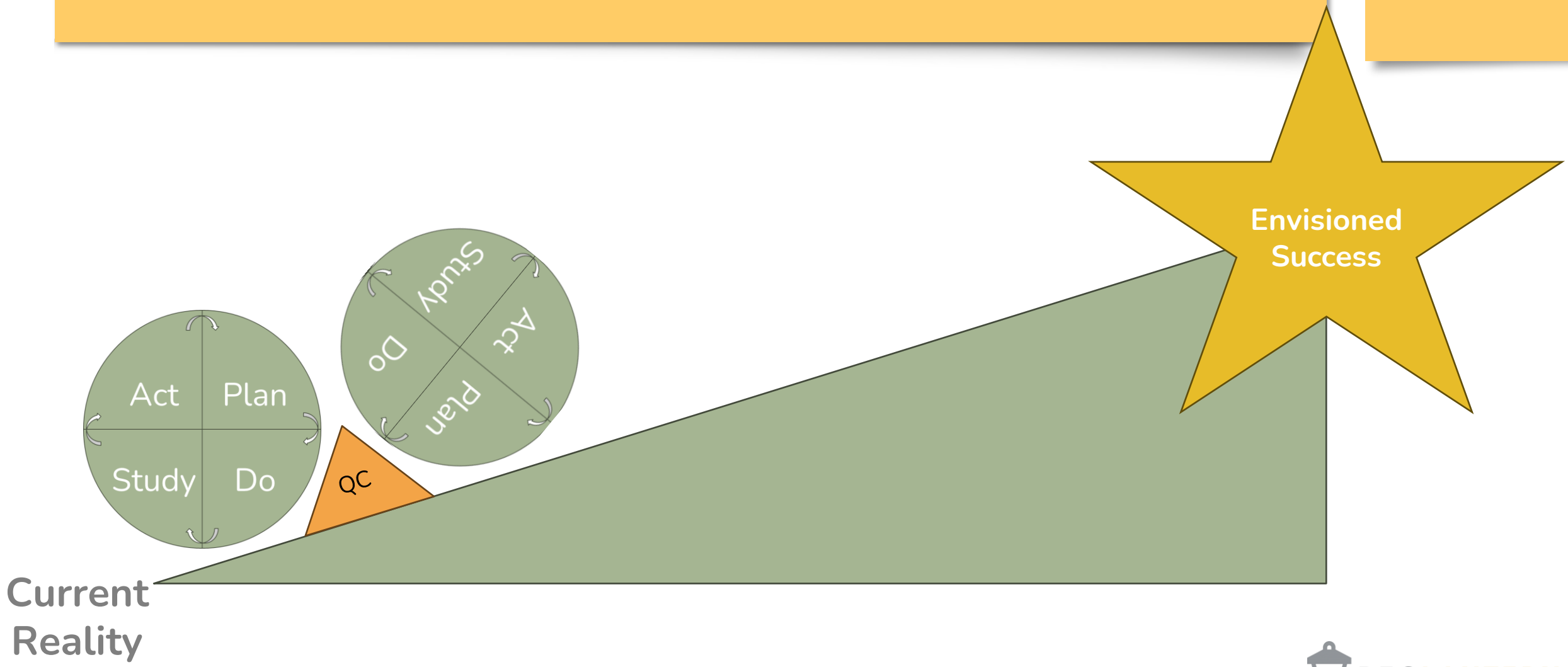
Quality Improvement Cycle



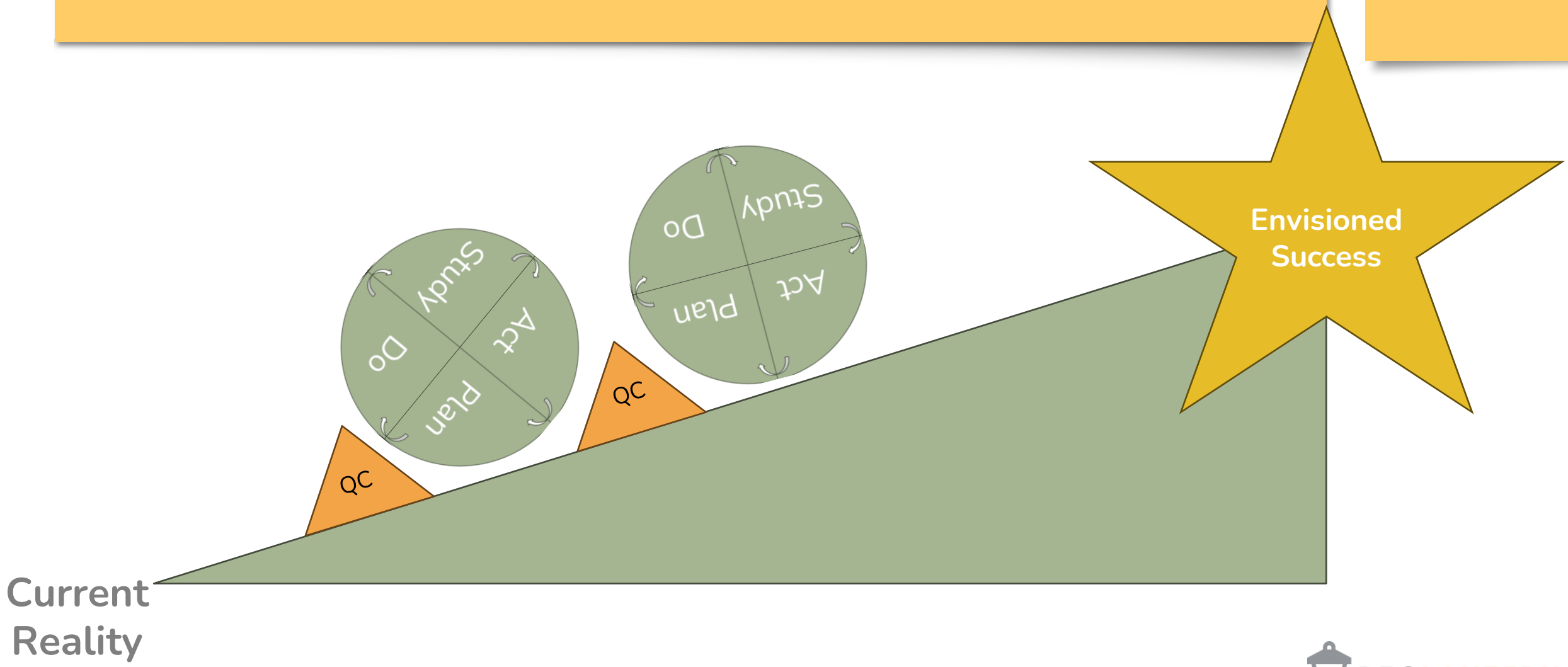
Quality Improvement - ONLY



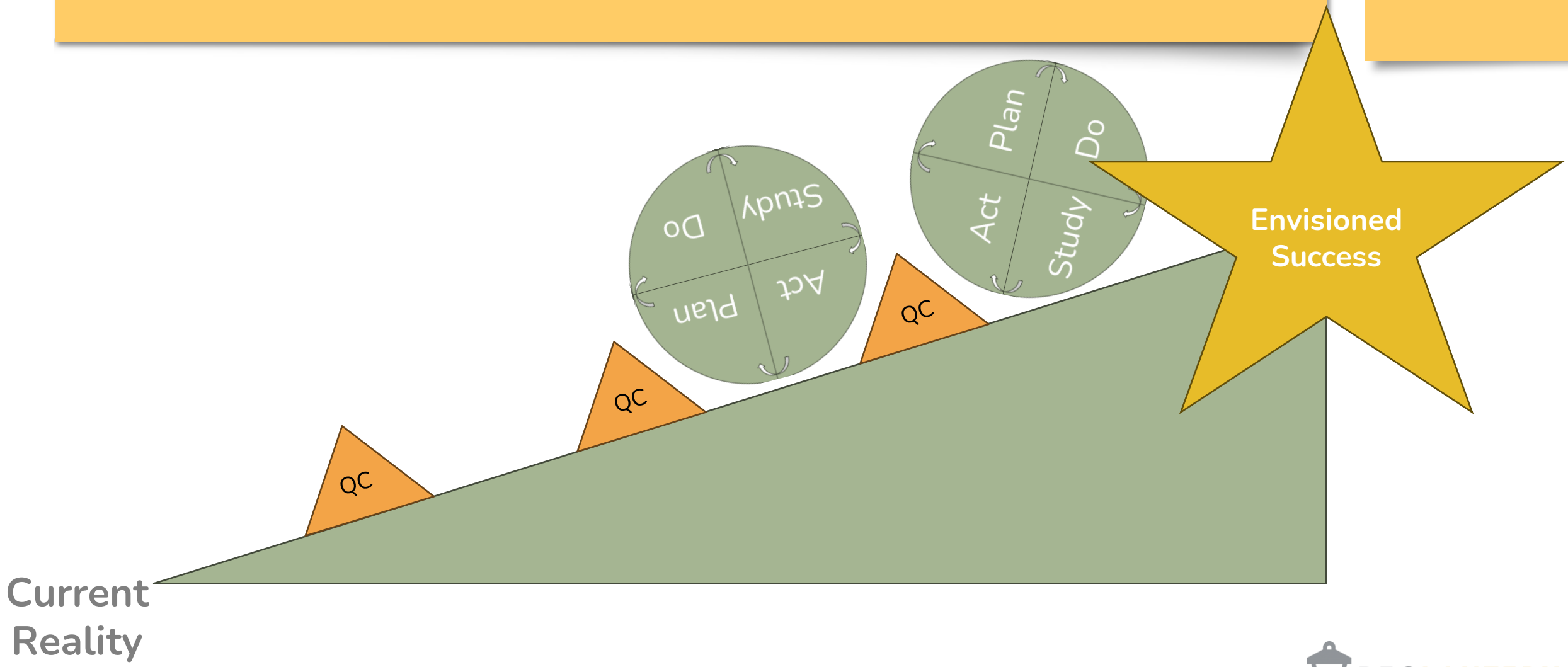
Quality Improvement with Quality Control



Repeated Improvement with Control



Culture of Learning with Control



What is the purpose Quality Control?

Everyday Assurance

Daily reviews to ensure we deliver services according to our standards.

Control Variation

Reduce variation in the process that could affect our service.

Maintain Improvements

Sustain improvements made during the Quality Improvement phase.

Stage	Step
QP	1
	2
	3
	4
QI	5
	6
	7
QC	8
QA	9

https://www.juran.com/blog/what-is-quality-control/

Who performs Quality Control?

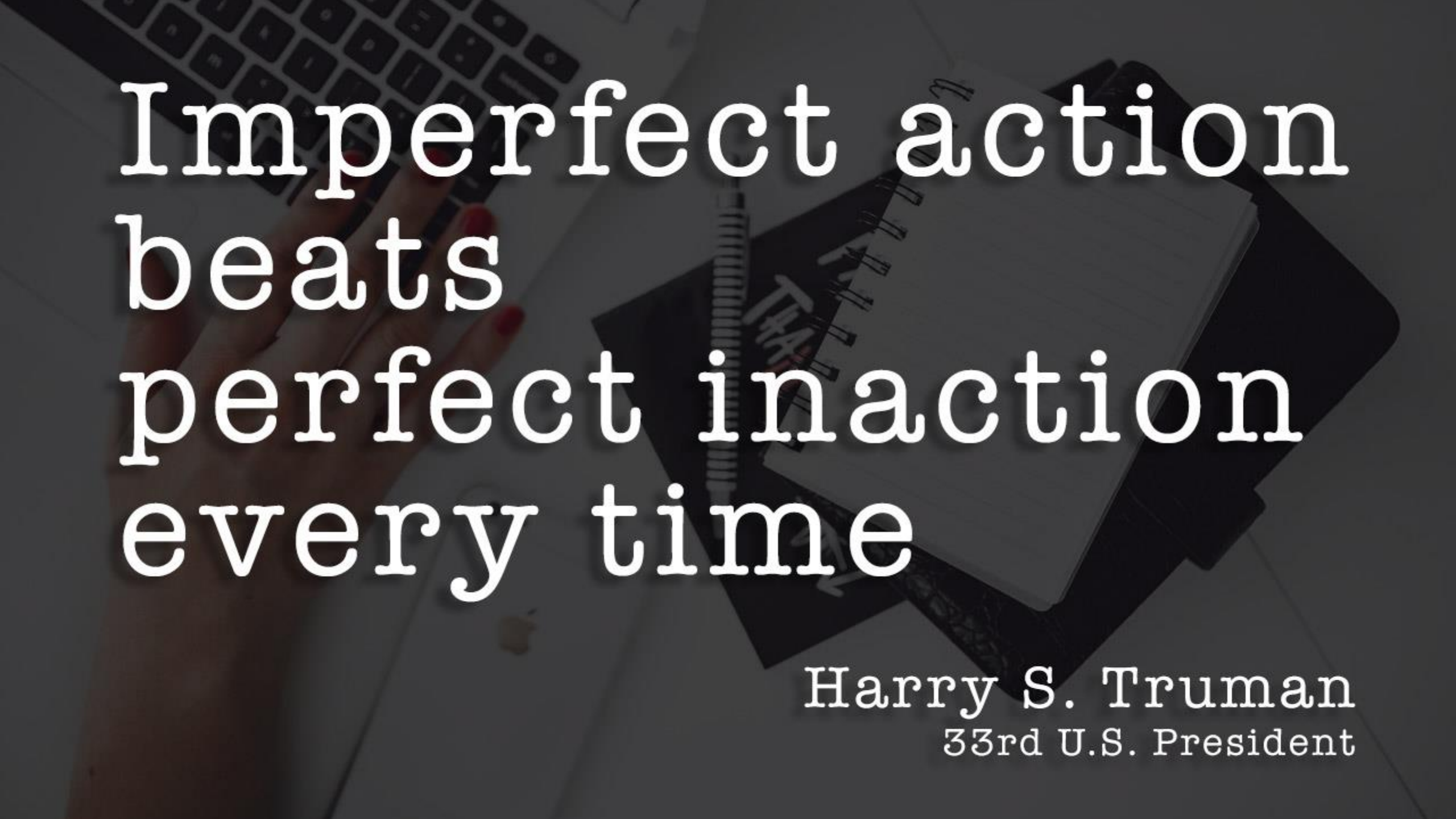
- Initially performed by Quality Leader or staff in charge of reviewing the process *(e.g. Nurse Manager, Front Desk Manager, etc.)*

- As the process matures, QC should be assigned to the person accountable for maintaining the quality of the process or service.

Who is Quality Control for?

- Quality Control is ultimately for the patients.
- The results of the Quality Control process are designed for the staff members who can address the issues at the patient level.
- Examples:
  - Produce a list of patients seen this past week who are due for their mammogram.
  - Produce a list of patients next week who have outstanding referrals.
  - Review the list of patients listed on the schedule to ensure insurance was captured and the data matches the insurance eligibility log.

Quality Control - Process


Imperfect action
beats
perfect inaction
every time
Harry S. Truman
33rd U.S. President

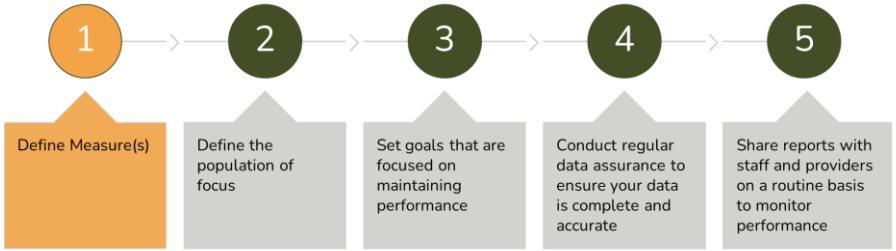
QC Process

1. Define Measure(s)
2. Define the population of focus
3. Set goals that are focused on maintaining performance
4. Conduct regular data assurance to ensure your data is complete and accurate
5. Share reports with staff and providers on a routine basis to monitor performance

QC Process – Define Measure(s)

- **Use UDS, HEDIS or CQM definitions for clarity, consistency, and comparison.**
- **Numerator** – patients who meet the measure (e.g. patients with a mammogram in the past 27 months)
- **Clarify How the Measure is Met** – is this claims data (i.e. ICD/CPT codes) or is this clinical data from the EMR? Does placing the order satisfy or must the result be returned?

46 mammos / 92 patients



Breast Cancer Screening (Line 11a), CMS125v11

Measure Description

Percentage of women 50*–74 years of age who had a mammogram to screen for breast cancer in the 27 months prior to the end of the measurement period

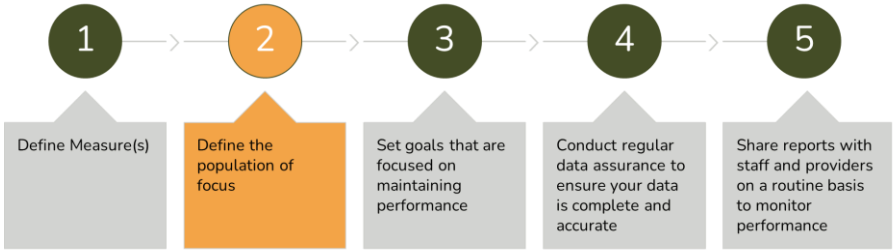
*Use 52 on or after December 31 as the initial age to include in assessment. See UDS Reporting Considerations for further detail.

QC Process – Define the population

46 mammos

92 patients

- **Denominator** – which patients are included?
  - Patients seen or patients assigned (e.g. UDS = patients seen, Quality Performance = assigned)
  - Age range (e.g. women between 52 and 74)
  - Date of service range (e.g. calendar year 2023)
  - A particular site
  - A particular provider
  - A particular day
  - A particular patient
- **Exclusions** – patients who are removed from the denominator (e.g. patients with a bilateral mastectomy)



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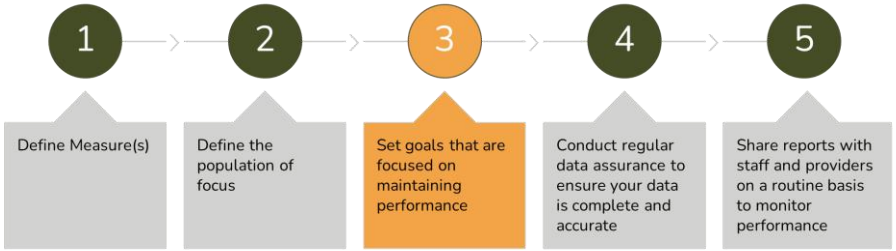
*Use 52 on or after December 31 as the initial age to include in assessment. See UDS Reporting Considerations for further detail.

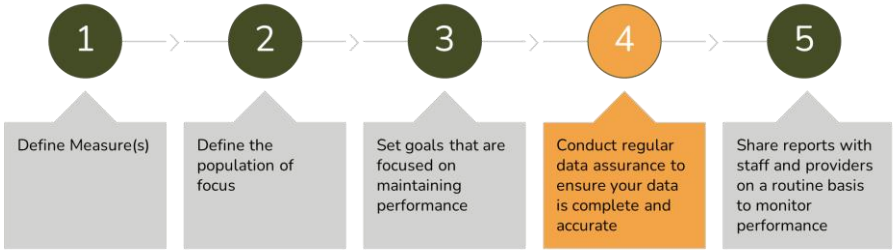
QC Process – Set Goals

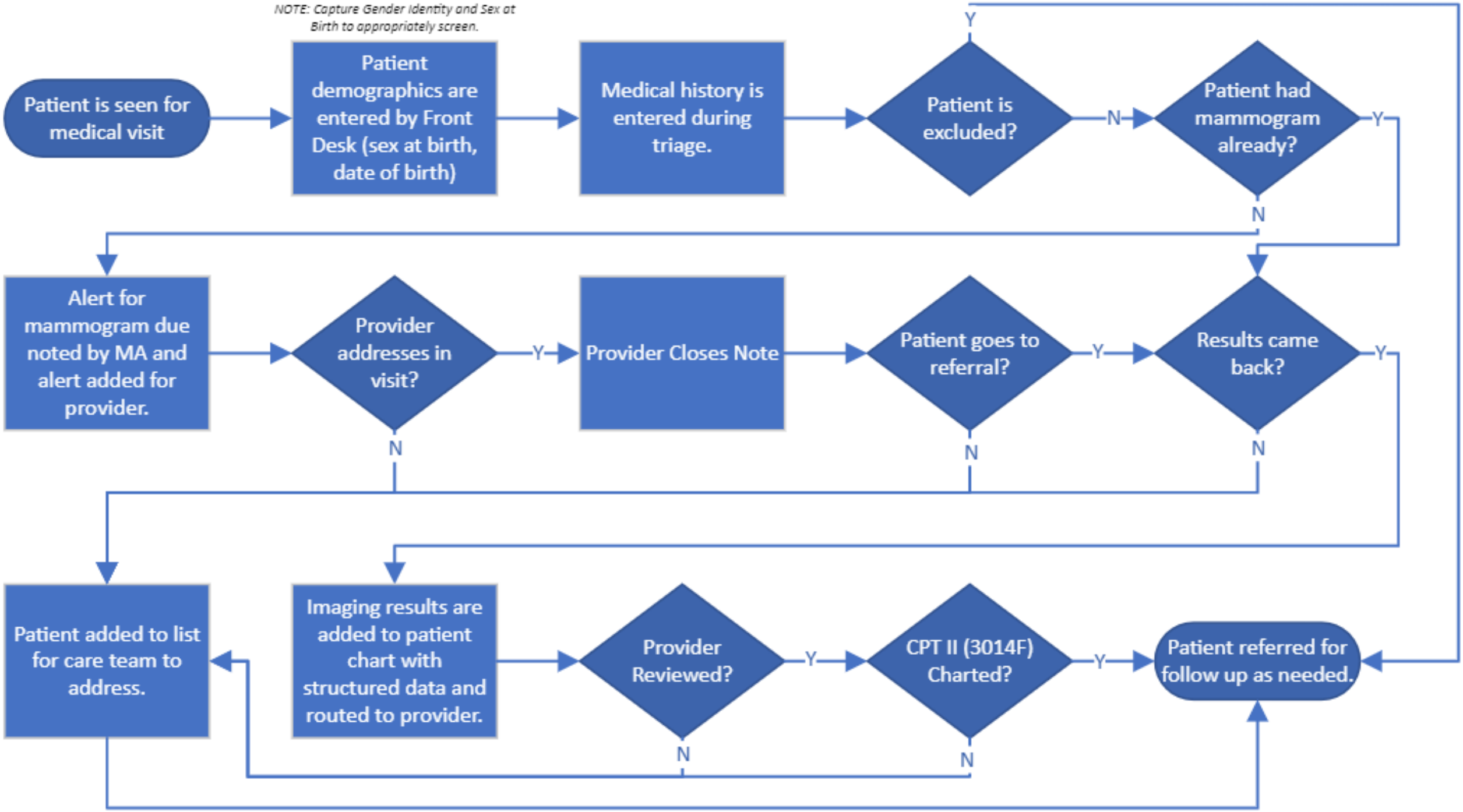
- Set goals focused on **maintaining** performance
  - Think about the threshold that is the minimal acceptable performance given your current reality.
  - Set those as thresholds that would trigger an improvement cycle if they were breached.
- **Example**: Current performance for Breast Cancer Screening is 50%. If it falls below 47.5% (25th percentile), we will initiate improvement activities.



QC Process – Data Assurance

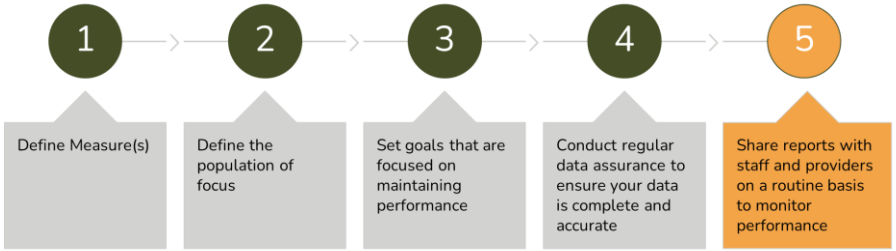
- Map the process for how a patient:
  - Is included in the denominator
  - Excluded from the denominator
  - Satisfy the numerator
- Validate reports with a manual review of the data to determine if the patient truly needs the service, if there is a data issue or if there is a need for staff education.




NOTE: Capture Gender Identity and Sex at Birth to appropriately screen.
Patient is seen for medical visit
Patient demographics are entered by Front Desk (sex at birth, date of birth)
Medical history is entered during triage.
Patient is excluded?
Y
N
Patient had mammogram already?
Y
N
Alert for mammogram due noted by MA and alert added for provider.
Provider addresses in visit?
Y
N
Provider Closes Note
Patient goes to referral?
Y
N
Results came back?
Y
N
Patient added to list for care team to address.
Imaging results are added to patient chart with structured data and routed to provider.
Provider Reviewed?
Y
N
CPT II (3014F) Charted?
Y
N
Patient referred for follow up as needed.

QC Process – Data Visualization

- Use Run Charts.
- Share Root Cause Analysis.
- Displaying Monitoring Measures – (we will address this in more detail in Webinar #2).



Quality Control - Tools

Sampling Data

- Plan for the time needed to perform the review. -> 4:30PM on Thursday
- Use a standard template for collecting the data. -> Provided Template
- Pick a time frame to find a list of patients. -> 1st week of Sep
- Filter for patients in the population of focus. -> Dr. D's Eligible Patients
- Randomize the list OR sample all results
  - Accurate percentage samples require 30 samples or the whole population if less than 30
  - Consider using the =RAND() function in Excel to sort the list or online list randomizers for selection

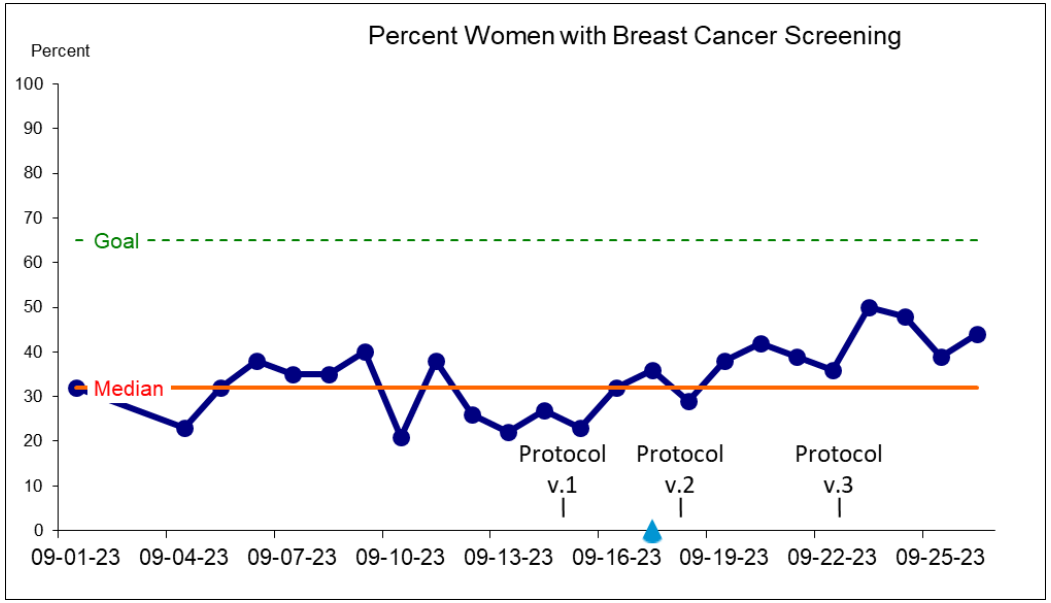
https://randomizer.org/
https://www.indeed.com/career-advice/career-development/how-to-randomize-list-in-excel

Instructions		Numerator
1. Clarify the population CQM of focus	**Performance**	15
2. Review the charts and record the findings in "Audit Findings"	53.6%	**Denominator (without exclusions)**
3. When complete, navigate to the Pivot Table tab, Refresh data and add results to a Run Chart for trending		28
		Excluded
		2

#	Population of Focus	Date of Service	CQM of Focus	Audit Findings	Other Notes
1	Dr. Dixon's Patients	9/4/2023	Breast Cancer Screening	Met	
2	Dr. Dixon's Patients	9/4/2023	Breast Cancer Screening	Excluded	History of mastectomy
3	Dr. Dixon's Patients	9/4/2023	Breast Cancer Screening	Missed opportunity during visit	No documention in Med Hx or reminder to patient
4	Dr. Dixon's Patients	9/4/2023	Breast Cancer Screening	Documentation issues	Medical history free texted in note by MA
5	Dr. Dixon's Patients	9/4/2023	Breast Cancer Screening	Met	
6	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Documentation issues	Previous mammogram screening noted, but date not entered
7	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Met	
8	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Documentation issues	Previous mammogram screening noted, but date not entered
9	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Met	
10	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Referral issues	Referral placed in January, no results in chart
11	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Referral issues	Referral placed in March, no results in chart
12	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Met	
13	Dr. Dixon's Patients	9/5/2023	Breast Cancer Screening	Met	
14	Dr. Dixon's Patients	9/6/2023	Breast Cancer Screening	Met	
15	Dr. Dixon's Patients	9/6/2023	Breast Cancer Screening	Referral issues	Referral placed in July, results back in August, not reviewed
16	Dr. Dixon's Patients	9/6/2023	Breast Cancer Screening	Met	
17	Dr. Dixon's Patients	9/6/2023	Breast Cancer Screening	Referral issues	Referral placed in May, patient did not show
18	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Met	
19	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Referral issues	Referral ordered as "referral" instead of diagnostic imaging.
20	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Met	
21	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Met	
22	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Reporting issues	Patient shows as met on report, but mammogram not in chart.
23	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Met	
24	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Missed opportunity during visit	No documention in Med Hx or reminder to patient
25	Dr. Dixon's Patients	9/7/2023	Breast Cancer Screening	Met	
26	Dr. Dixon's Patients	9/8/2023	Breast Cancer Screening	Excluded	History of mastectomy
27	Dr. Dixon's Patients	9/8/2023	Breast Cancer Screening	Met	
28	Dr. Dixon's Patients	9/8/2023	Breast Cancer Screening	Met	
29	Dr. Dixon's Patients	9/8/2023	Breast Cancer Screening	Missed opportunity during visit	No documention in Med Hx or reminder to patient
30	Dr. Dixon's Patients	9/8/2023	Breast Cancer Screening	Missed opportunity during visit	No documention in Med Hx or reminder to patient

Run Charts - Definition

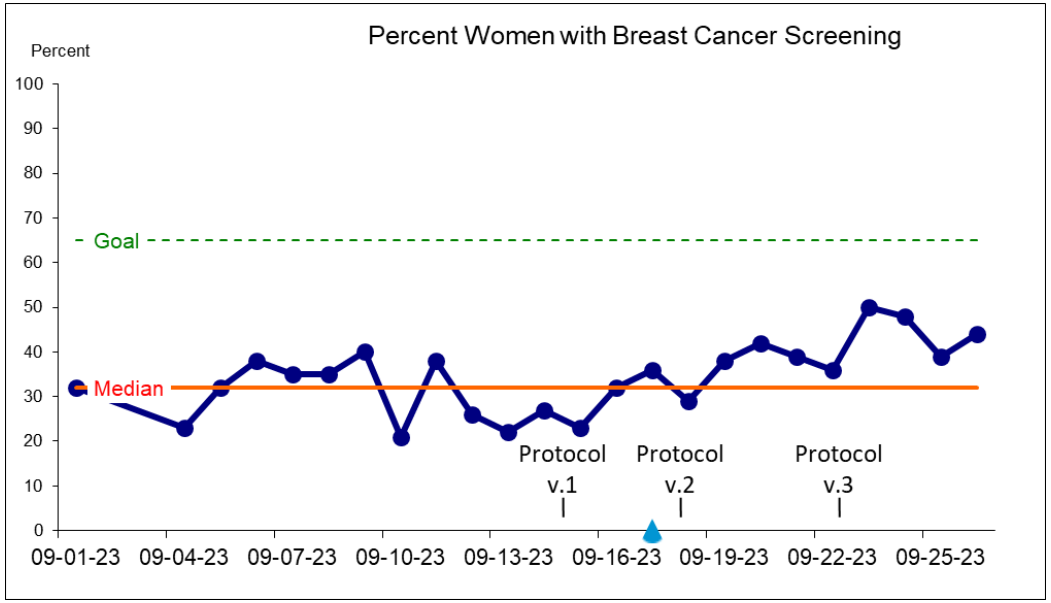
- A graph of a measure of performance over time.
- Used to depict how well (or poorly) a process is performing.
- Determine when a change is truly an improvement.
- Provide direction to initiate improvement activities.



https://www.ihi.org/resources/Pages/Tools/RunChart.aspx

Run Charts - Process

- Plot points with time on the x-axis and performance on the y-axis.
- If more than 10 points, identify the median and plot.
- Title and annotate important points.



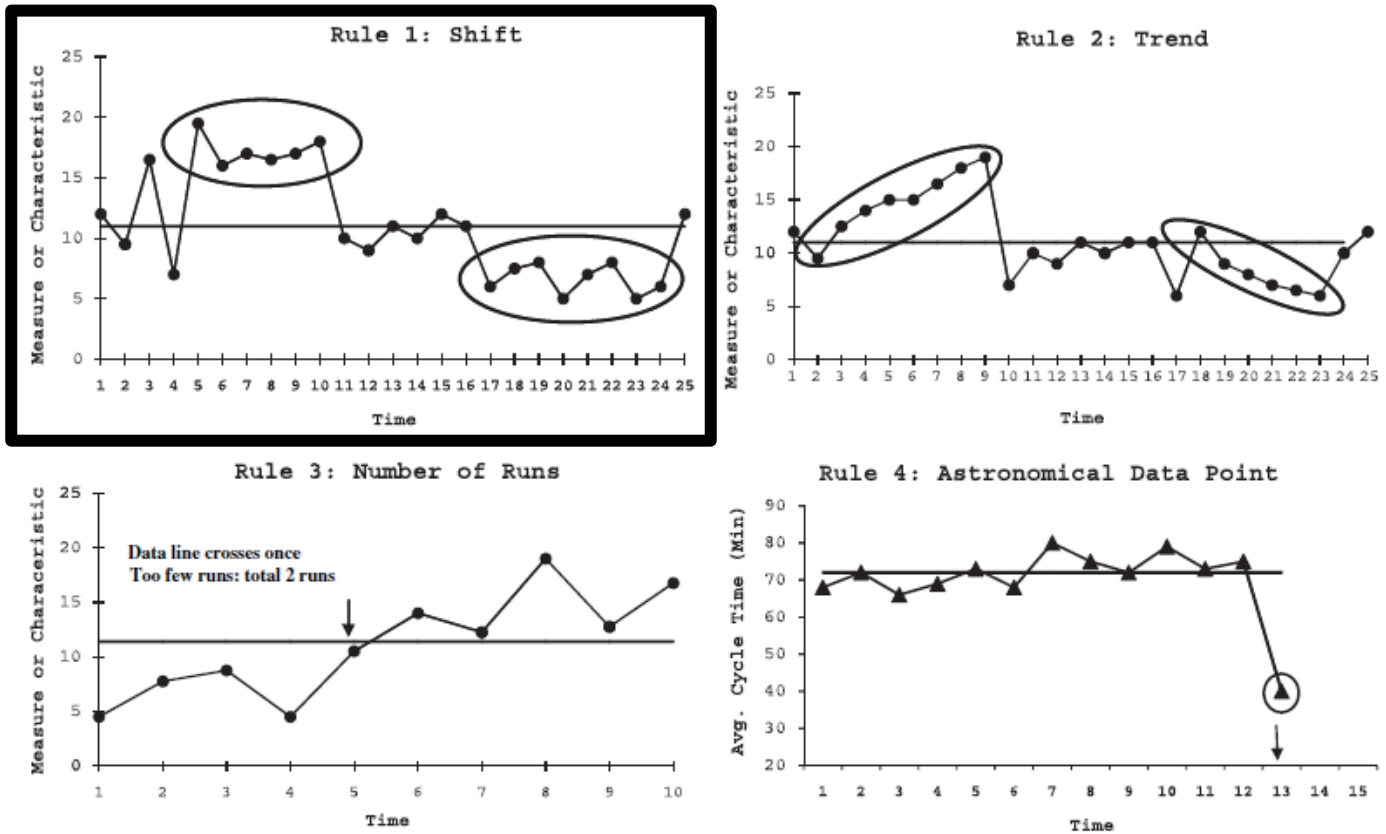
https://www.ihi.org/resources/Pages/Tools/RunChart.aspx

Run Chart Rules

Rule #1

You can detect a change if there is a **shift**.

6 or more consecutive points *either* all above or all below the median.



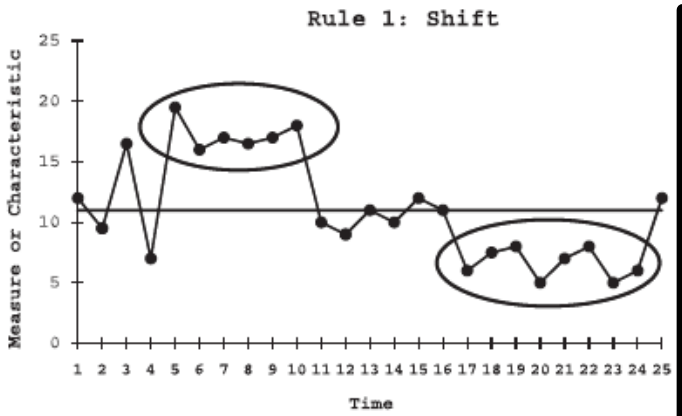
Perla, Rocco & Provost, Lloyd & Murray, Sandy. (2011). The run chart: A simple analytical tool for learning from variation in healthcare processes. BMJ quality & safety. 20. 46-51. 10.1136/bmjqs.2009.037895.
https://www.researchgate.net/publication/49748769_The_run_chart_A_simple_analytical_tool_for_learning_from_variation_in_healthcare_processes

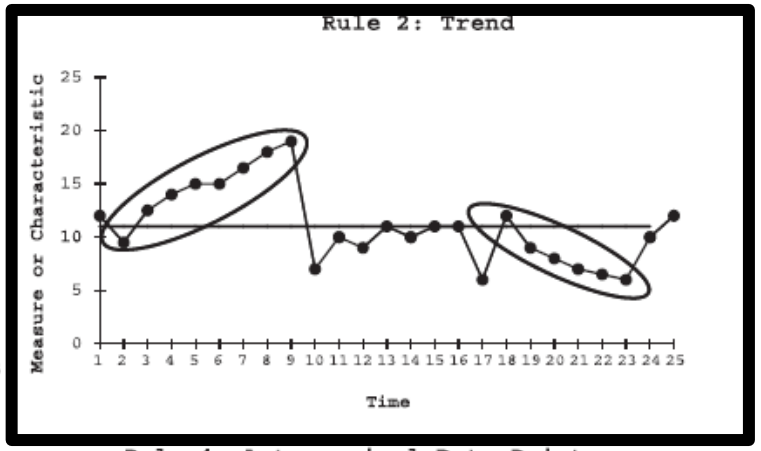
Run Chart Rules

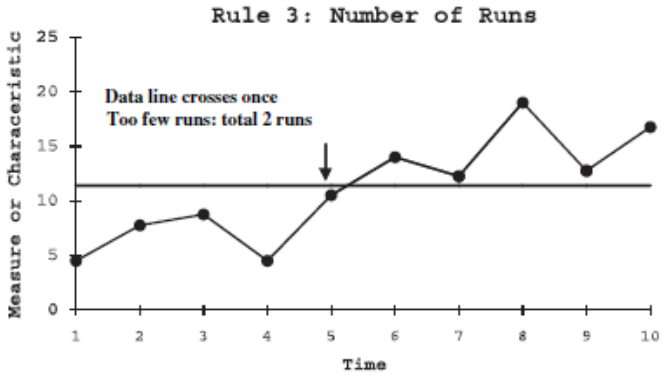
Rule #2

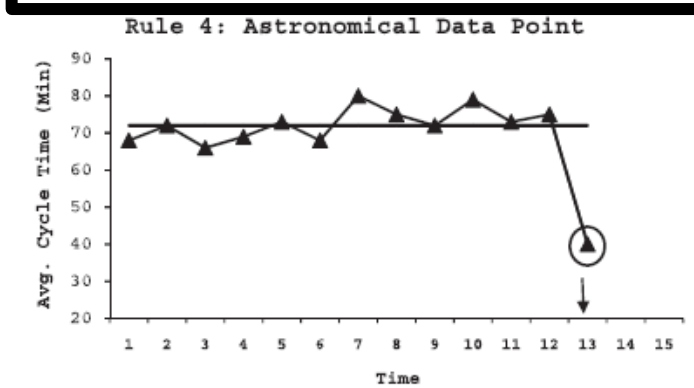
You can detect a change if there is a **trend**.

6 or more consecutive points *either* all increasing or decreasing. Ignore repeated values.









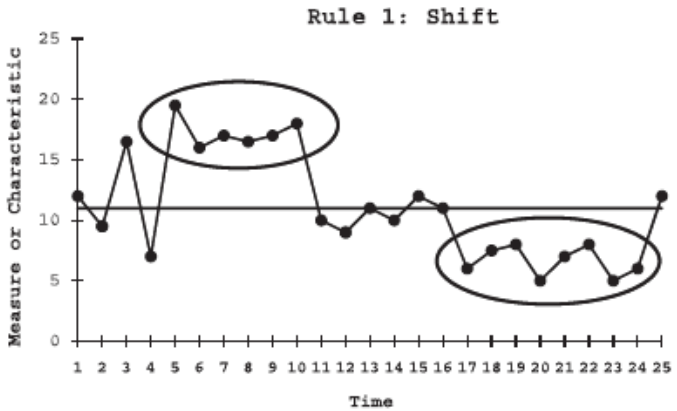
Perla, Rocco & Provost, Lloyd & Murray, Sandy. (2011). The run chart: A simple analytical tool for learning from variation in healthcare processes. BMJ quality & safety. 20. 46-51. 10.1136/bmjqs.2009.037895.
https://www.researchgate.net/publication/49748769_The_run_chart_A_simple_analytical_tool_for_learning_from_variation_in_healthcare_processes

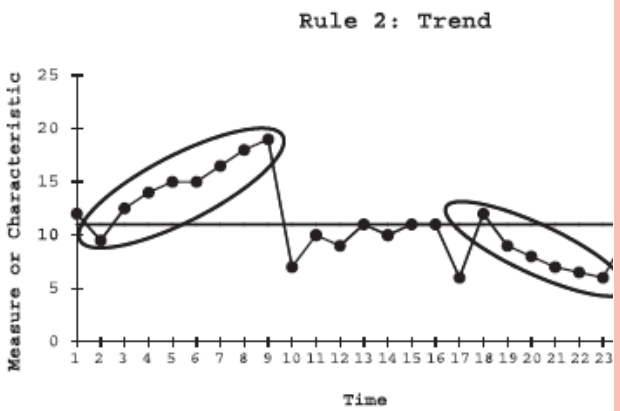
Run Chart Rules

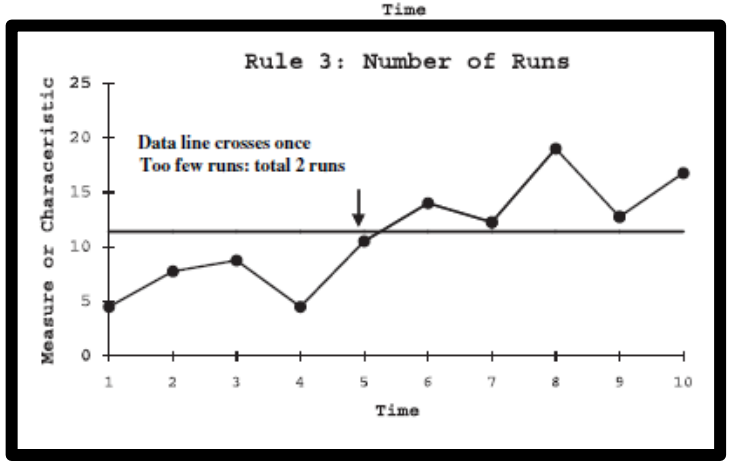
Rule #3

You can detect a change if there are too many or too few **runs**.

The number of times the data crosses the median.







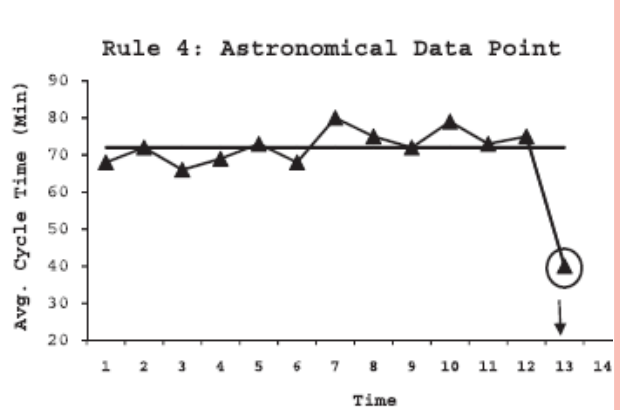


Table 1 Checking for too many or too few runs on a run chart. Table is based on about a 5% risk of falling the run test for random patterns of data

Total number of data points on the run chart that do not fall on the median	Lower limit for the number of runs (< than this number runs is 'too few')	Upper limit for the number of runs (> than this number runs is 'too many')
10	3	9
11	3	10
12	3	11
13	4	11
14	4	12
15	5	12
16	5	13
17	5	13
18	6	14
19	6	15
20	6	16
21	7	16
22	7	17
23	7	17
24	8	18
25	8	18
26	9	19
27	10	19
28	10	20
29	10	20
30	11	21
31	11	22
32	11	23
33	12	23
34	12	24
35	12	24
36	13	25
37	13	25
38	14	26
39	14	26
40	15	27
41	15	27
42	16	28
43	16	28
44	17	29
45	17	30
46	17	31
47	18	31
48	18	32
49	19	32
50	19	33
51	20	33
52	20	34
53	21	34
54	21	35
55	22	35
56	22	35
57	23	36
58	23	37
59	24	38
60	24	38

Source: Adapted from Swed and Eisenhart.[12]

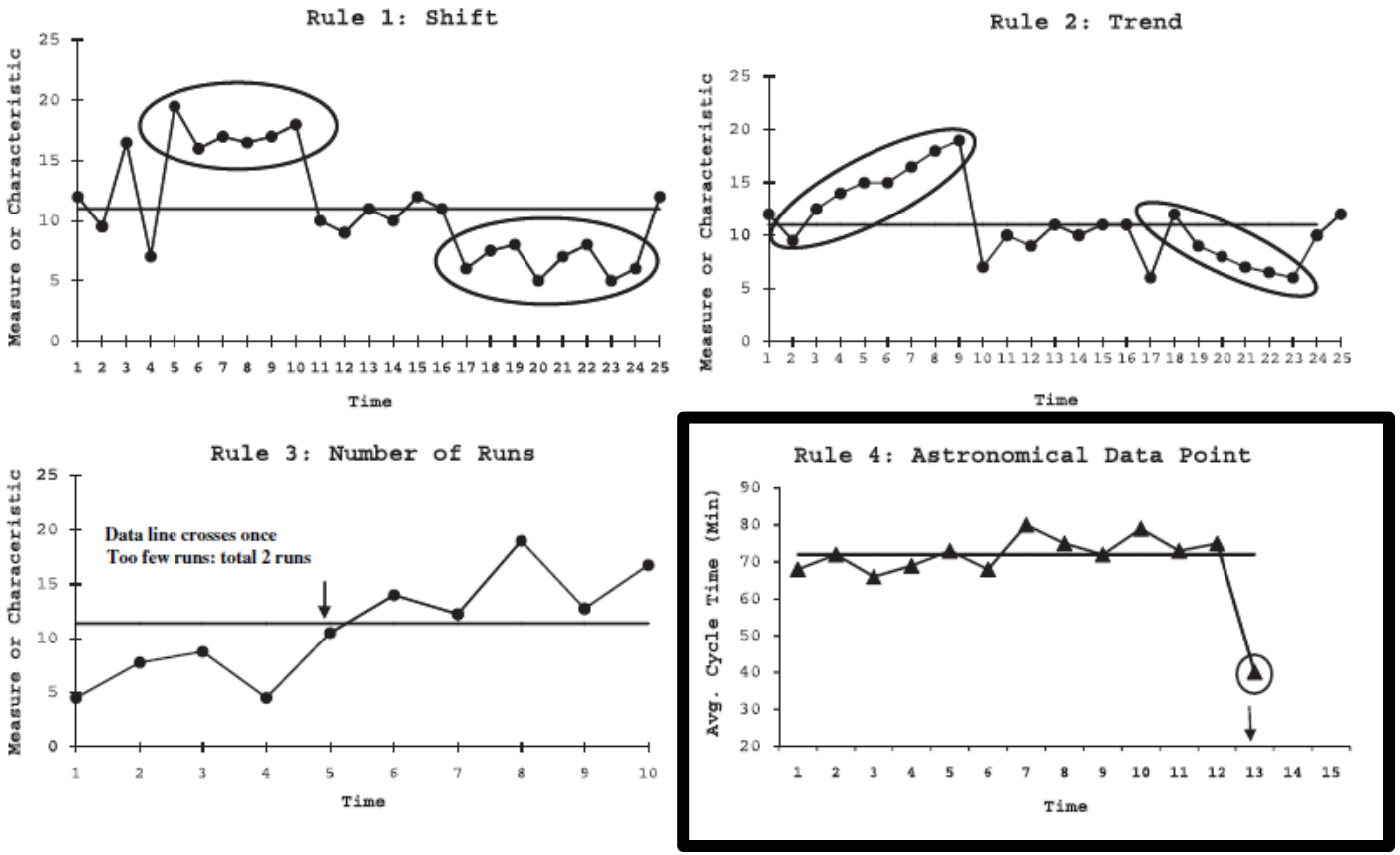
Perla, Rocco & Provost, Lloyd & Murray, Sandy. (2011). The run chart: A simple analytical tool for learning from variation in healthcare processes. BMJ quality & safety. 20. 46-51. 10.1136/bmjqs.2009.037895.
https://www.researchgate.net/publication/49748769_The_run_chart_A_simple_analytical_tool_for_learning_from_variation_in_healthcare_processes

Run Chart Rules

Rule #4

You can detect a change if there is an **astronomical point**.

Subjectively testing obvious outliers (not just the max or min). Annotate this point.



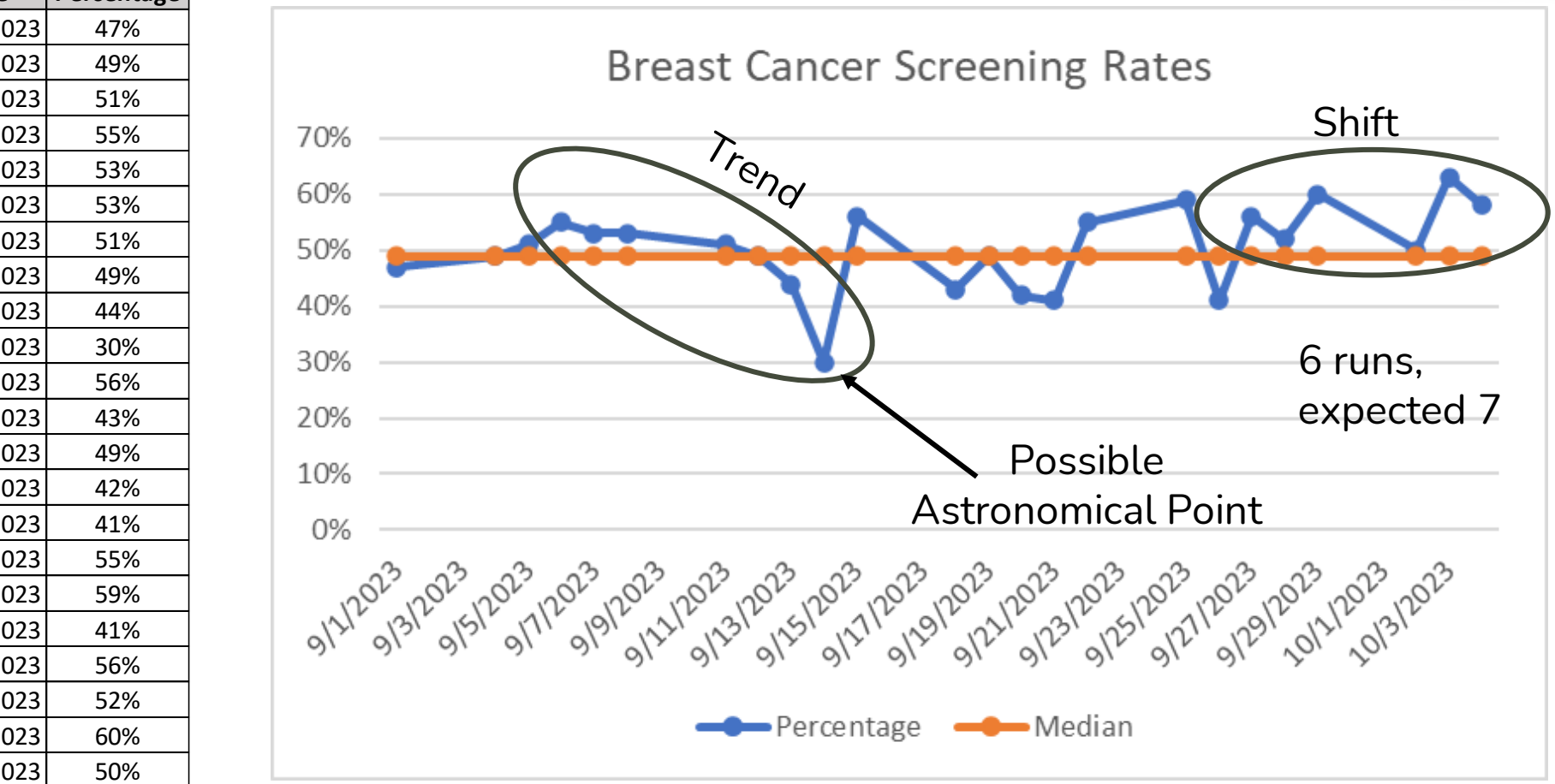
Perla, Rocco & Provost, Lloyd & Murray, Sandy. (2011). The run chart: A simple analytical tool for learning from variation in healthcare processes. BMJ quality & safety. 20. 46-51. 10.1136/bmjqs.2009.037895.
https://www.researchgate.net/publication/49748769_The_run_chart_A_simple_analytical_tool_for_learning_from_variation_in_healthcare_processes

Breakouts!

- Groups of 2-3.
- View the Run Chart from the supplied data (Breast Cancer Screening).
- Answer the following questions:
  - What do the rules tell you about the data?
  - Has the overall performance shifted?
  - Is there evidence that the QI efforts are making a difference?
  - Are there any astronomical points in the data?
  - What experience have you had at your health center with data like this?

Breast Cancer Screening - KEY

Date	Percentage
9/1/2023	47%
9/4/2023	49%
9/5/2023	51%
9/6/2023	55%
9/7/2023	53%
9/8/2023	53%
9/11/2023	51%
9/12/2023	49%
9/13/2023	44%
9/14/2023	30%
9/15/2023	56%
9/18/2023	43%
9/19/2023	49%
9/20/2023	42%
9/21/2023	41%
9/22/2023	55%
9/25/2023	59%
9/26/2023	41%
9/27/2023	56%
9/28/2023	52%
9/29/2023	60%
10/2/2023	50%
10/3/2023	63%
10/4/2023	58%

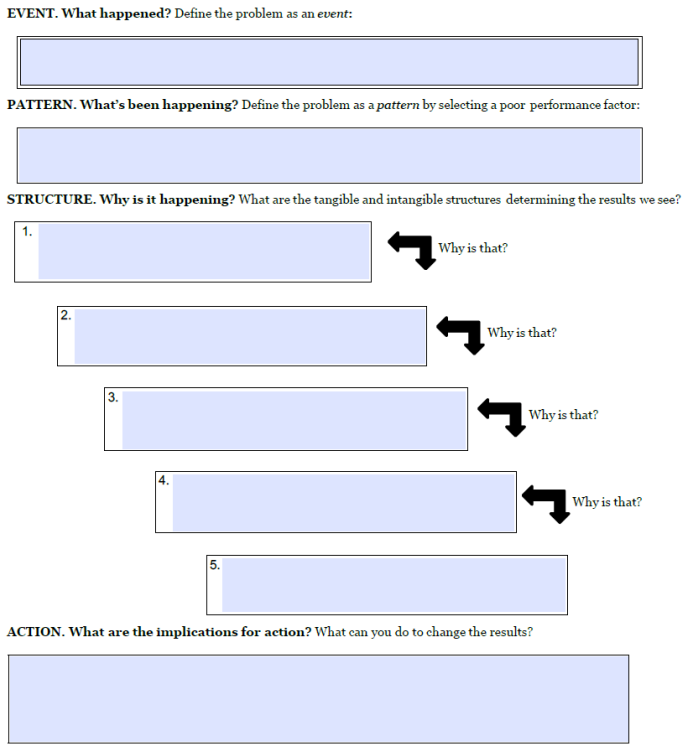


Reflections

- Action required when downward trend identified
- Improvement established last week of Sep
- Find out what happened 9/14
- Fewer runs likely due to the positive shift

REGLANTERN

Root Cause Analysis – 5 Whys



1. Gather a group of interprofessional stakeholders who are familiar with the problem or event you are exploring.
2. Define the problem or event in clear, plain language.
3. Define the problem as a pattern and not just as an isolated event.
4. Ask "why" five times (at least) until you get to the root cause of the problem.
5. Explore the best way to solve the problem and make the subsequent changes to the system to ensure it doesn't happen again.

https://www.ihi.org/resources/Pages/Tools/5-Whys-Finding-the-Root-Cause.aspx

EVENT. What happened? Define the problem as an *event*:

9/14 was the lowest screening day in the past month.

PATTERN. What's been happening? Define the problem as a *pattern* by selecting a poor performance factor:

A downward trend was detected in the Breast Cancer Screening data.

STRUCTURE. Why is it happening? What are the tangible and intangible structures determining the results we see?

1. Fewer women had mammograms completed in the last 2 years. → Why is that?

2. Several patients had the mammogram just beyond the required time frame in the past. → Why is that?

3. We held a screening mammogram event for patients about this time 2 years ago, not since. → Why is that?

4. We have not maintained the partnership with the local hospital to have their mobile van come. → Why is that?

5. We have not clarified who will own this relationship and ensure this is scheduled.

ACTION. What are the implications for action? What can you do to change the results?

- Identify the team member accountable for this relationship.
- Schedule the mammography mobile van to come to the clinic.
- Send a scheduling reminder to those patients overdue and almost due for mammograms

Conclusion

RECAP

- Quality Control is about prevention of errors and detecting changes. Quality Control leads to improvement efforts and maintains improvements over time.
- Quality Control efforts are conducted close to the work and provide opportunities to correct the process.
- We can use Run Charts to detect shifts, trends, runs, and astronomical data.
- These may lead us to conduct a Root Cause Analysis.

Next Steps

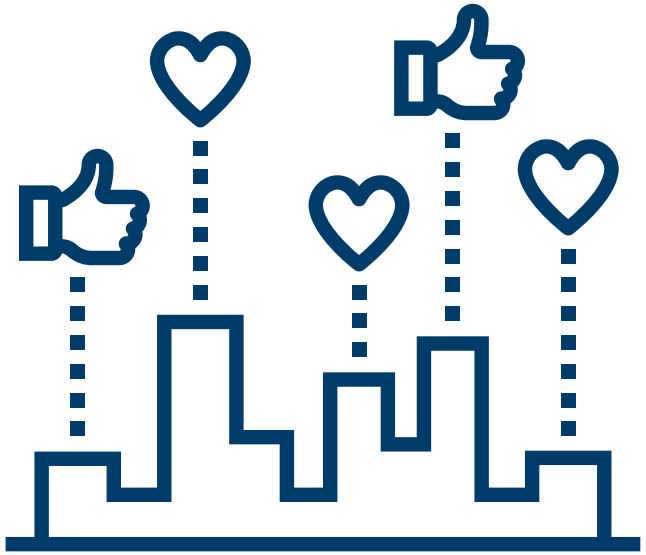
- Use the sampling template, as needed.
- Complete a Run Chart for a measure you are tracking.
- Complete a Root Cause Analysis for a patient that does not meet a measure.
- Continue with PDSA / Improvement Cycle.

Webinar #2 and Session #4 Dates

Webinar #2: October 19 @ 2PM

All times are 2PM Eastern / 11AM Pacific

- **Cohort A**: October 26
- **Cohort B**: October 24
- **Cohort C**: November 2
- **Cohort D**: October 31



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The NACHC Quality Center team is here to help!

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