

Indian Health Service

Clinical Documentation Improvement (CDI)

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Clinical Documentation

Catalyst for medical necessity, coding, billing and auditing

Provides evidence of quality and continuity of patient care

Coding and reimbursement professions involved

Consistency and attention to detail



Good Documentation

Medical record should be complete and legible

Documentation should include:

- Reason for the encounter (chief complaint)
- Relevant history (related to why the patient is here)
- Physical Examination (findings, observations)
- Test ordered and their results
- Assessment (clinical impression or diagnosis)
- Plan of care
- Date and signature of provider



Additional Items

Rationale for ordering diagnostic or ancillary services should be documented or easily inferred

Past and present diagnoses available for review

Health risk factors should be identified

Documentation should support charges submitted on claim form

Medical record should be:

- Complete
- Concise
- Legible
- Timely



Department of Health and Human Services (DHHS) Documentation Guidelines

Documentation:

- Timely, accurate and complete
- Appropriate for diagnoses and treatment

Medical Record Documentation:

- Site of service
- Appropriateness of service
- Accuracy of billing
- Identification of service provider



Documentation Improvement in Physician Practice

Education

Documentation Improvement Programs

Physician Queries

Follow-up, Repetition, and Persistence



Common Errors for CDI

Upcoding

Unbundling

Lack of medical necessity

Mismatched treatment/diagnosis codes

Typos in note

Not listing start and end times

Not listing where the patient and provider are located for telemedicine encounters



Quality Improvement



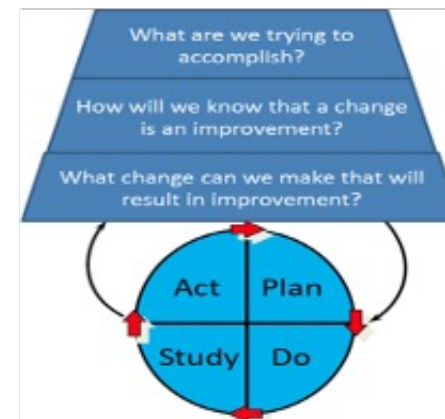
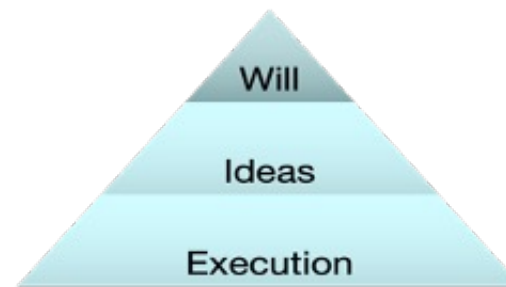
Quality Improvement – An Introduction

What is Quality Improvement?

The Fundamental Law of Quality Improvement

Three Necessary Ingredients

Three Necessary Questions



The Fundamental Law of Improvement

“All improvement requires change, but not all change leads to improvement”

Example:

Goal:

- Lose Weight

Change 1:

- Buy more Veggies

Was it an improvement?

- No, they spoiled in my fridge

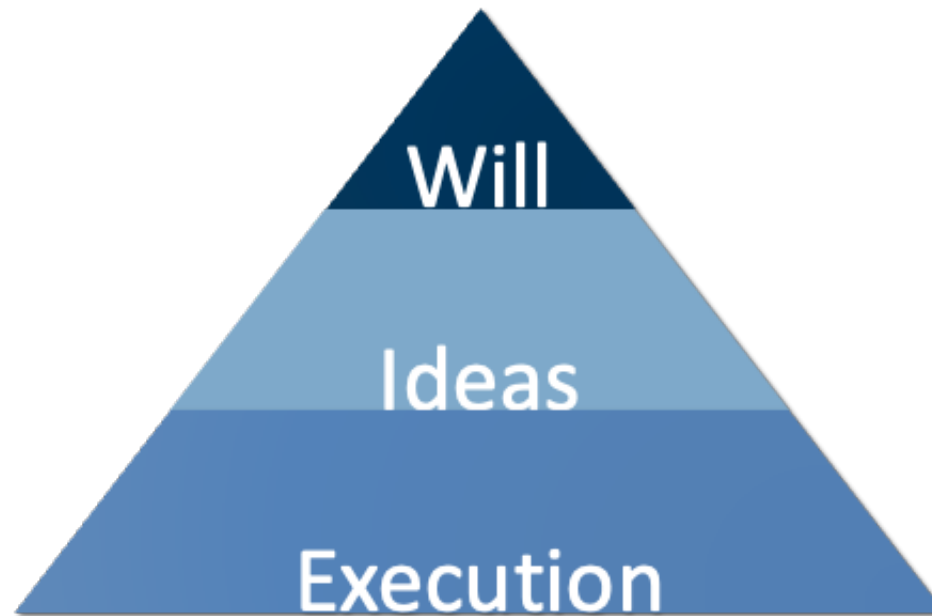


3 Necessary Ingredients

The Will to Change

Ideas for Improvement

Execution Strategies

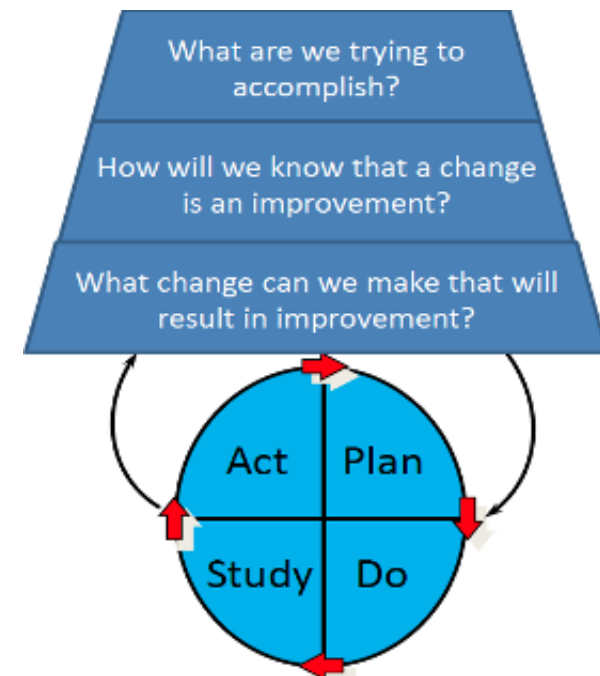


3 Necessary Questions

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will lead to improvement?



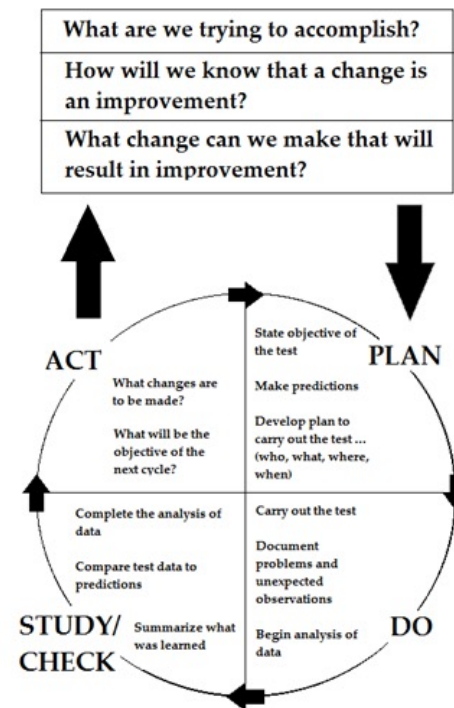
Model for Improvement

Simple Yet Powerful

Developed By Associates in Process Improvement

Two Parts

- Three Fundamental Questions
- Plan-Do-Study-Act Cycle



What Are We Trying to Accomplish?

Importance of a Project Aim:

Provides:

- Who Will Be Working On It
- What Will Be Worked On
- When It Will Be Worked On

Keeps Team Focused on Set Goals

- Can Be Modified As Project Progresses



How Will We Know A Change Is An Improvement?

Measurement:

Qualitative:

- Deals with Descriptions
- Data Can Be Observed but Not Measured
 - Staff/Patient Satisfaction
 - Written (narrative) feedback, rather than a number

Quantitative

- Deals with Numbers
- Data Can Be Measured
 - GPRA Measures, DM Audit Measures



What Changes Can We Make That Will Result In An Improvement?

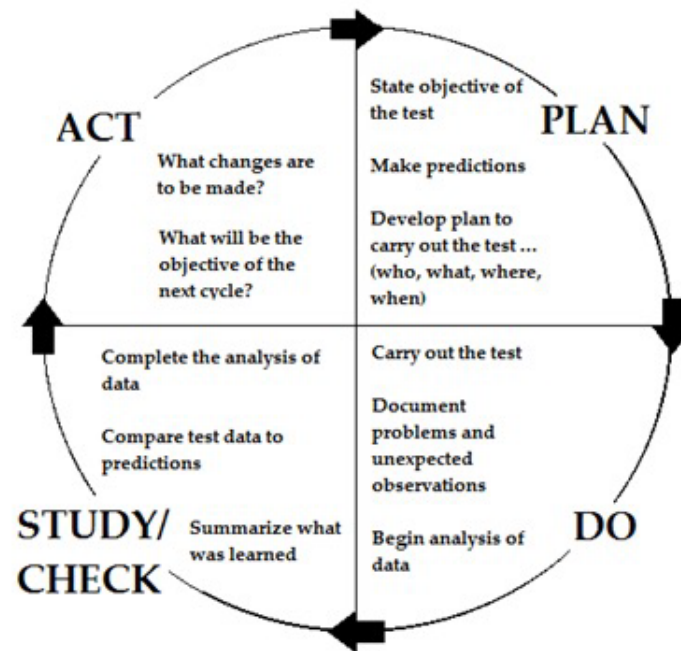
Multiple Small Scale Tests

Brainstorm Ideas

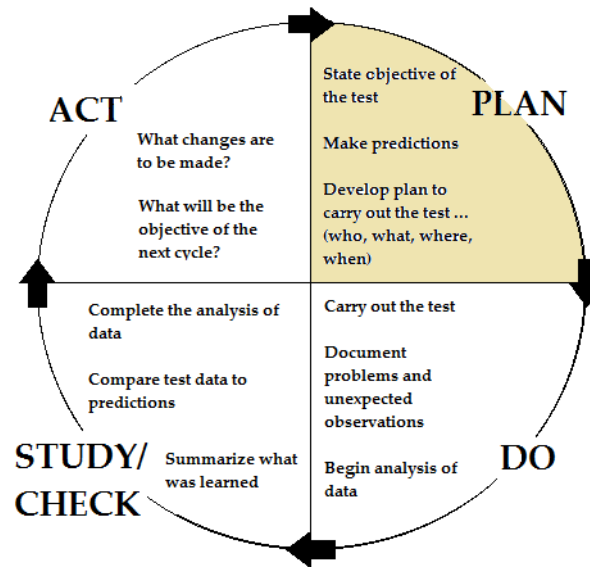
Obtain Quick Feedback

Modify Tests Along the Way

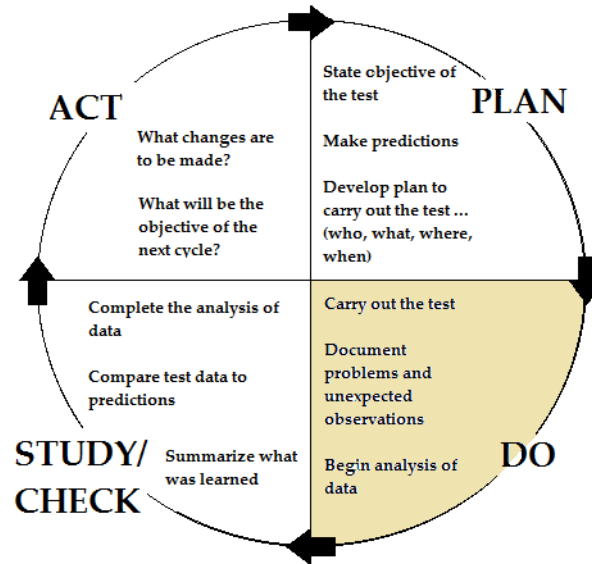
Spread Successful Tests



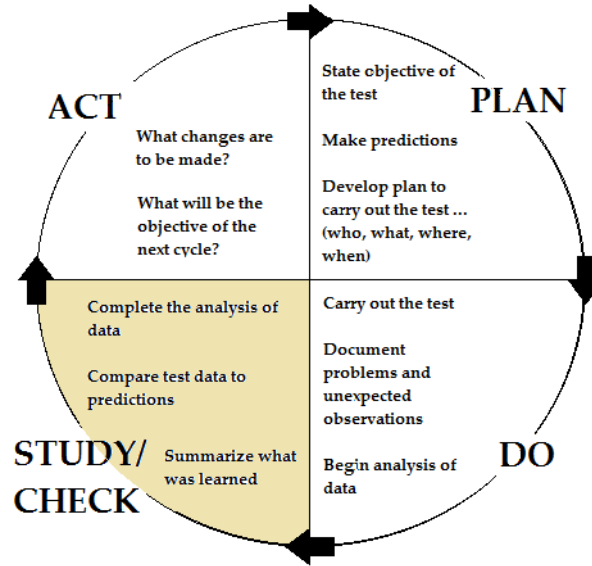
Plan-Do-Study-Act (PDSA)



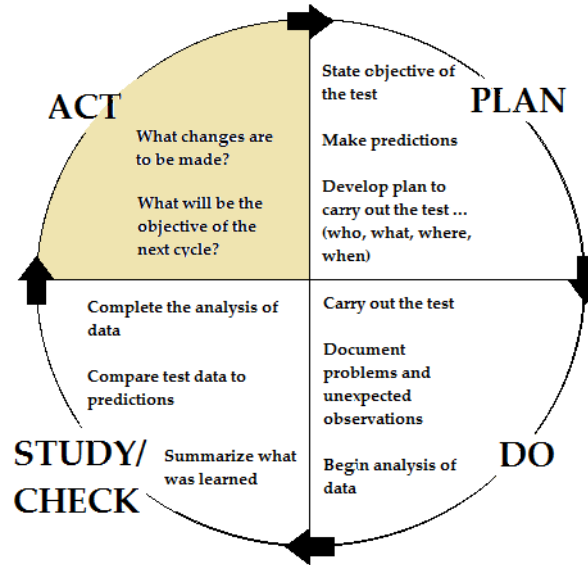
Plan-Do-Study-Act (PDSA)



Plan-Do-Study-Act (PDSA)



Plan-Do-Study-Act (PDSA)



Plan-Do-Study-Act (PDSA)

As a Model for Continuous Improvement

Starting a New Improvement Project

Developing a New or Improved Design or a Process, Product or Service

Defining a Repetitive Work Process

Planning Data Collection and Analysis

Implementing a Change



Plan-Do-Study-Act (PDSA)

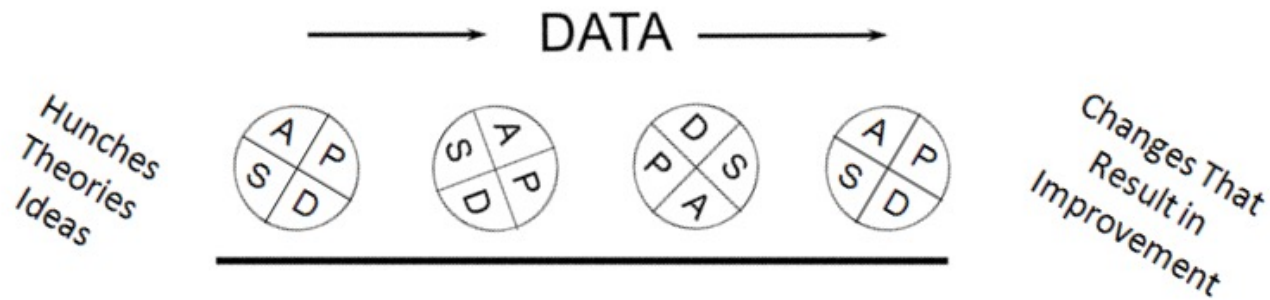
Increase Belief Change Will Result in Improvement

Small Tests = Small Risk

Rapid Cycle Testing = Quick Feedback

Multiple Cycles = Iterative Learning

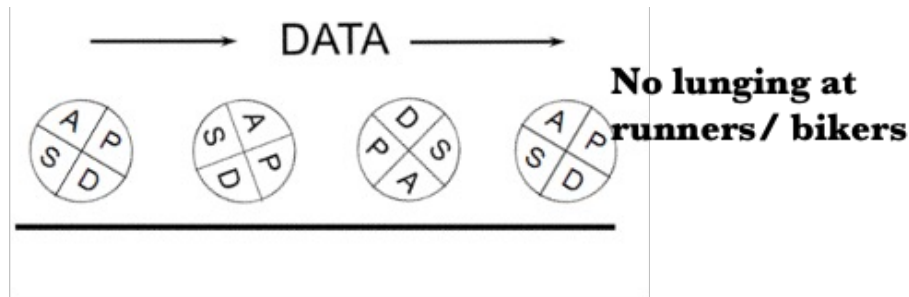
List of Changes & Outcomes for an Improvement Process



PDSA - Example

Aim: Peaceful Walk with my dog Dexter (Yes, after the serial killer)

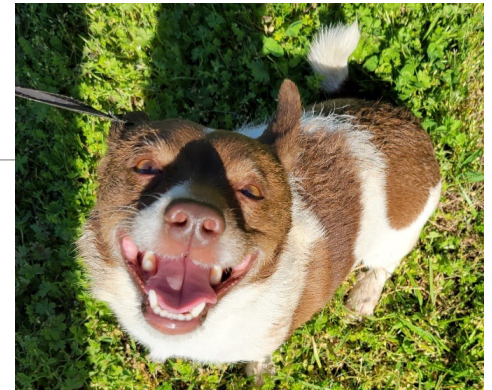
Stop Dexter from lunging and runners/bikers



Cycle 1:
Use a
Harness

Cycle 2:
Use just his
collar

Cycle 3:
Give treat
when they
approach



PDSA Worksheet

PDSA Worksheet for Testing Change

Aim: (overall goal you wish to achieve)

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do Describe what actually happened when you ran the test

Study Describe the measured results and how they compared to the predictions

Act Describe what modifications to the plan will be made for the next cycle from what you learned



PDSA Worksheet Example

Aim: (overall goal you wish to achieve)

Documentation to support medical necessity listed on 90% of Dr. X's encounters by the end of the 1st quarter of the year. Currently Dr. X puts diagnoses that are on the problem list in the encounters, without supporting documentation. The overall goal is to have each diagnoses utilized have corresponding documentation indicating it was addressed.

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done
Educate Dr. X on documentation requirements: <ul style="list-style-type: none"> - Each diagnosis utilized must have corresponding documentation to be on the encounter 	Kristina Rogers	08/26/24	Schedule virtual meeting with Dr. X, will send calendar invite

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done
<ul style="list-style-type: none"> - Learn and understand the documentation requirements - Understand how the problem list works - Understand how the template Dr. X is using works 	Kristina Rogers	08/19/24	At worksite

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds
<ul style="list-style-type: none"> - Dr. X will attend the call - Visits will have necessary information moving forward 	<ul style="list-style-type: none"> - Did he attend: Yes or No - Random Sample of visits (10) over the next week to see if they have necessary information



PDSA Worksheet Example

Do **Describe what actually happened when you ran the test**

Dr. X showed up to the call, but was very distracted. He had people coming in and out of his office, he was not really paying attention and I'm not sure he grasped the information.

Study **Describe the measured results and how they compared to the predictions**

Dr. X did show up, but he was unreceptive to the information and his documentation didn't change.

Act **Describe what modifications to the plan will be made for the next cycle from what you learned**

Go onsite to provide training one-on-one where there can't be any distractions.

Contact his supervisor to ask for some intervention and assistance.

Work with him to improve the EHR template to make it more receptive to needs of both parties.



Quality Tools

PROCESS ANALYSIS

CAUSE ANALYSIS

DATA COLLECTION & ANALYSIS



Process Analysis

FLOWCHART

SPAGHETTI DIAGRAM



Process Flowchart

WHAT IT IS

First Step to Improve

Visual Picture

Shows Interactions

WHEN TO USE IT

Establish “as is”

Identify Waste

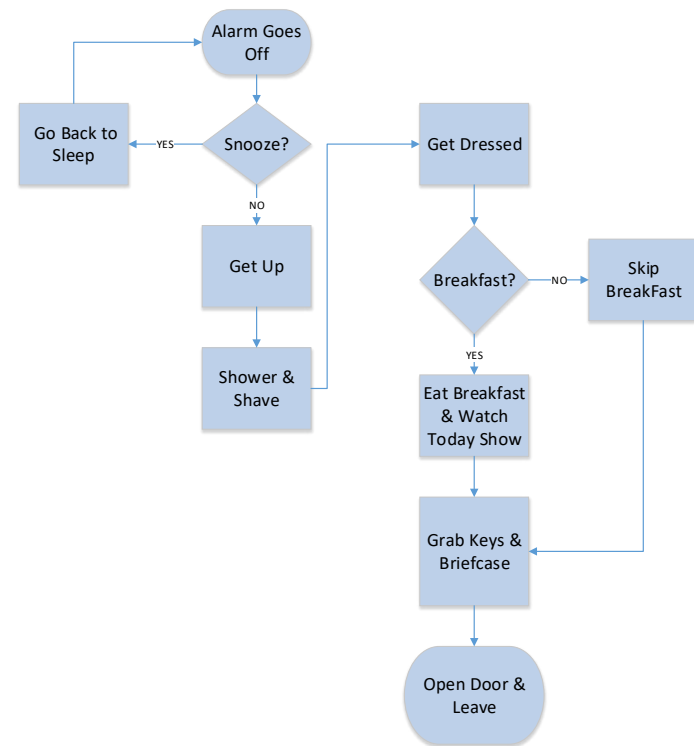
Uncover Variation

Show/Train Employees



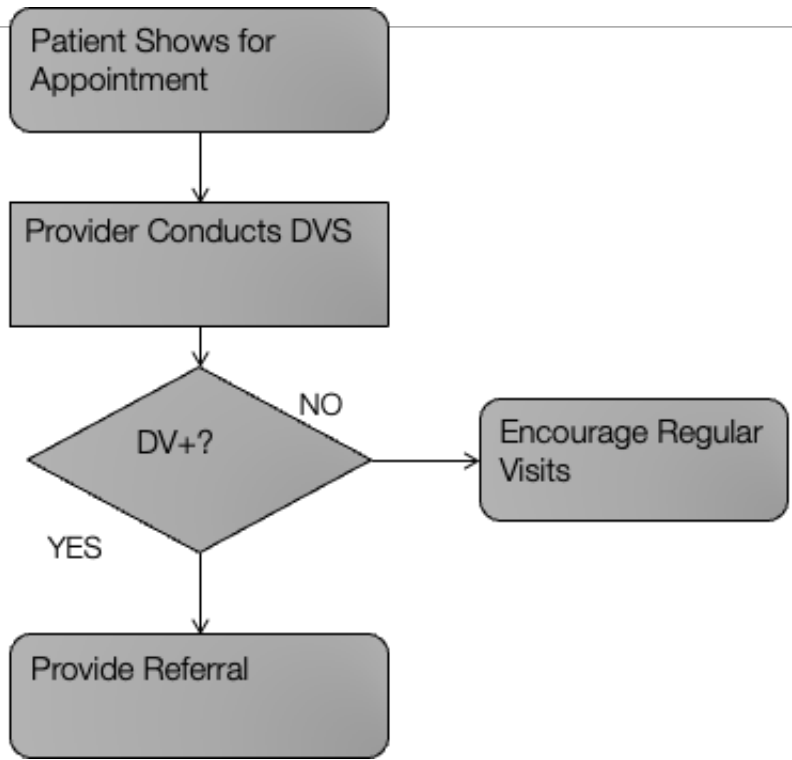
Dos & Don't to Flowcharting:

- Do Talk with other people involved in the process
- Do define the beginning and end points up front
- Do flowchart at a high level
- Don't attempt to start without boundaries
- Don't get bogged down with too much detail



How to Use It

- Clearly Define the Process to Study
- Set the Boundaries (start & end points)
- Decide on Level of Detail
- Gather Information and Develop the Chart
- Use Common Set of Symbols
- Identify Bottlenecks, Rework, etc.



Spaghetti Diagram

WHAT IT IS

Visual Representation

Continuous Flow Line

WHEN TO USE IT

Analyze Work Flow

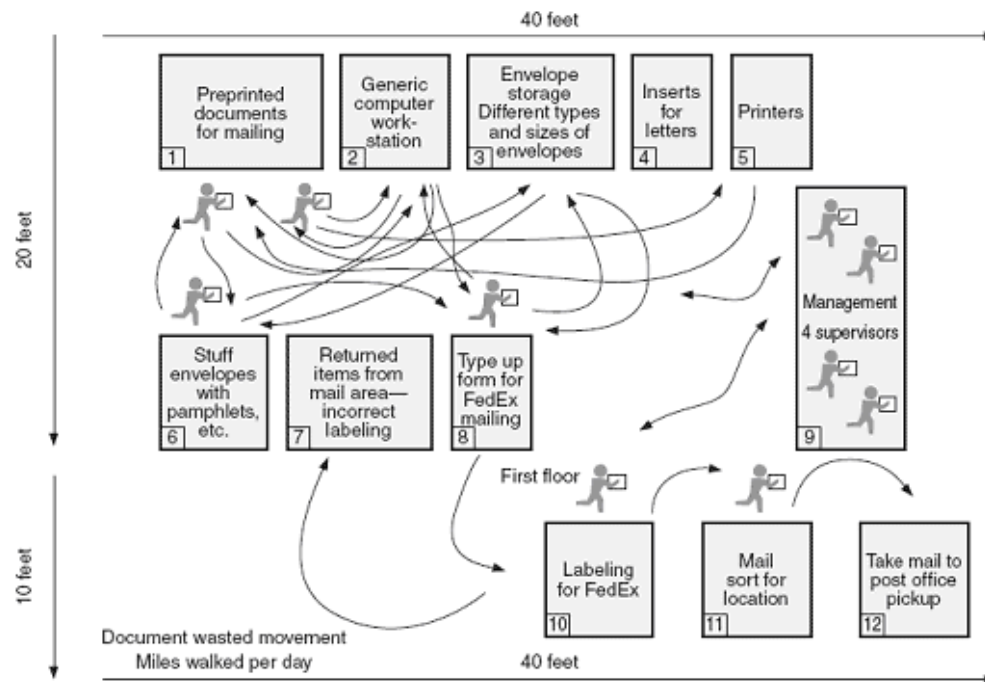
Remove Wasted Motion

Remove Waiting

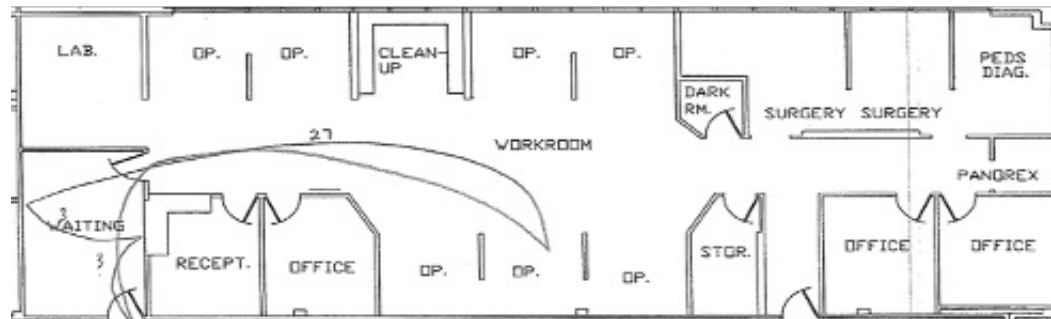
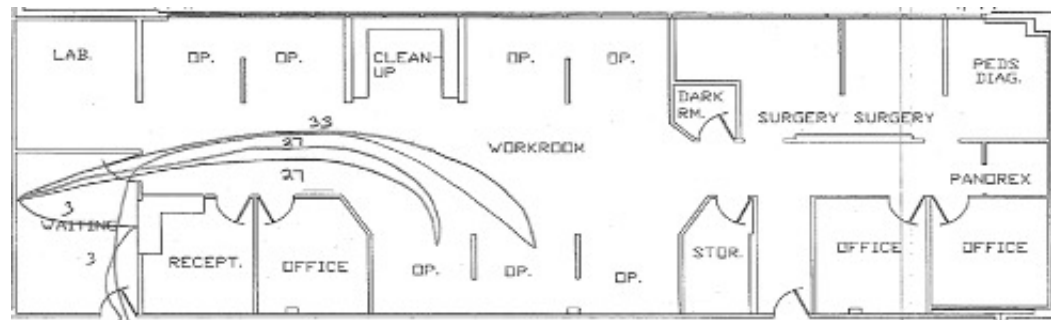
Bonus: Staff Collaboration



Example 1



Example 2



Cause Analysis

5-WHYS

CAUSE & EFFECT DIAGRAM



Five Whys

WHAT IT IS

Questioning Process

Clarify & Refine Problems

Uncover Symptoms

WHEN TO USE IT

Investigate a Problem

With Brainstorming

Seeking Solutions



Example: 5 Whys

A patient received the wrong medication.

- 1) Why did the patient receive the wrong medication?
 - The nurse did not complete patient identification.
- 2) Why did the nurse not complete patient identification?
 - The patient did not have a wristband.
- 3) Why did the patient not have a wristband?
 - The wristband had been removed for a procedure and not replaced.
- 4) Why was the wristband not replaced?
 - The printer for the wristbands was not working.
- 5) Why was the printer not working?
 - The staff needed to support IT had been reduced and was overworked.



How to Use It

Describe the Problem in Specific Terms

Ask Why It Happens

Ask Why Again (if no root cause is identified)

Ask Why Until Root Cause Surfaces

Focus on Process Aspects



Cause-and-Effect Diagram

WHAT IT IS

Relates Symptoms to Causes

Systematic Approach to Root Cause

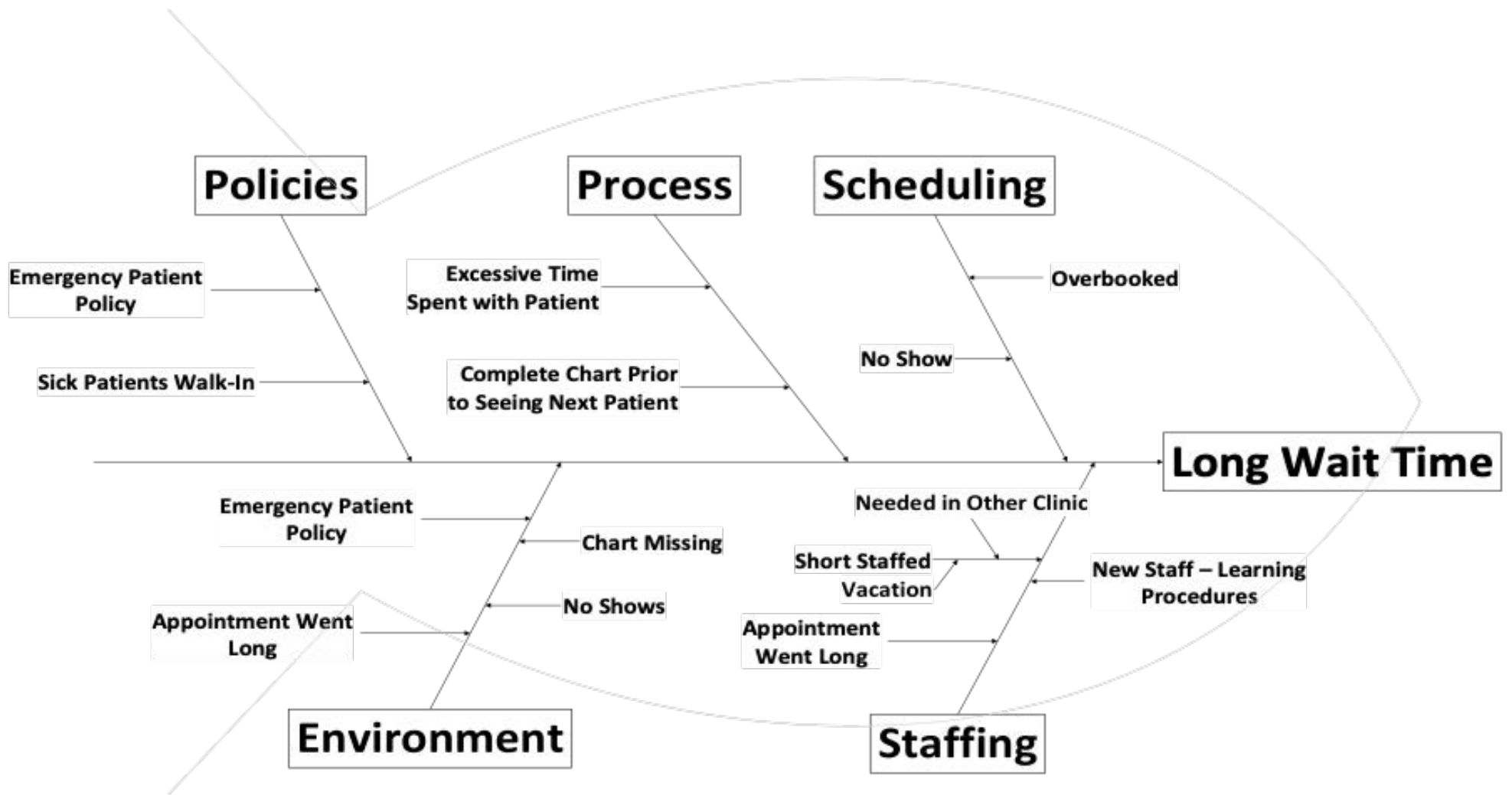
WHEN TO USE IT

Consider All Contributing Factors

Determine Primary & Secondary Causes

Alternative Approach





How to Use It

Write the Issue as a Problem Statement

- The Issue is Now the Effect

Brainstorm Main Causes of the Effect

Create Main Headers

- Four M's – Manpower, Materials, Methods, Machinery
- People, Policies, Processes

Brainstorm Sub-Causes for Main Causes (5-Whys)

List Sub-Causes with Arrows

Once Complete, Decide the Few Areas to Focus On



Data Collection & Analysis

PARETO CHART

RUN CHART



Pareto Chart

WHAT IT IS

Prioritized bar graph

Visually depicts most significant factors

Shows where to focus efforts

Helps break down big problems into smaller pieces

WHEN TO USE IT

Analyzing frequency data

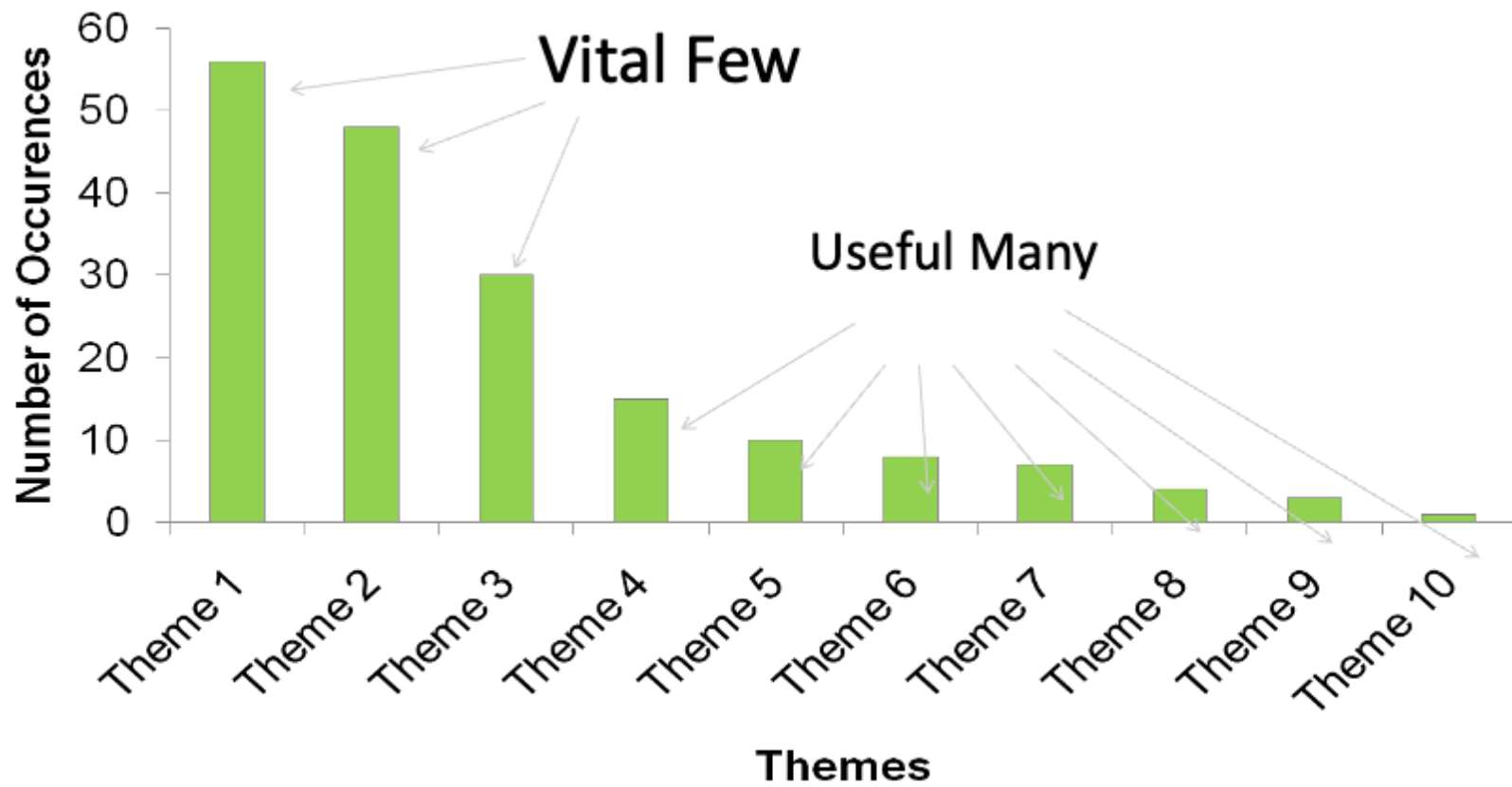
Focusing on significant problems or causes

Analyzing broad causes

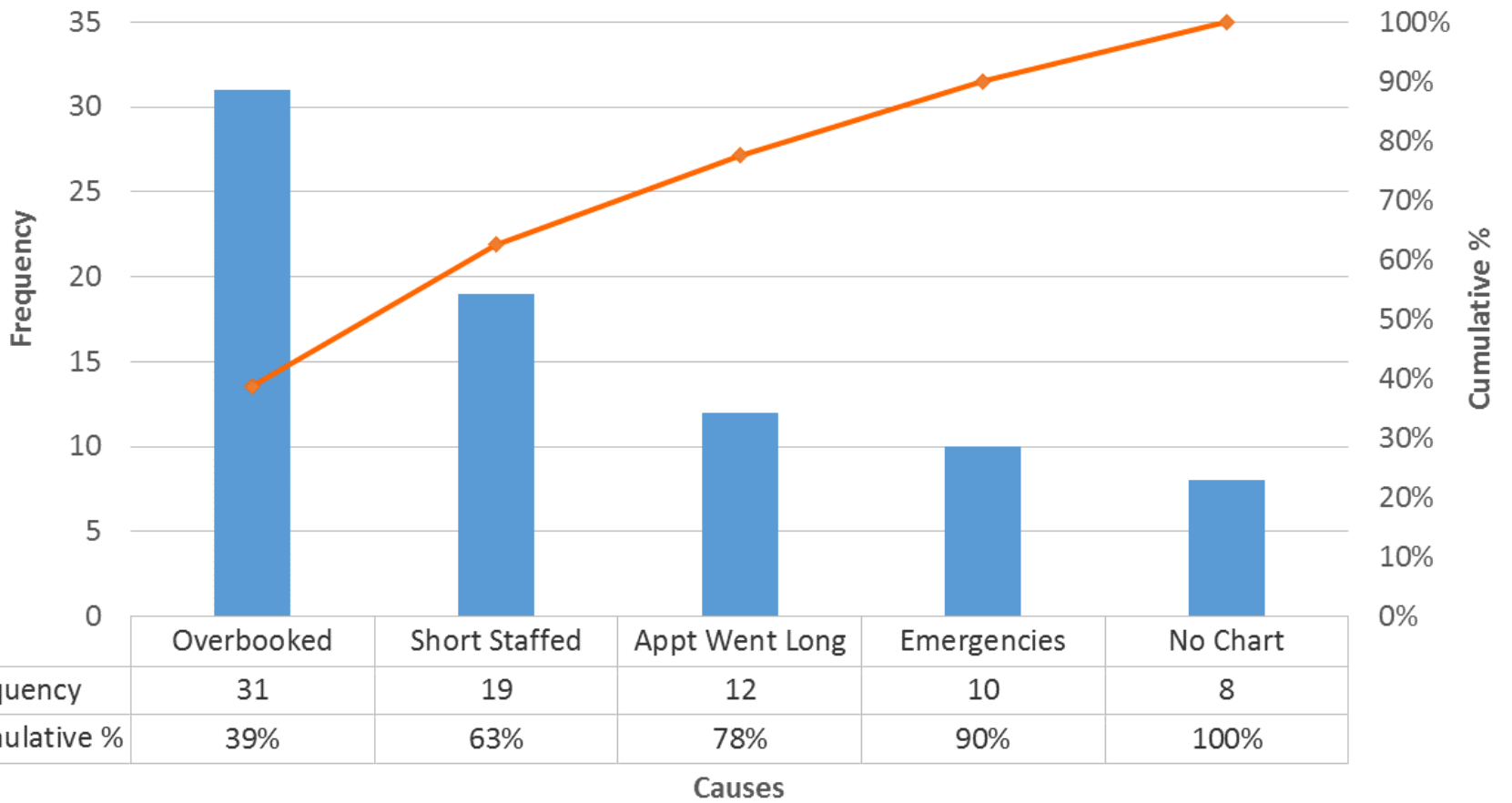
Communicating with others about data

Decide which areas to focus improvement efforts





Long Wait Times (20 min +)



How to Use It

Pick categories to group items and decide on the type of measurement (frequency, quantity, cost, time, etc.)

Record or collect the data, record the category each time

Subtotal and order the data for each category

Label the left-hand vertical axis, equal intervals from 0 to a round number equal to the largest subtotal from step 4

Label the bottom horizontal axis with the categories, place the largest to the far left, then the next tallest to and so on

Plot a bar for each category

Add title, legend (optional) and a date (optional)

Identify the vital few and the useful many



Run Chart

WHAT IT IS

Line Graph of Variability

Displayed Over Time

Median as Centerline

WHEN TO USE IT

Plot Data Over Time

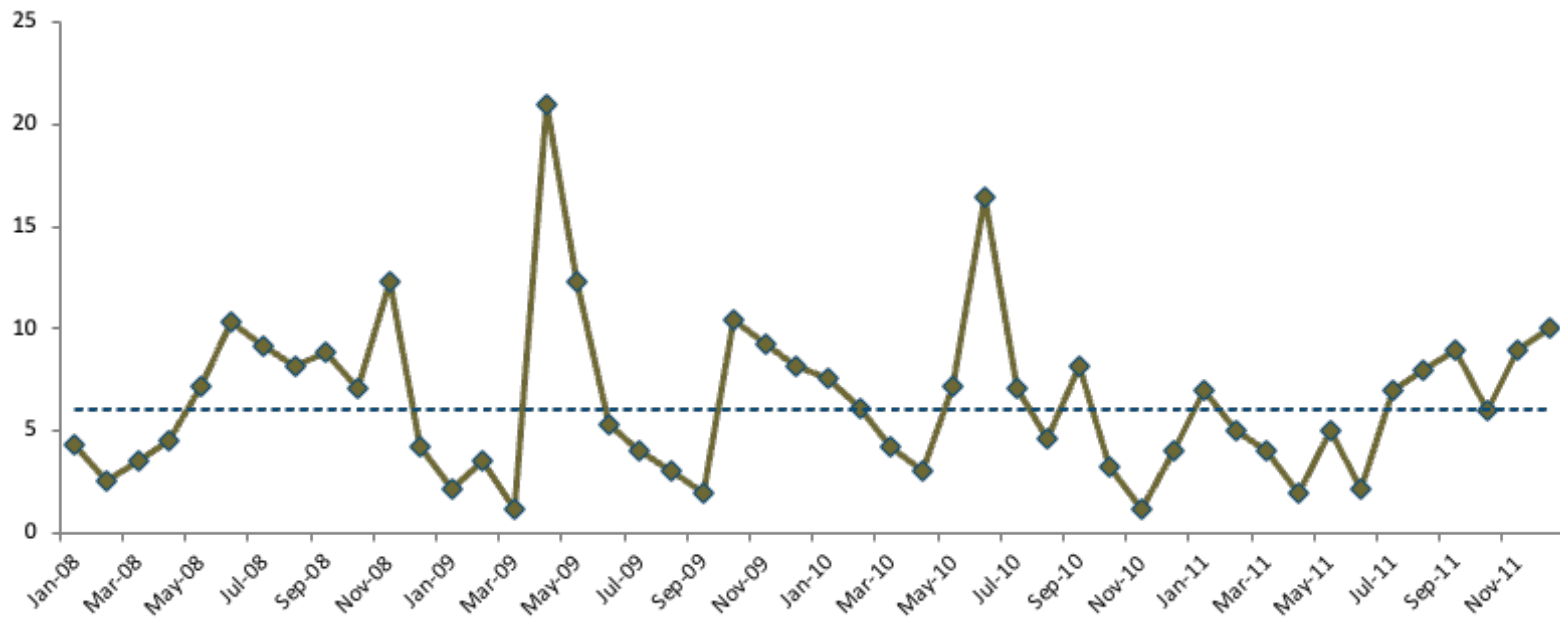
Show Performance

Confirm Knowledge

Identify Non-Random Patterns (signals)



Example



Median

Definition:

The middle number in a given sequence of numbers

Used as the centerline to provide the point at which half the observations are expected to be above or below and the median is not influenced by extreme values in the data



Calculating the Median

Sort the data points – lowest to highest

Odd # of data points*:

- $(n+1)/2$ = spot in sequenced #'s, then go back to the list and the number in that spot is the Median

Even # of data points*:

$(n+1)/2$ = decimal value that is spot in sequenced #'s, there will be two values identified - average the two values identified and get the Median

*n = # of data points



Calculating the Median - Example

13, 18, 13, 14, 13, 16, 14, 21, 13



13, 13, 13, 13, 14, 14, 16, 18, 21

$(n+1)/2 = (9+1)/2 = (10)/2 = 5\text{th \# in sequence}$

Median = 14



Calculating the Median - Example

8, 9, 13, 10, 10, 11, 11, 12, 11, 10



8, 9, 10, 10, 10, 11, 11, 11, 12, 13

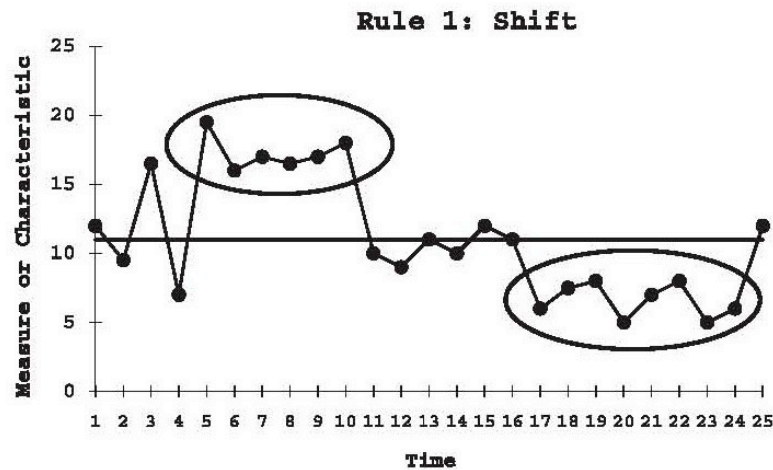
$(n+1)/2 = (10+1)/2 = 5.5$ th number in sequence

Median = $(10+11)/2 = 10.5$

Rules to Interpret a Run Chart

Rule # 1 – Shift:

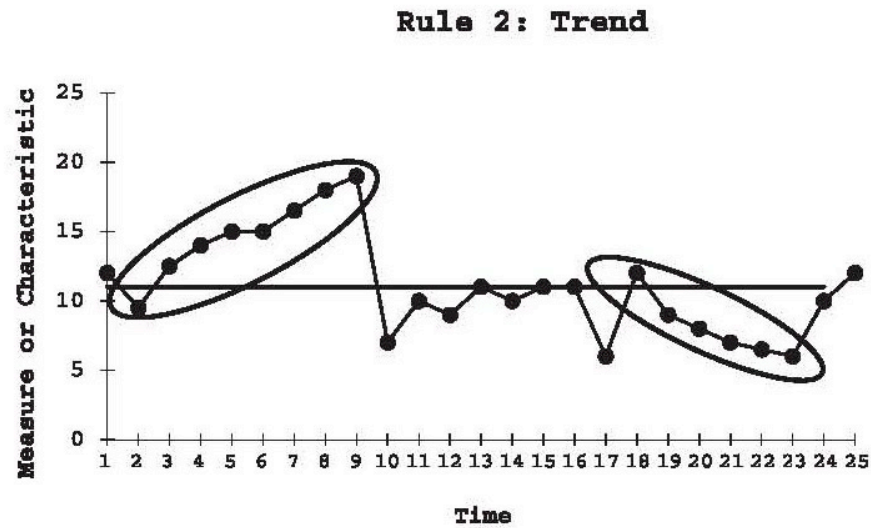
Six or more consecutive points either all above or all below the median.
Do not count points that fall on the median.



Rules to Interpret a Run Chart

Rule # 2 – Trend:

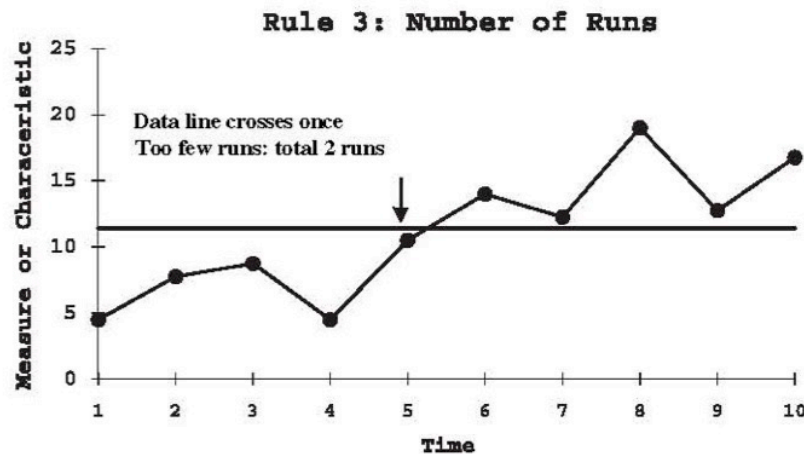
Five or more consecutive points all going up or down. Only count like values one time.



Rules to Interpret a Run Chart

Rule # 3 – Runs:

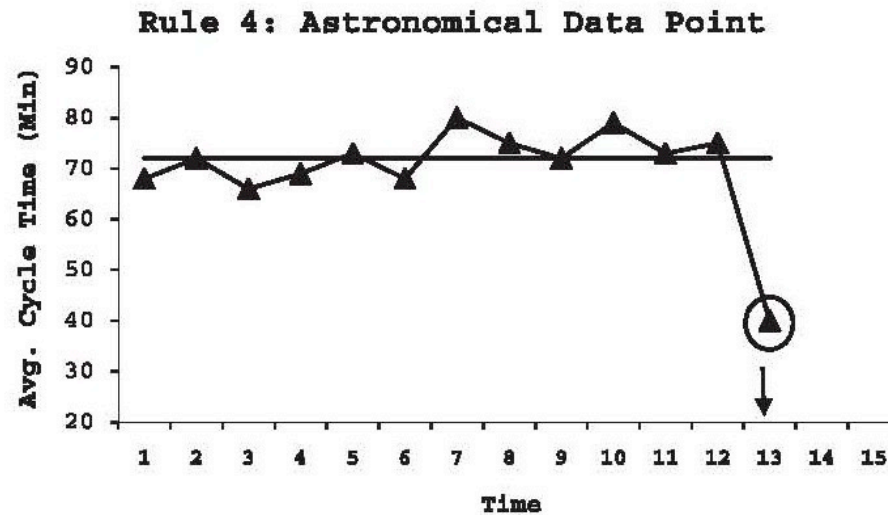
Series of points in a row on one side of the median. Count the number of times the line connecting the data points crosses the median and add one.



Rules to Interpret a Run Chart

Rule # 4 – Astronomical Point:

A point that is obviously different from the rest of the points



How to Use It

Clearly Define a Process

Design Data Strategy

- 25 Data Points/Samples Minimum

Collect Data & Determine the Median

Review the Chart

Understand Reasons of Unusual Patterns



Summary

Clinical Documentation Improvement

The difference between Quality Improvement and Quality Assurance

Will, Ideas and Execution

Necessary questions

Model for Improvement

Plan-Do-Study-Act Cycles

Quality tools – Process analysis, cause analysis and data collection/analyses



References

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