



April 2023

Improvement Coaching Workshop

Day 1

California Quality Collaborative



California Quality
Collaborative

Welcome!

W E L C O M E

Orientation!



Materials to Support Your Learning

- Agenda
- Participant Workbook
- Event Evaluation

Logistics

- Food & Refreshments
- Restrooms
- Parking

Ground Rules



- Take care of yourself
- All voices heard
- Be present
- Have fun

Achievement Based Objectives (Day 1)

- **Created** a SMARTIE project Aim Statement
- **Developed** a set of project measures
- **Practiced** analyzing run charts
- **Demonstrated** brainstorming
- **Developed** driver diagrams
- **Practiced** process flow mapping
- **Conducted** rapid improvement cycles (PDSAs)



Workshop Faculty



Peter Robertson
Senior Director,
Practice Transformation

probertson@pbgh.org



Kristina Mody
Associate Director,
Practice Transformation

kmody@pbgh.org



Jose Ordonez
Manager,
Data Analytics

jordonez@pbgh.org



Felicia Skaggs
Senior Manager,
Behavioral Health
Integration

fskaggs@pbgh.org



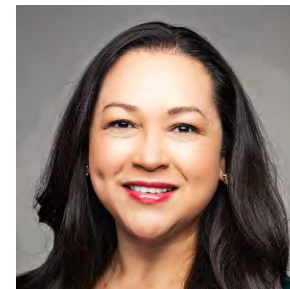
Erika Lind
Manager,
Care Transformation
Events and Learning

elind@pbgh.org



Carol Flores
Senior Manager, Equity
and Transformation

cflores@pbgh.org



**Daniela Vela
Hernandez**
CFHA Technical
Assistance Associate

dvhernandez@cfha.net

Workshop Participants

EQuIP-LA



CalHIVE BHI



Riverside Family Physicians

Introductions

Please share:

- Your name and role within your organization
- One thing you're looking forward to over the next two days





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Quality Improvement

What is it?

What is Quality Improvement?

When did you last participate in a QI effort?

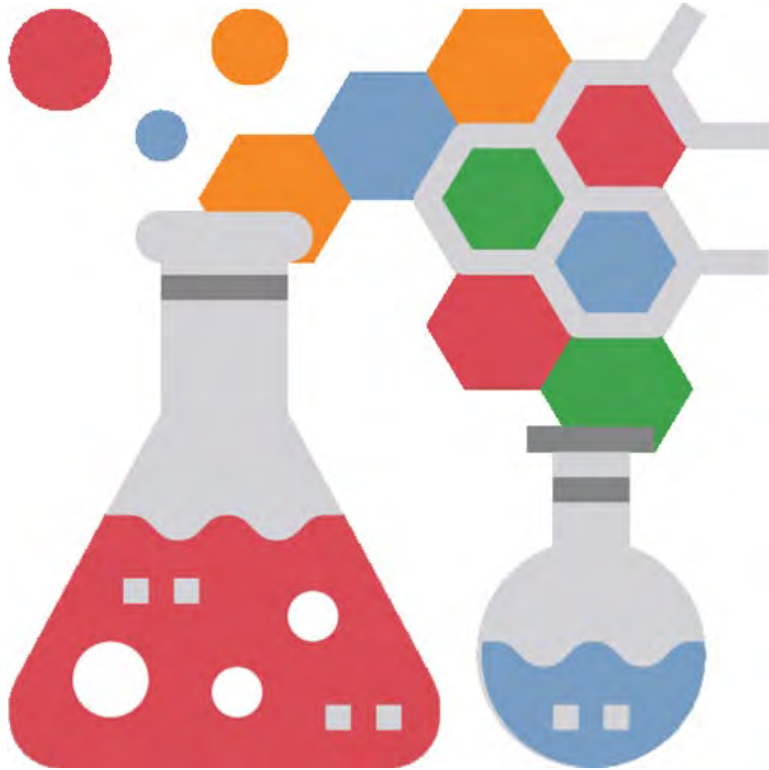


Quality Improvement Defined



“Quality improvement consists of systematic and continuous actions that lead to measurable improvement”

Elements of Quality Improvement



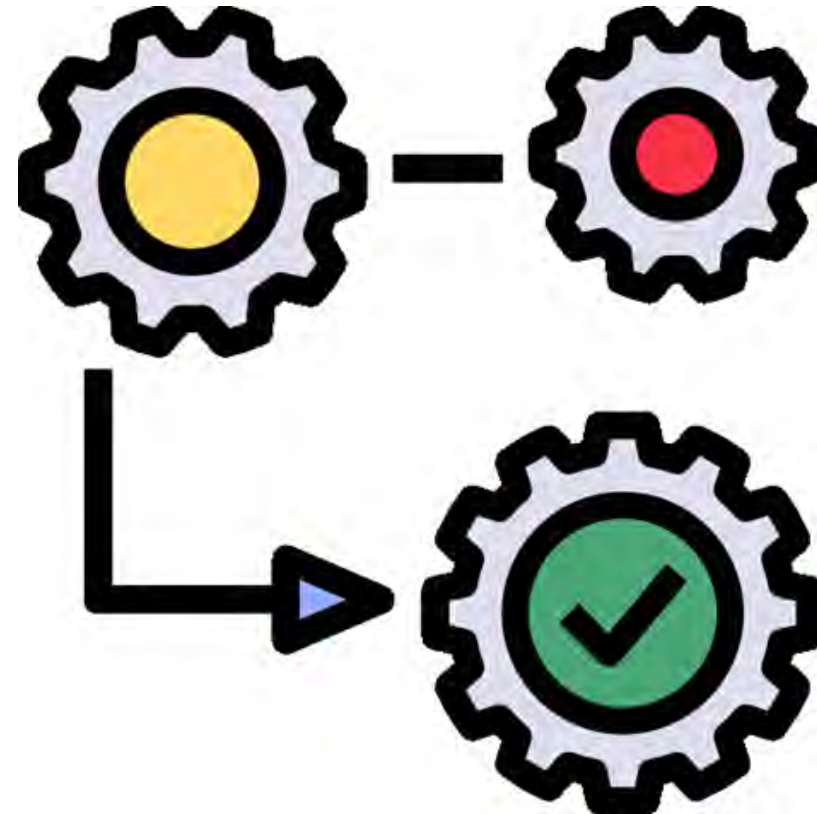
- Theory or hypothesis
- Regular, ongoing assessment and measurement
- System focused
- Reduction in variability

What is Quality Assurance?



What is Quality Assurance?

“The planned and systematic activities put in place to ensure that (quality) requirements for a product or service will be fulfilled.”



What is Quality Assurance?



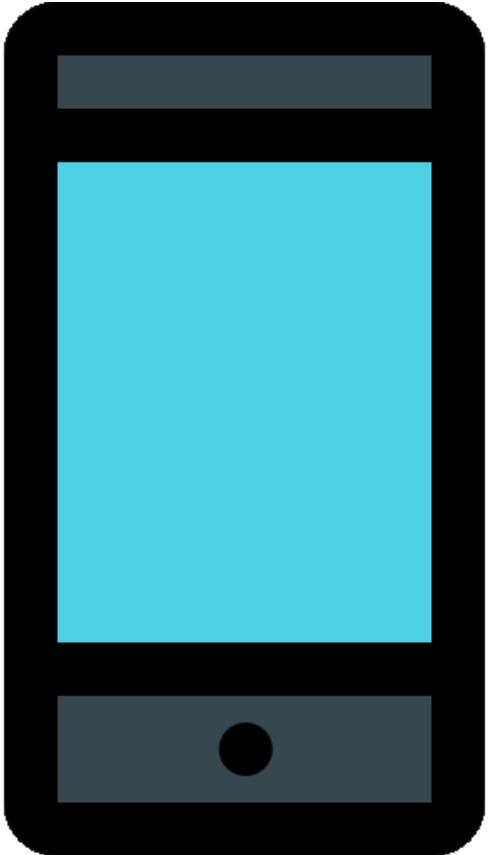
- Regulatory in nature
 - Also known as quality control
 - Ensure that requirements/guidelines met
- Uses inspection
 - Does a product/service meet standards?
 - Static in nature
- Examples:
 - Health Code for restaurants
 - Provider licensing
 - Accreditation Associations
 - Health Plan audits
 - Facility Site Visits

Why Quality Improvement?



“Improving quality is about making healthcare more safe, effective, patient-centered, timely, efficient and equitable.”

Take Out Your Cell Phone



How Do We Get Started?



Several Approaches/Models to Improvement

- Lean
- Six Sigma
- Juran Trilogy
- Focus PDCA
- Model for Improvement



A word about the Curriculum

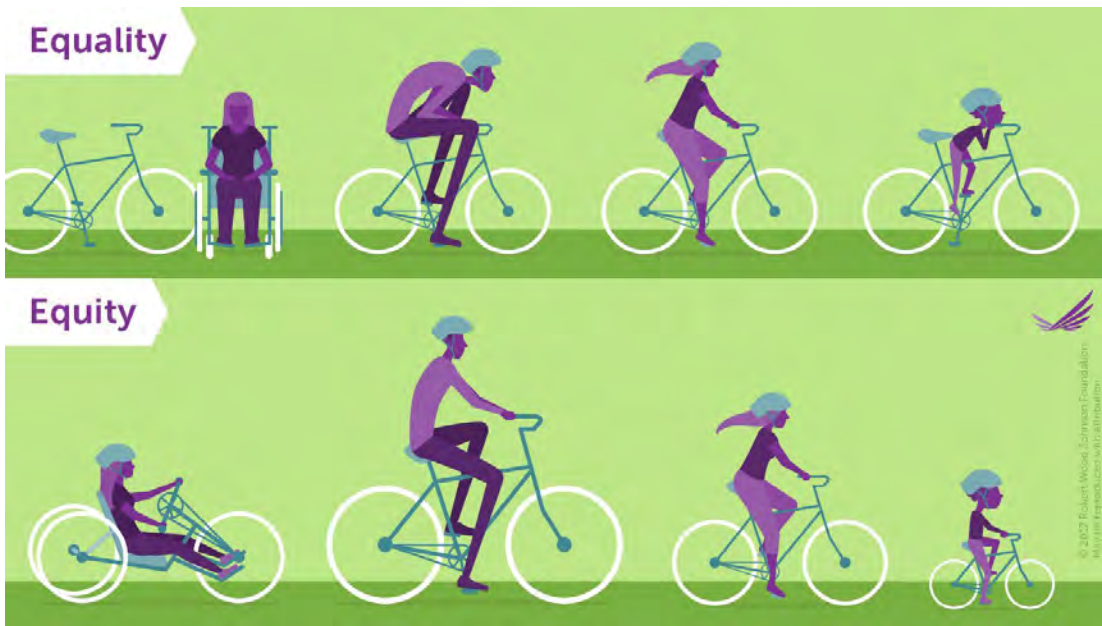
Some of today's materials were adapted from the following:

- The ABCs of QI
 - Developed with sponsorship from the California Health Care Foundation's California Improvement Network (CIN)
- ADVANCE Improvement Advisor Training
 - Developed by Partnership HealthPlan of California



Quality Improvement and Health Equity

“Improving quality is about making healthcare more safe, effective, patient-centered, timely, efficient and **equitable.**”



- **Health Equity** - is achieved when everyone has the opportunities and resources they need to be as healthy as possible and no one is disadvantaged due to social circumstances drivers or policies. Because structural racism has systematically denied opportunities and resources based on race, health equity is inextricably linked to racial equity.
- **Health Disparities** - are differences in health status rates between population groups
- **Health Inequities** - are those disparities that are due to differences in access to social, economic, environmental, or health care resources; health inequities are health disparities that are unfair and unjust

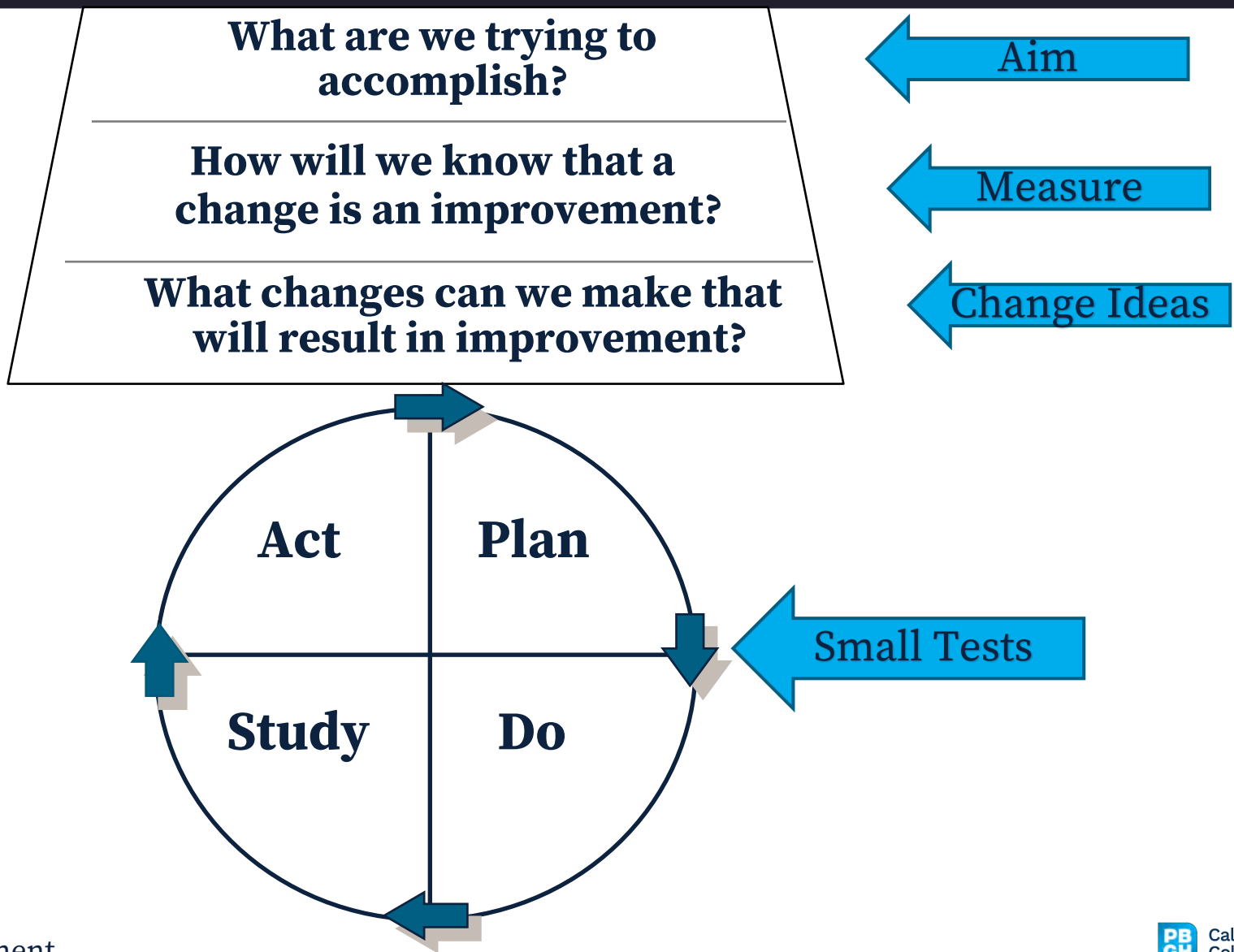
Equity-Focused Quality Improvement

- Align with organizational culture & values
- Incorporate equity throughout every stage of QI project
- Analyze and present data to identify inequities
- Co-design with family and community partners

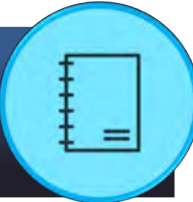
Sources: Lion, Zaro, Coker; [Pediatrics](#); March 2022

Michelle-Marie Peña, MD, Children's Hospital of Philadelphia, [CIN presentation](#), 2021

Model for Improvement



Model for Improvement: Equity Lens

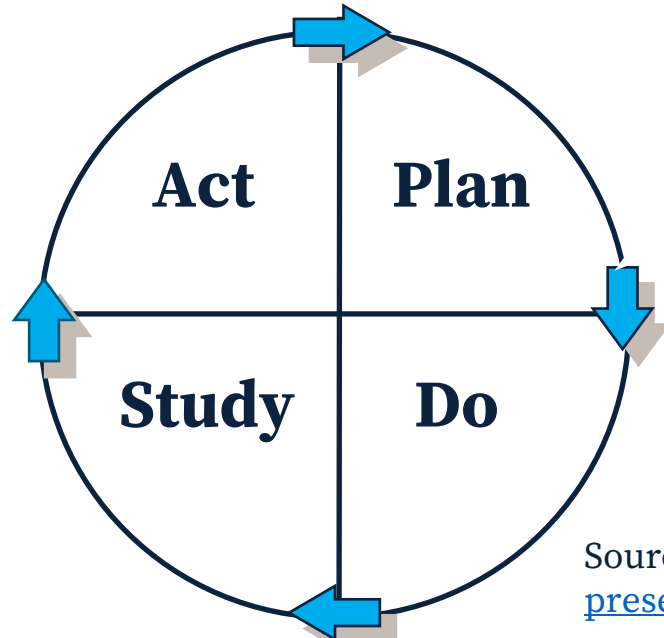


Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What changes can we make that will result in improvement?



**In which populations?
Experiencing what barriers?**

**For whom? Under what
circumstances? Who might we
miss?**

**Are there unintended
consequences? Do all receive the
benefits of the change equitably?
Will the change worsen
inequities?**

Let's Dive In





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What are we trying to accomplish?

Setting Aims

Model for Improvement: Equity Lens

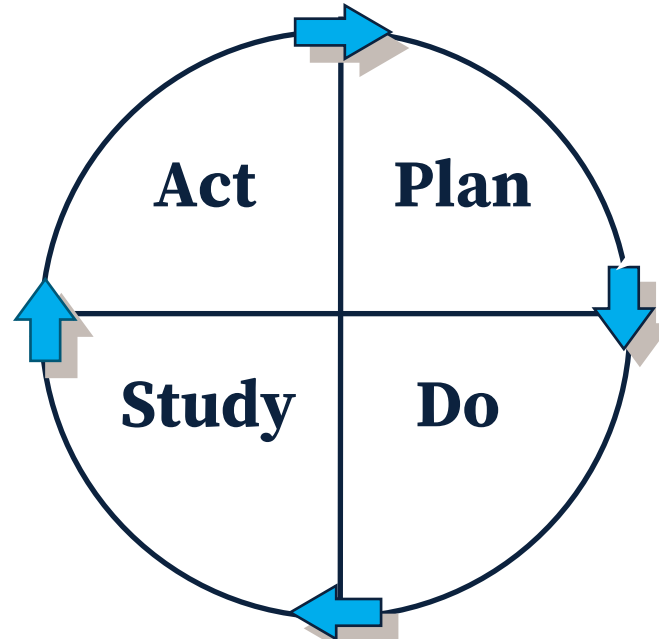
Aim Statement

What are we trying to accomplish?

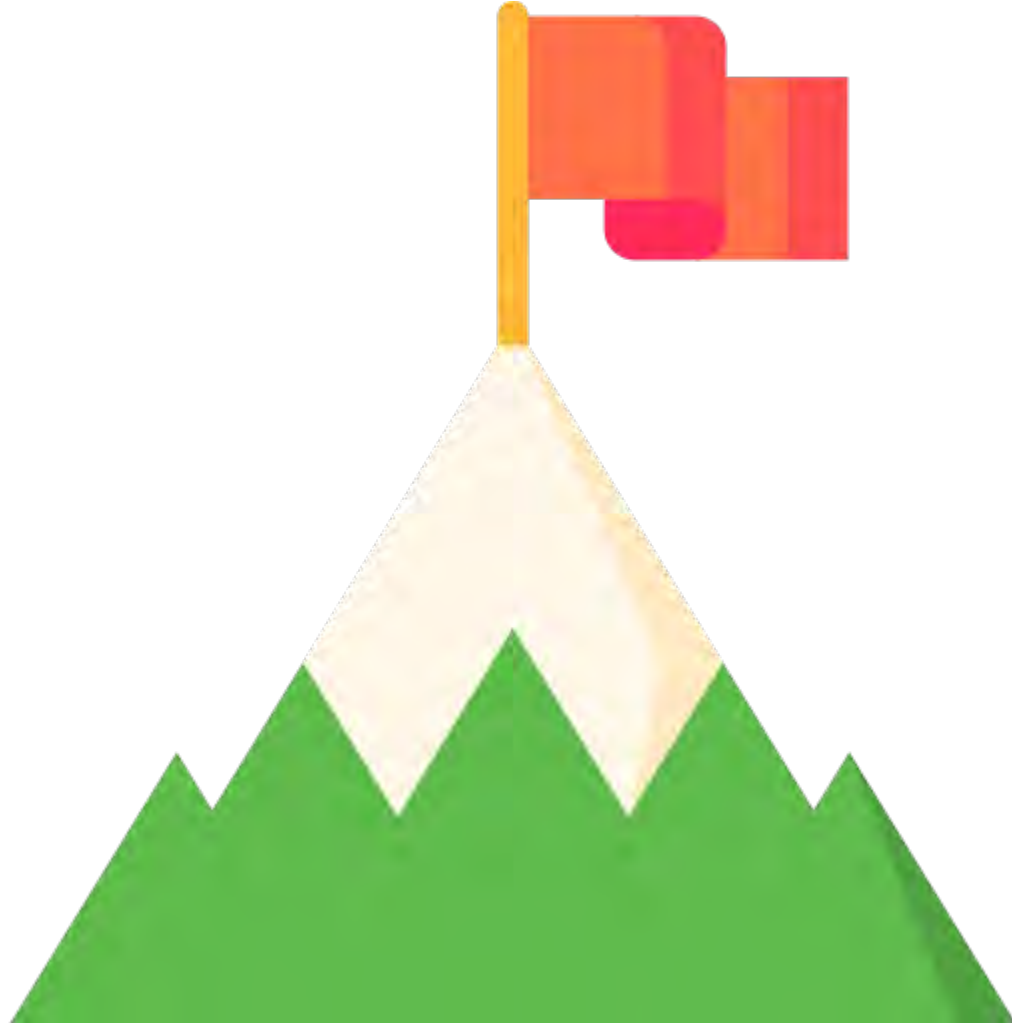
How will we know that a change is an improvement?

What changes can we make that will result in improvement?

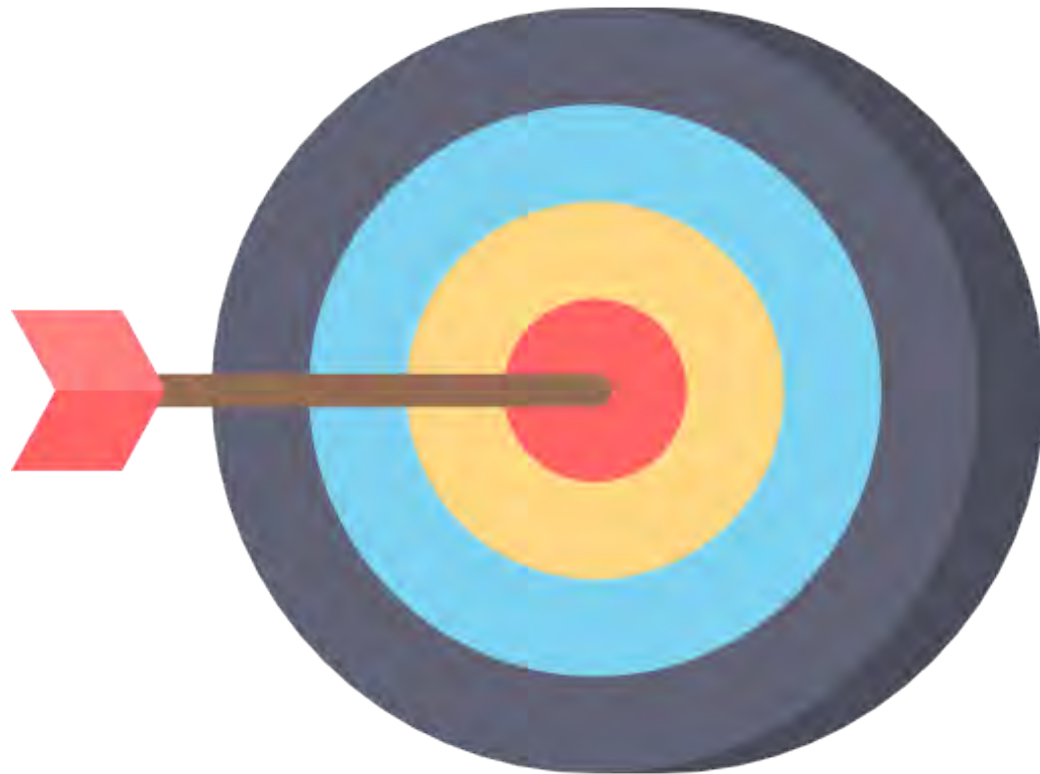
**In which populations?
Experiencing what barriers?**



Accomplishments



Why are Aim Statements important?



Requirements for Developing an Effective Aim Statement

1. Collective/Collaborative Effort

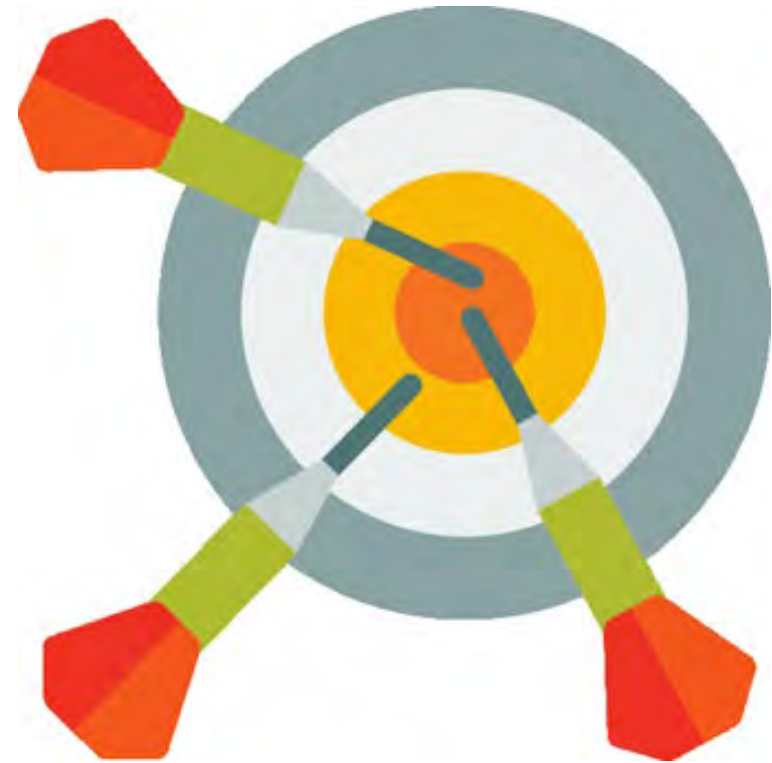
- Input from leaders and improvement team members

2. Scope of Project

- Consider factors that may impact the change effort

3. SMARTIE Characteristics

- Elements represented in an acronym to ensure the clear intention of your project is captured



SMARTIE Characteristics

- Specific
- Measurable
- ~~Achievable~~ Ambitious
- Relevant
- Time-bound
- Inclusive
- Equitable



Aim Statement Template



We

Organization name

Will improve

High level broad focus area: operational efficiency, patient experience, etc.

By

Reducing/decreasing or raising/increasing project focus: diabetes management, breast cancer screening, etc.

For

Patient population

From

Baseline

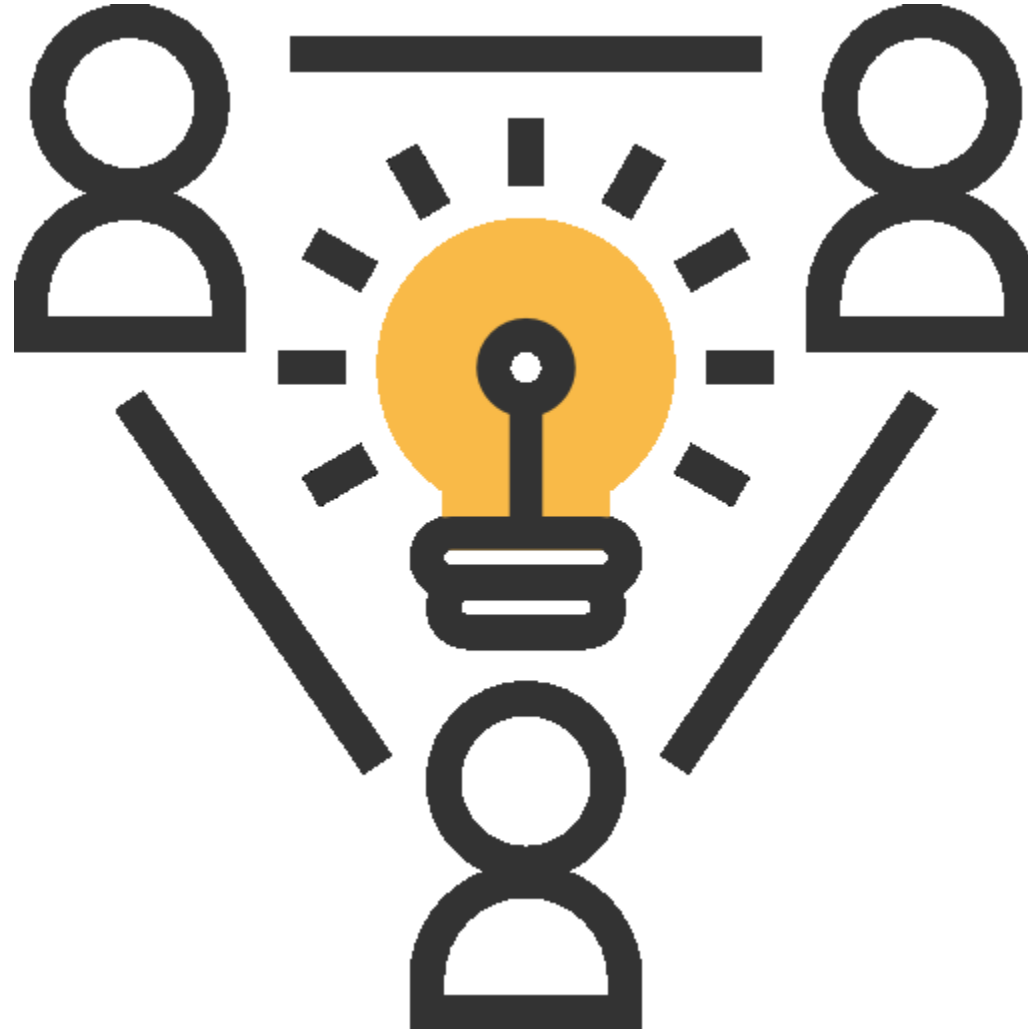
to

Target goal

By when

Target date – specific exact date

Is this Aim Statement SMARTIE?



Making the Examples SMARTIE



By December 31, 2025, Seaside Clinic will decrease (by 100%) the gap between (Hispanic and Non-Hispanic White) patients (ages 50 -75 years) who have an up-to-date fecal occult blood test, while improving colon cancer screening rates for all (to 60%).

Aim Statements with Multiple Outcomes

South Shore Clinic will improve care management of our patients with Type 2 diabetes by September 30, 2025, as evidenced by:

- Increasing the percentage of patients with HbA1c < 7 from 40% to 50%
- Increasing the percentage of patients with BP < 140/90 from 60% to 80%
- Increasing the percentage of patients with timely retinopathy screening from 50% to 75%

Develop Your Aim Statement



With members of your team:

- Develop an Aim Statement for an improvement initiative for your organization or one of your clinics/practices to work on
- Use the Aim Statement template



**10
MINUTES**

What Questions Do You Have?





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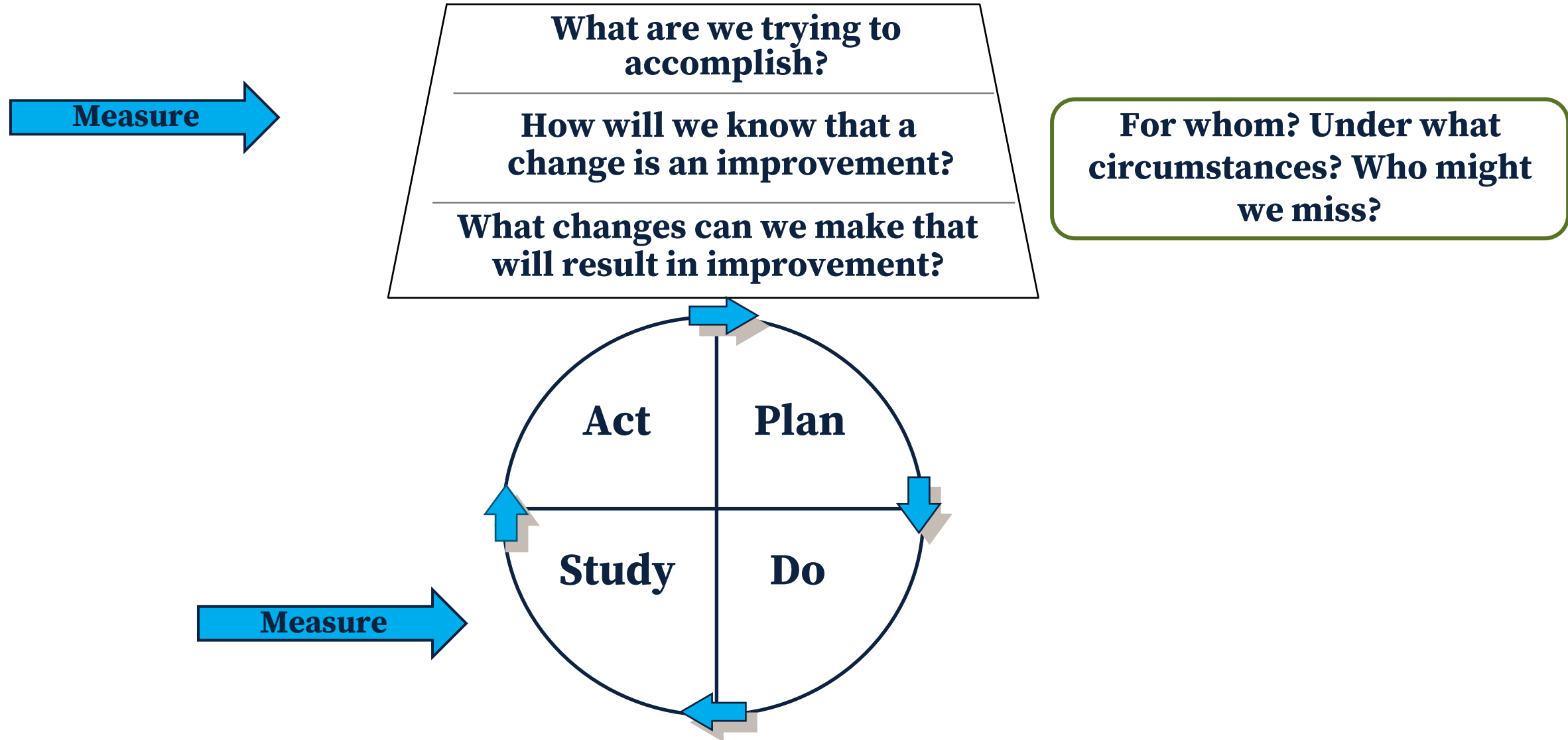
How Do We Know that a Change is an Improvement?

Part 1 - Developing Measures

MAKING A CHANGE!



Model for Improvement: Equity Lens



The Role of Measurement in QI

Understand

- How does the current system perform?

Predict

- What interventions might improve the performance of the current system?

Evaluate

- Did our interventions result in improvement?
For all populations?

Monitor

- Are our improvements sustained over time?

Engage

- Are we considering what is important for others to know?

QI Measurement Characteristics

1

Focused on Learning

- Not for scientific research or provider feedback

2

Simple Methodology

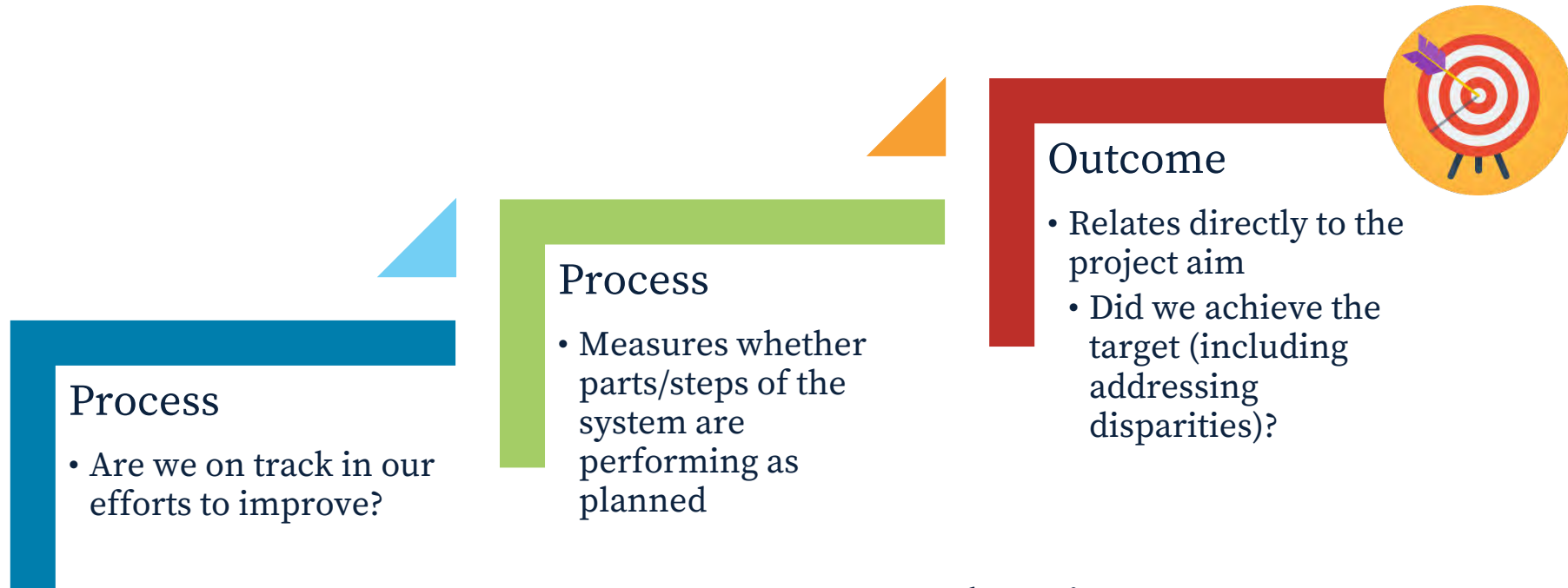
- Small samples
- Frequent sampling (rapid)
- Motivate immediate action (what do we do with what we have learned)

3

Displayed Over Time

- Tells a story of progress-to-goal
- Highlights system performance

QI Measures Set Defined



Balancing

- Unintended impact (can be + or -)
 - Are our changes impacting another part of the system?
 - Are health inequities being widened?

Using QI Data to Address Inequities

- Ensure you are monitoring any new **gaps in quality** between patients of focus and general population

Neutral



More of the same

Narrowing



Shows improvement

Widening



Gap worsens

Aim: Cervical Cancer Screening



Aim: Inland Medical Center to reduce the number of cervical cancer screenings performed outside of the current screening guidelines from 40% to 10% by November 30, 2024.



QI Measure Set: Cervical Cancer Screening

Process

- % of providers & patients who receive education on screening guidelines

Process

- % of appropriate EHR documentations

Outcome

- Cervical cancer screening rate w/in guidelines

Balancing

- Breast cancer screening
- Analysis of specific populations



Identify the Measure Type



In your groups:

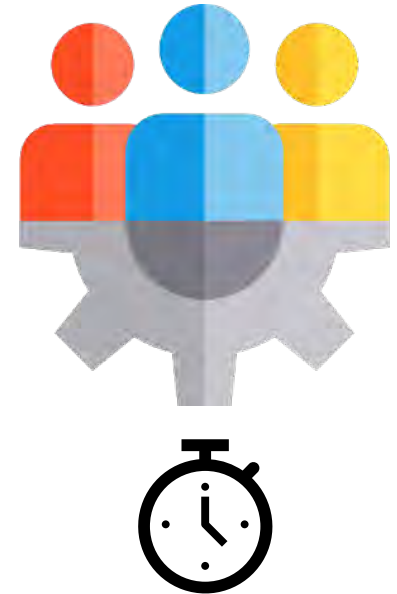
Read the Aim Statement.

Review the list of measures and assign each one a specific type: Outcome, process, or balancing.

Aim Statement: We will increase the percentage of Mandarin-speaking patients whose blood pressure is adequately controlled (less than 140/90 mm Hg) from 50% to 70% by September 30, 2024.

Measures:

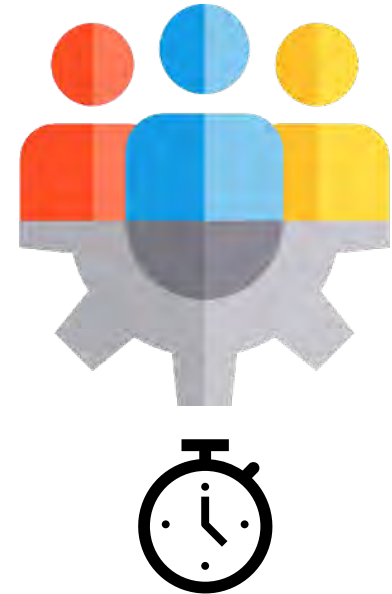
1. Medications prescribed
2. Education on BP management
3. F/up appointments scheduled
4. Blood pressure
5. HbA1c
6. Health Coach assignment



5 MINUTES

Time to Practice

- Individuals will be assigned to groups and record responses on chart pad paper
- Each group will be assigned one Aim Statement
- Read the assigned Aim Statement
 - Determine whether the Aim Statement could more SMARTIE
 - If so, re-write it
- Develop a set of possible measures
 - 1 outcome
 - 2 process
 - 1 balancing



10 MINUTES

Measurement Set - Activity 1



Aim: Partnership Clinic will increase colorectal cancer screening from 40% to 65% by June 30, 2023.



Measurement Set – Activity 1

Colorectal Cancer Screening

Process

- % of patients receiving outreach calls

Process

- % of patients 40-75 for whom colorectal cancer screening is ordered (FIT test mailed to home)

Outcome

- % of patients 50-75 yrs. Old with colorectal cancer screening

Balancing

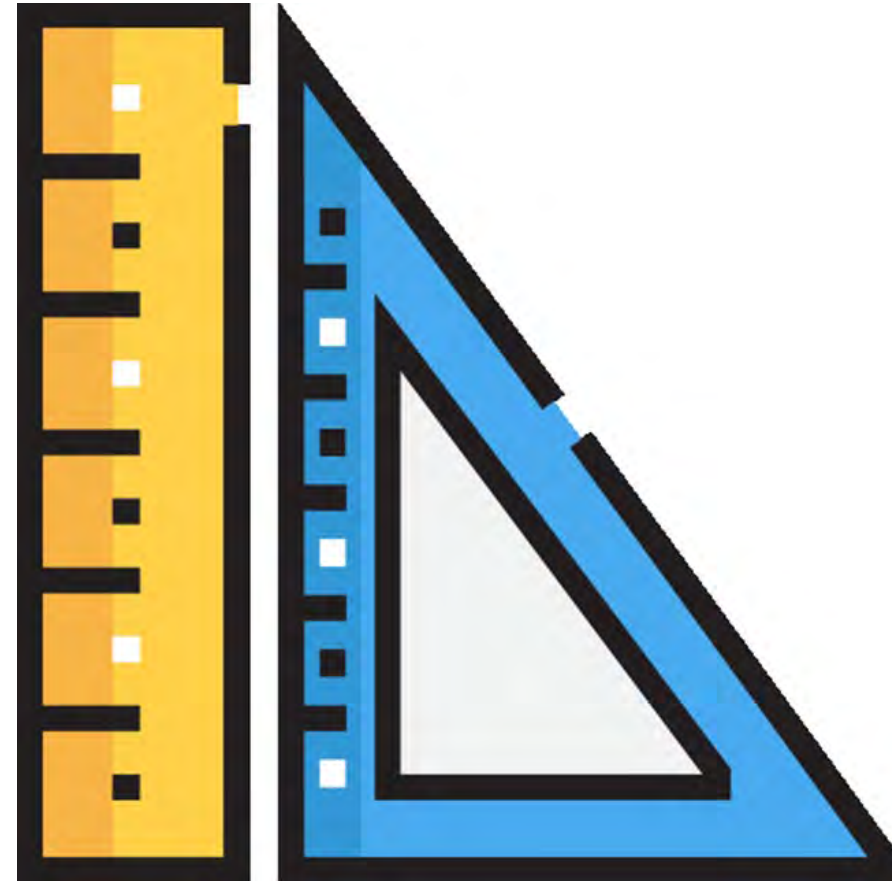
- Cost of increased volume FIT Tests
- Stratification of outcome measure



Measurement Set - Activity 2

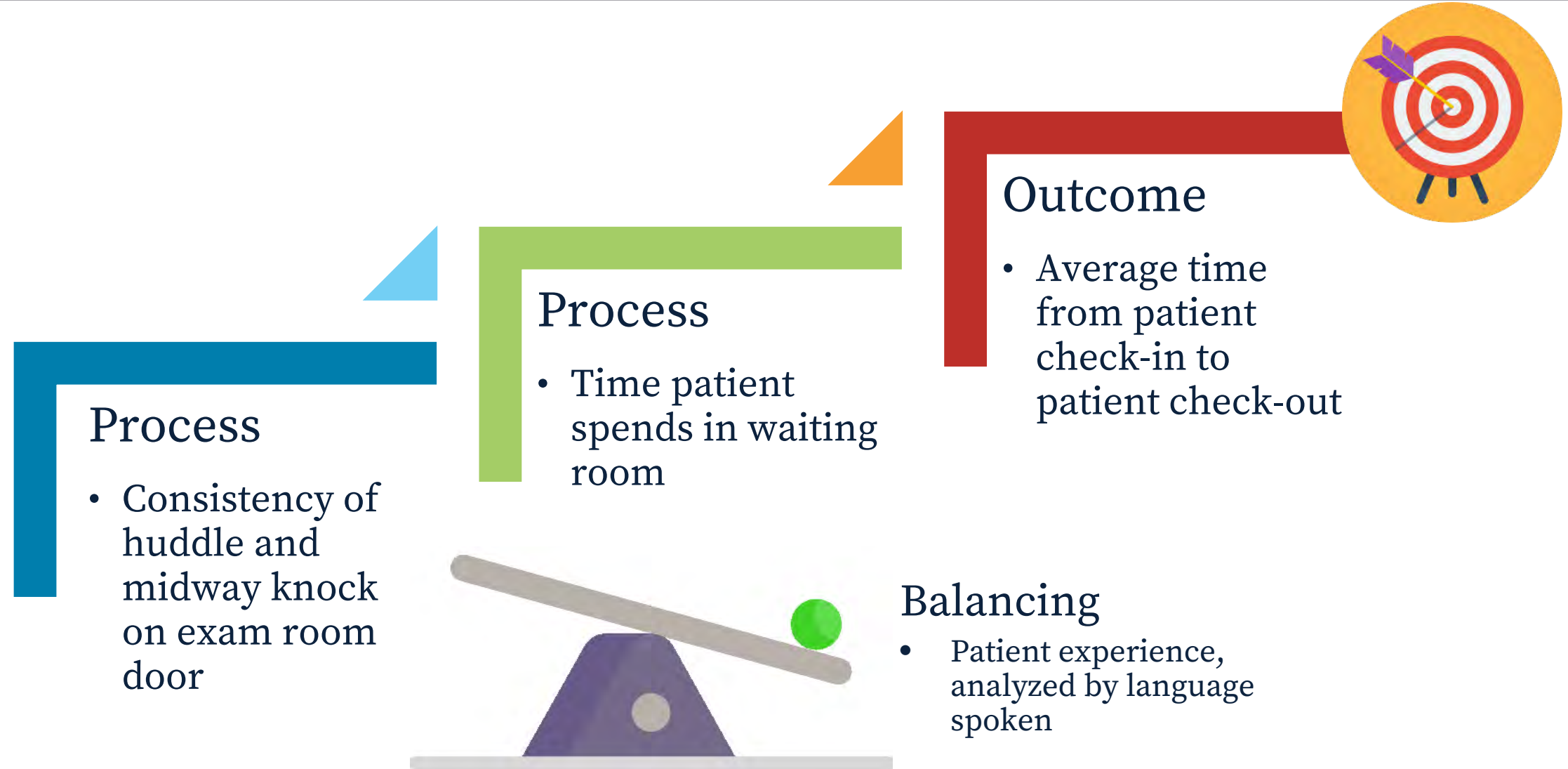


Aim: ABC Clinic will reduce appointment cycle time from 40 minutes to 30 minutes by December 31, 2023.



Measurement Set – Activity 2

Cycle Time



Measurement Set - Activity 3



Aim: Good Health Clinic will reduce the hospital all-cause 30-day readmission rate from 20% to 10% by June 30, 2023.

Measurement Set – Activity 3

Readmission Rate

Process

- % of calls made by hospital to PCP to regarding patient hospitalization and discharge

Process

- % of discharged patients who receive f/up call from PCP within 48 hours
- Addition of language access for f/up call

Outcome

- % of all cause, 30-day readmission rate

Balancing

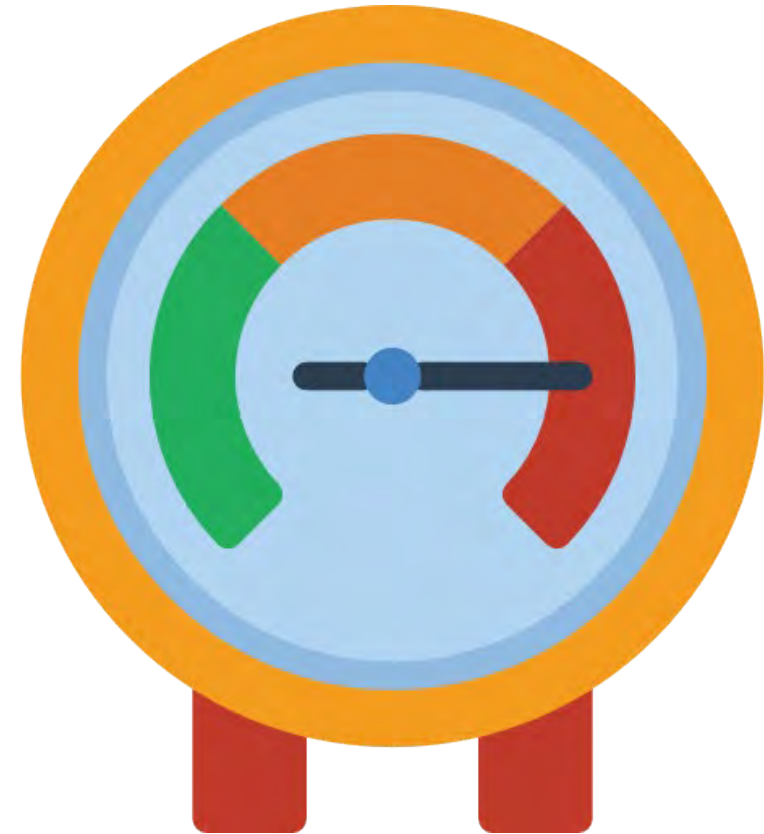
- Time required for calls
- Access to translation services



Measurement Set - Activity 4

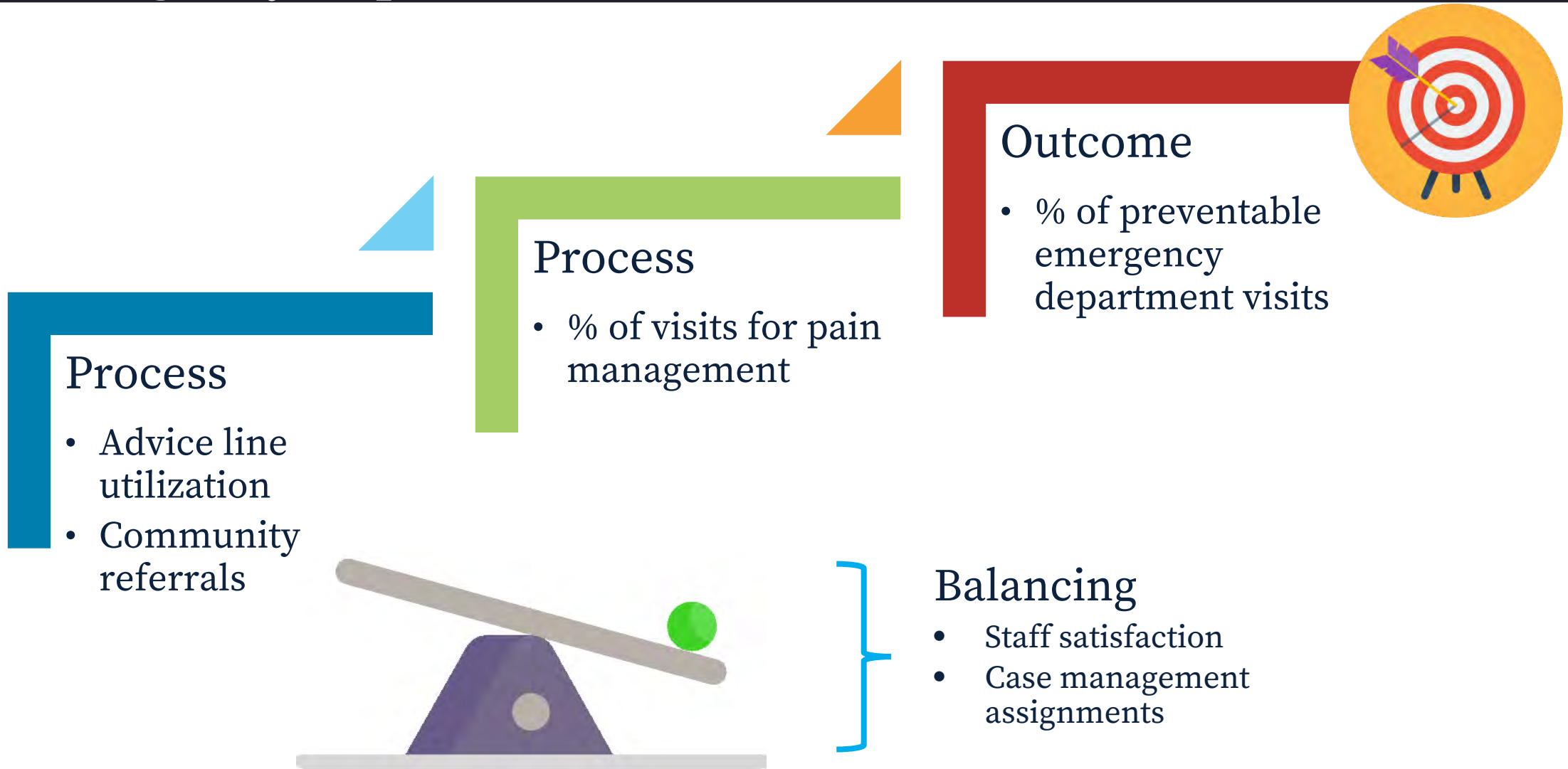


Aim: Hill Valley Clinic will decrease the number of preventable emergency department visits from 54% to 36% by December 31, 2023.



Measurement Set – Activity 4

Emergency Department Utilization



Process

- Advice line utilization
- Community referrals

Process

- % of visits for pain management

Outcome

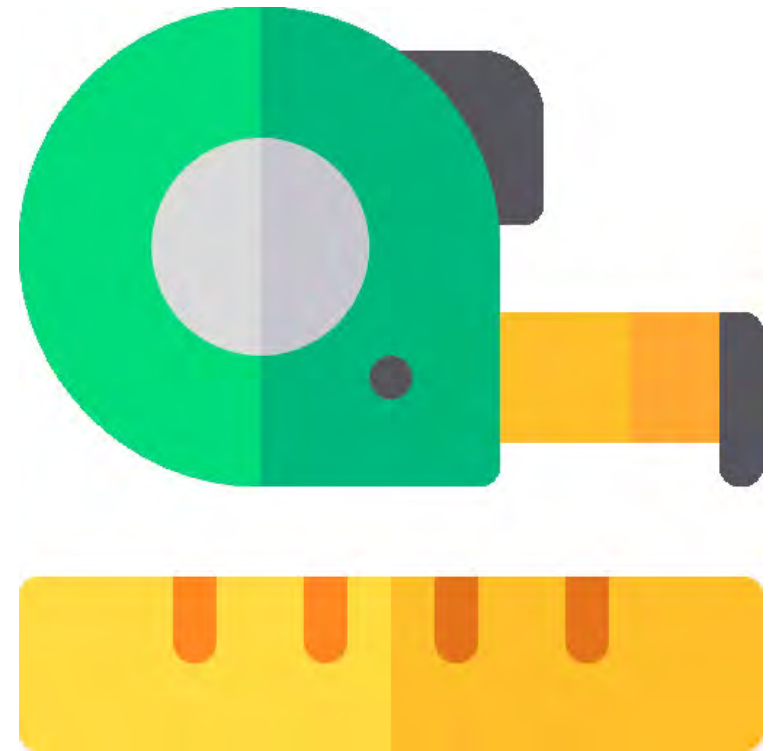
- % of preventable emergency department visits

Balancing

- Staff satisfaction
- Case management assignments

Considerations for Measure Selection

- Keep the number of measures manageable
 - 1 Outcome Measure
 - 2-3 Process Measures
 - 1-2 Balancing Measures
- Choose measures with accessible data
- Be specific



Measurement Plan



TEMPLATE: MEASUREMENT PLAN

Project Name:									
Measure	Measure Type <i>(Outcome, Process, Balance)</i>	Description/Specs <i>(include definition of numerator/denominator where appropriate)</i>	Data Source	Measurement Frequency	Reporting Frequency	How will data be presented?	Responsible Person(s)	Baseline	Target

Elements of the Measurement Plan

Measure

What will be measured (conceptual name)?

Measure Type

Outcome, Process or Balancing

Description/ Specs

How will you measure it? Define proportions (numerator/denominator) and operational definitions (“lingo” and jargon); stratification

Data Source

Where is the data coming from?

Measurement Frequency

How often will data be collected or generated?

Elements of the Measurement Plan

Reporting Frequency

How often will the data be shared and with whom?

Data Presentation

How will the data be organized for display and presentation?

Responsible Person(s)

Who is responsible for ensuring that data is collected/generated for this measure?

Baseline

Record the baseline

Target

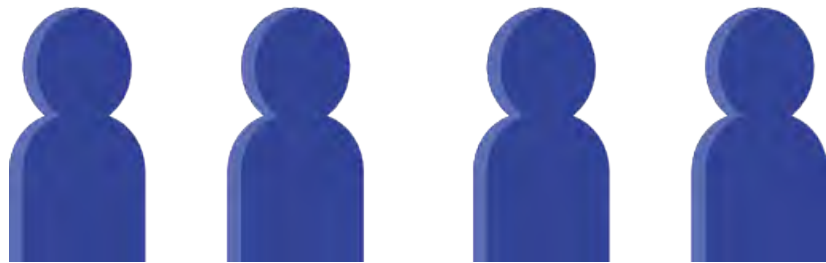
Record the target

Reactions to Data

What type of reactions can you expect when you share data?

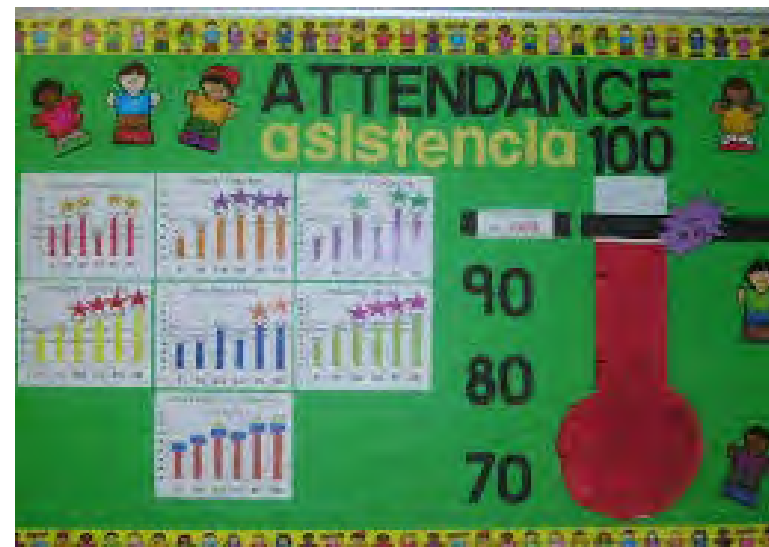


Engage the Practice with Measures that *MOVE*



- Outcome measures often do not *move* quickly enough to capture attention
- Consider focusing on a process measure to engage the practice
 - What is important to them?
 - What would get them most excited, if they were to see improvement?
 - What milestones will you celebrate?

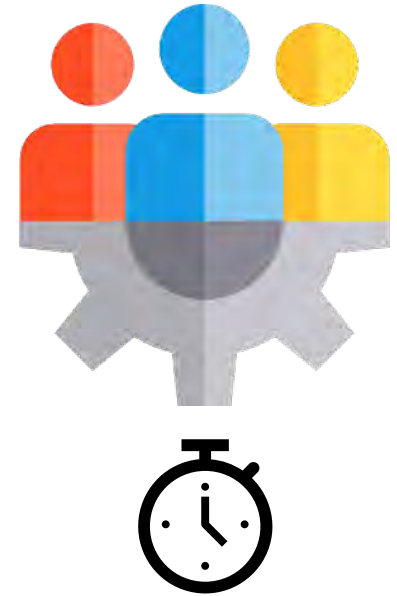
Take a Lesson from Elementary School Teachers



Let's Practice



- Develop measures for your Aim Statement
 - One outcome
 - Two process
 - One balancing
- Use the *Measurement Plan* template
 - Prioritize first 4 columns



10 MINUTES

What Questions Do You Have?





How Will We Know the Change is an Improvement?

Part 2 - Using Data for Quality Improvement

Measurement Results in Data



The Role of Measurement in QI

Understand

- How does the current system perform?

Predict

- What interventions might improve the performance of the current system?

Evaluate

- Did our interventions result in improvement?
For all populations?

Monitor

- Are our improvements sustained over time?

Engage

- Are we considering what is important for others to know?

Important Factors for Interpreting Data

- Context
- Understanding Variation



Consider Context



- Compare
 - Data in previous months, quarters or years?
 - Performance of similar organizations (benchmarking)?
 - Trends in different patient populations?
 - Industry standards?
 - My organization's performance goals?

Why Context is Important?

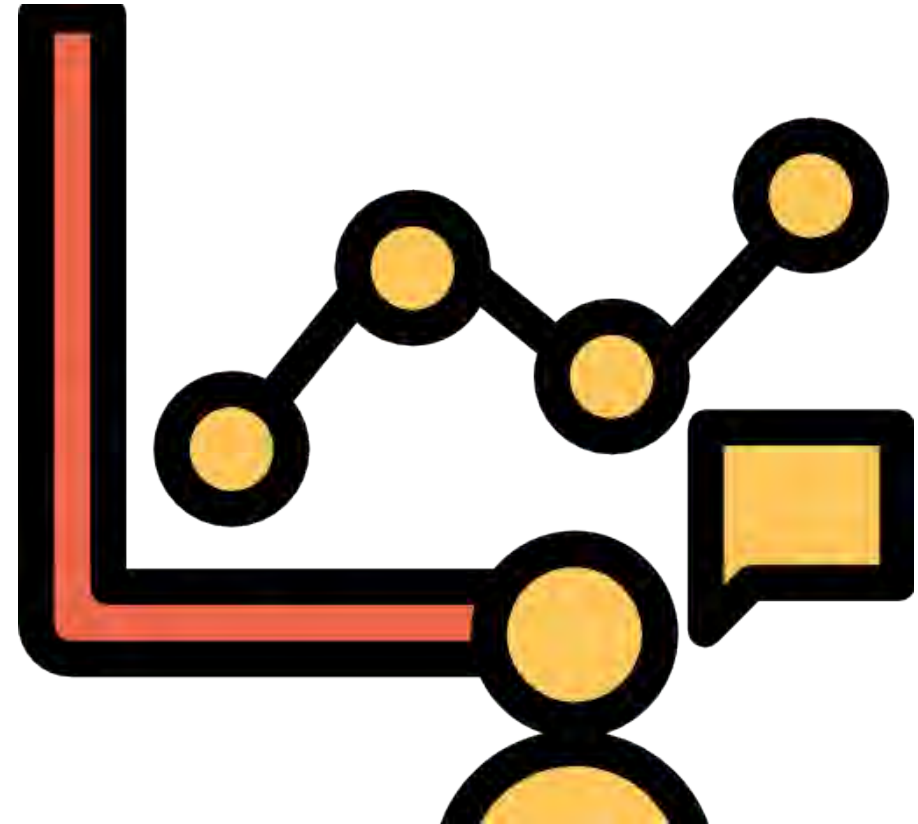
- Partnership Clinic retained 20 staff.



- Partnership Clinic's 30-day all-cause readmission rate is 7%.
 - **What if it started at 20%? 5%?**
- 90% of patients are satisfied with Partnership Clinic
 - **What if the state mandates a satisfaction rate of 100%?**

Variation in Data

- All data demonstrate variation
- Interpretation of variation prompts reaction



Two Types of Variation

Common Cause Variation

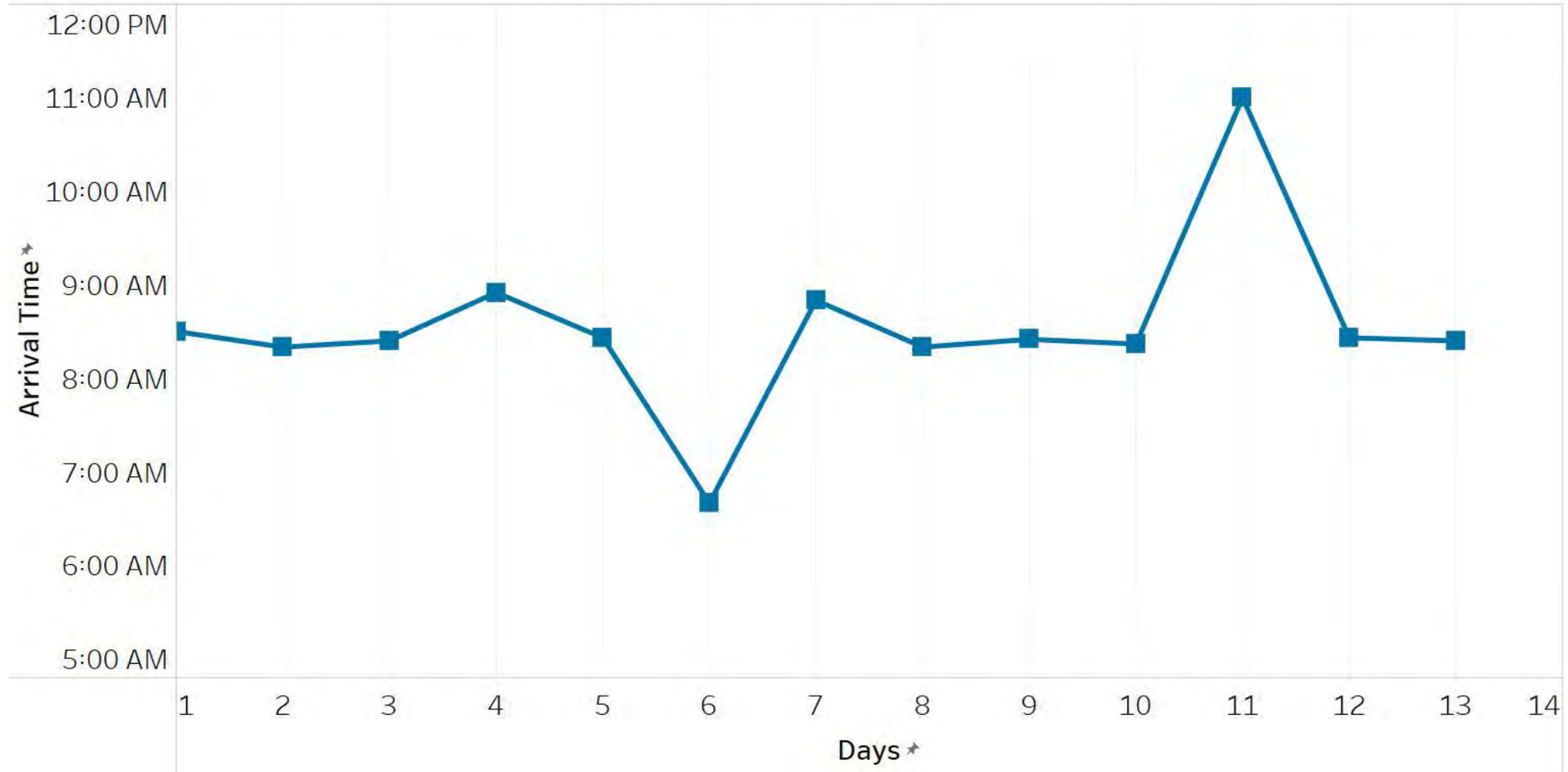
- Natural, inherent system patterns effecting outcomes
- Predictable within a range
- Considered “stable” (neither good nor bad)

Special Cause Variation

- Due to an assignable cause/specific circumstance
- Not part of the natural system patterns
- Considered unstable or “out of control”

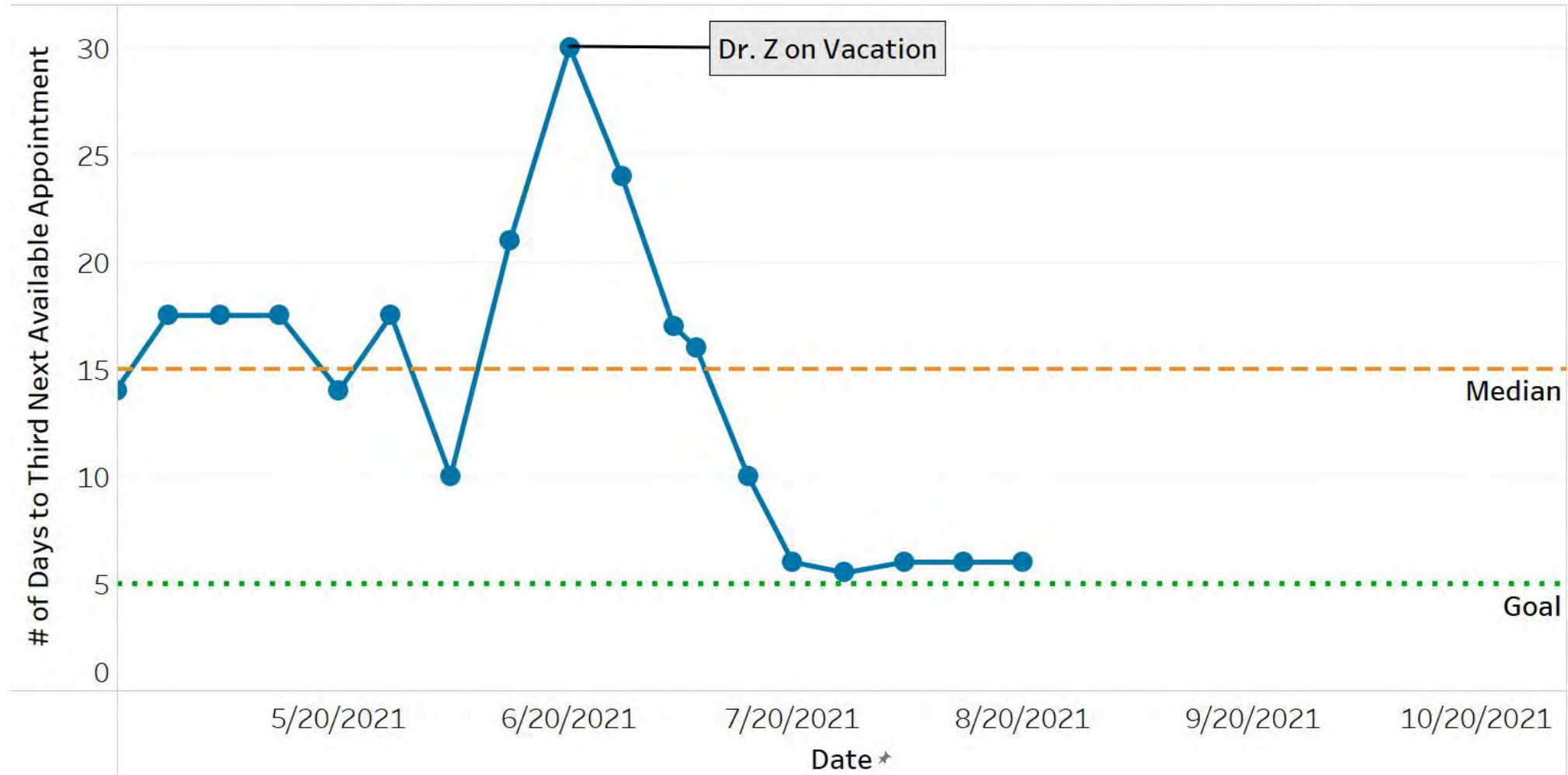
Variation in Data – Example 1

Arrival Time to Work

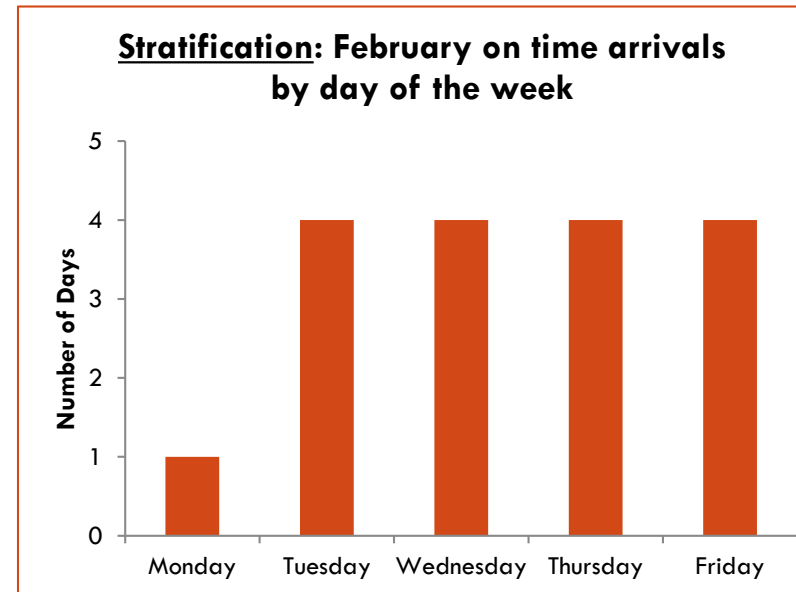
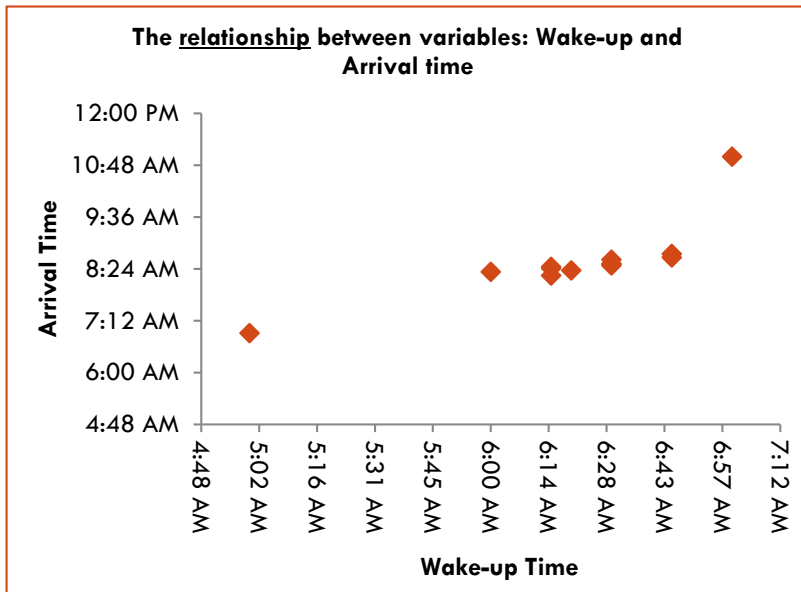
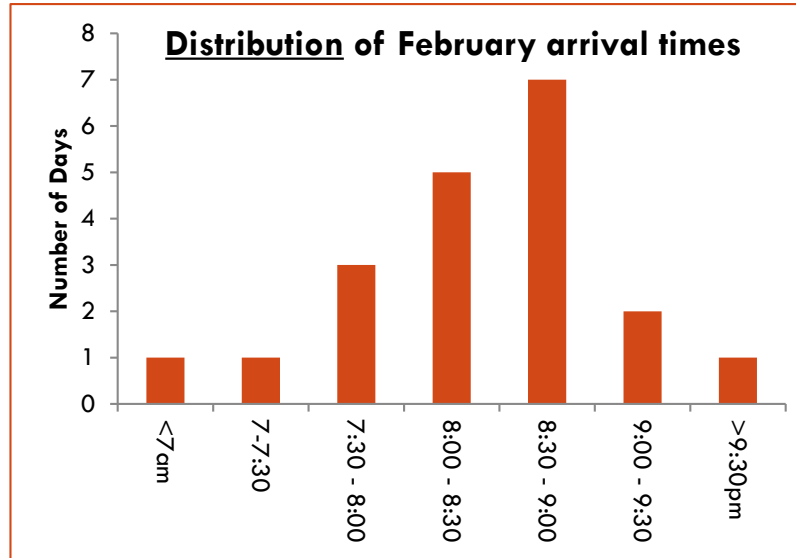
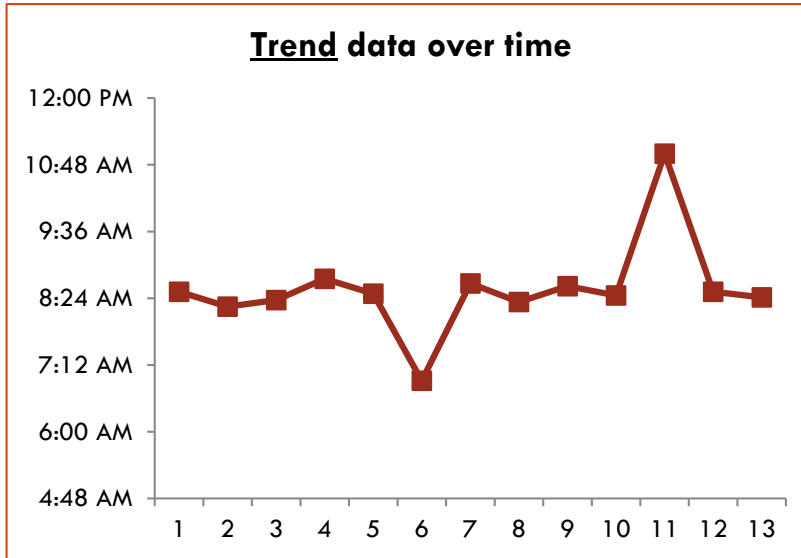


Variation in Data – Example 2

Third Next Available Appointment for Dr. Z's Established Patients

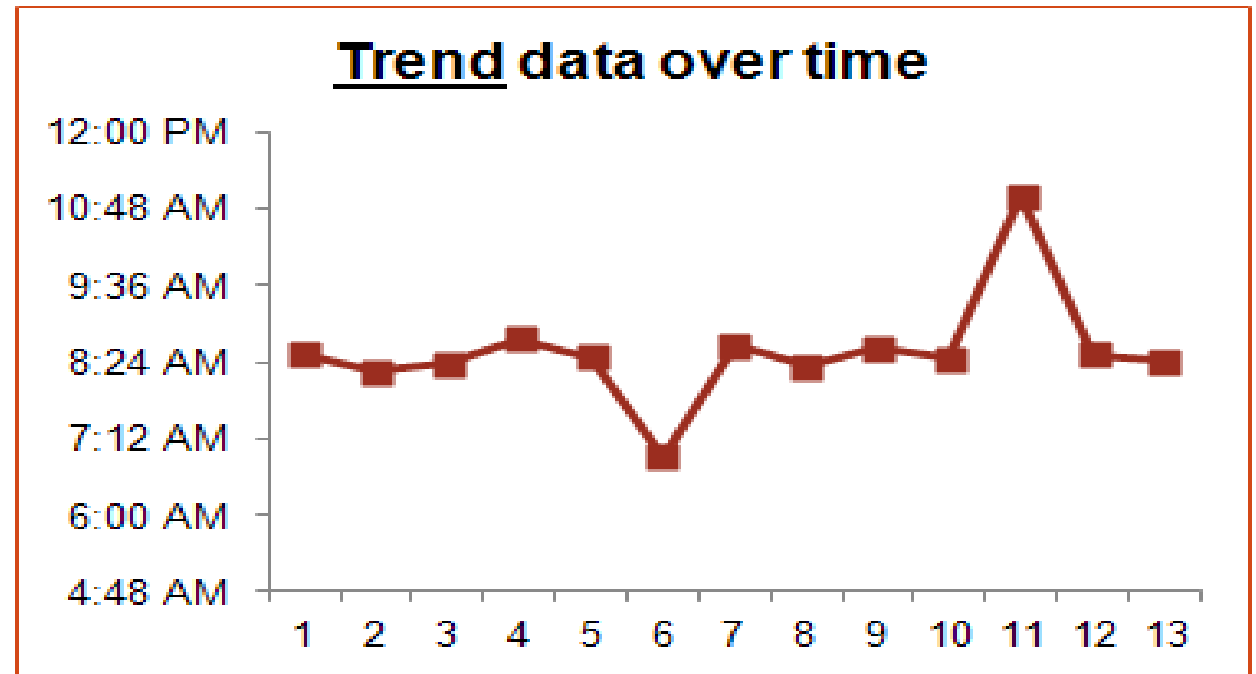


Tools to Understand Variation in Data



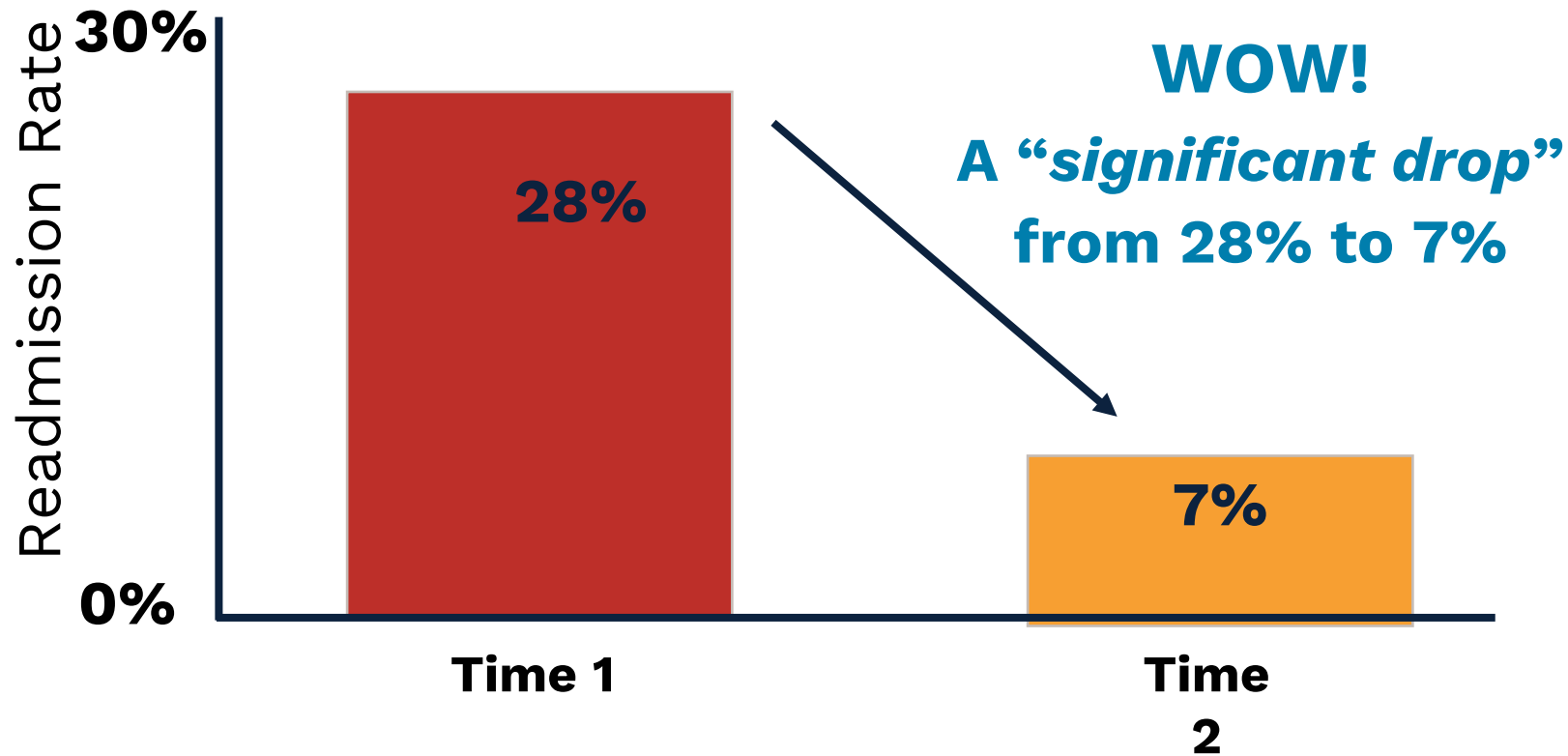
Why Track Data Over Time?

- Makes performance of the process visible
- Demonstrates improvement by comparing data before and after change is tested
- Monitors process for sustainability



The Significance of Displaying Data Over Time

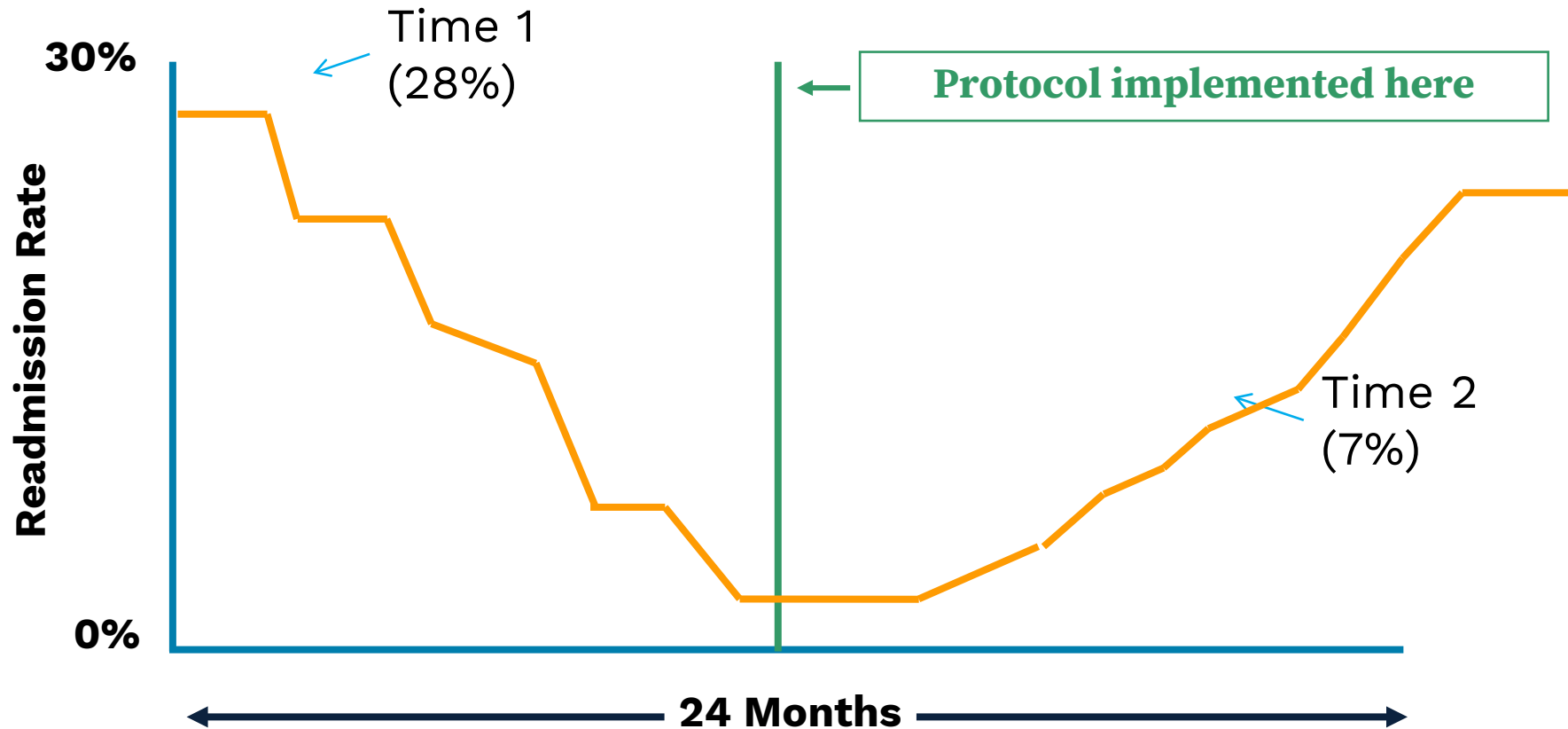
Before and after implementation of a new protocol to reduce readmissions.



**Conclusion -The protocol was a success!
We saw a 75% reduction in readmission rate**

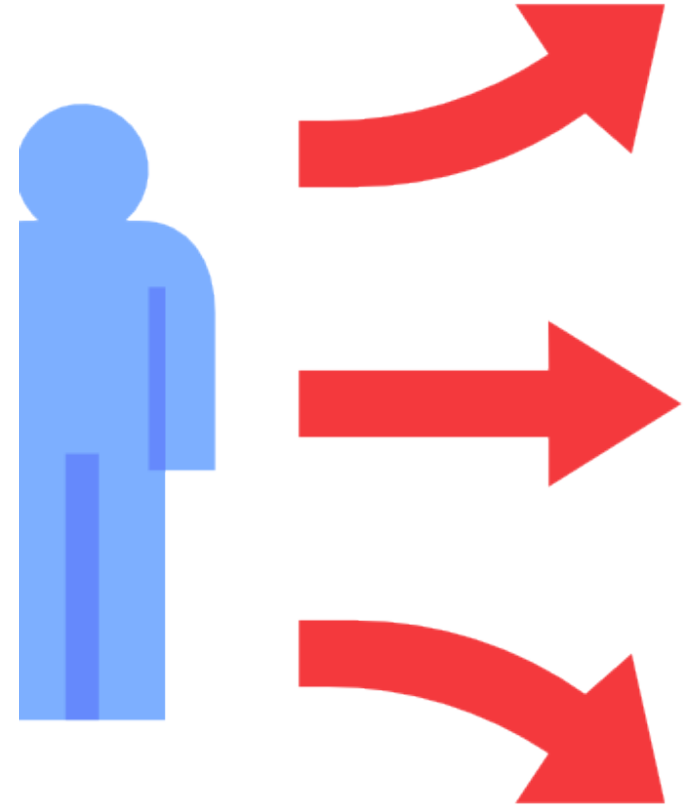
Run Charts Help Tell the Whole Story

Before and after implementation of a new protocol



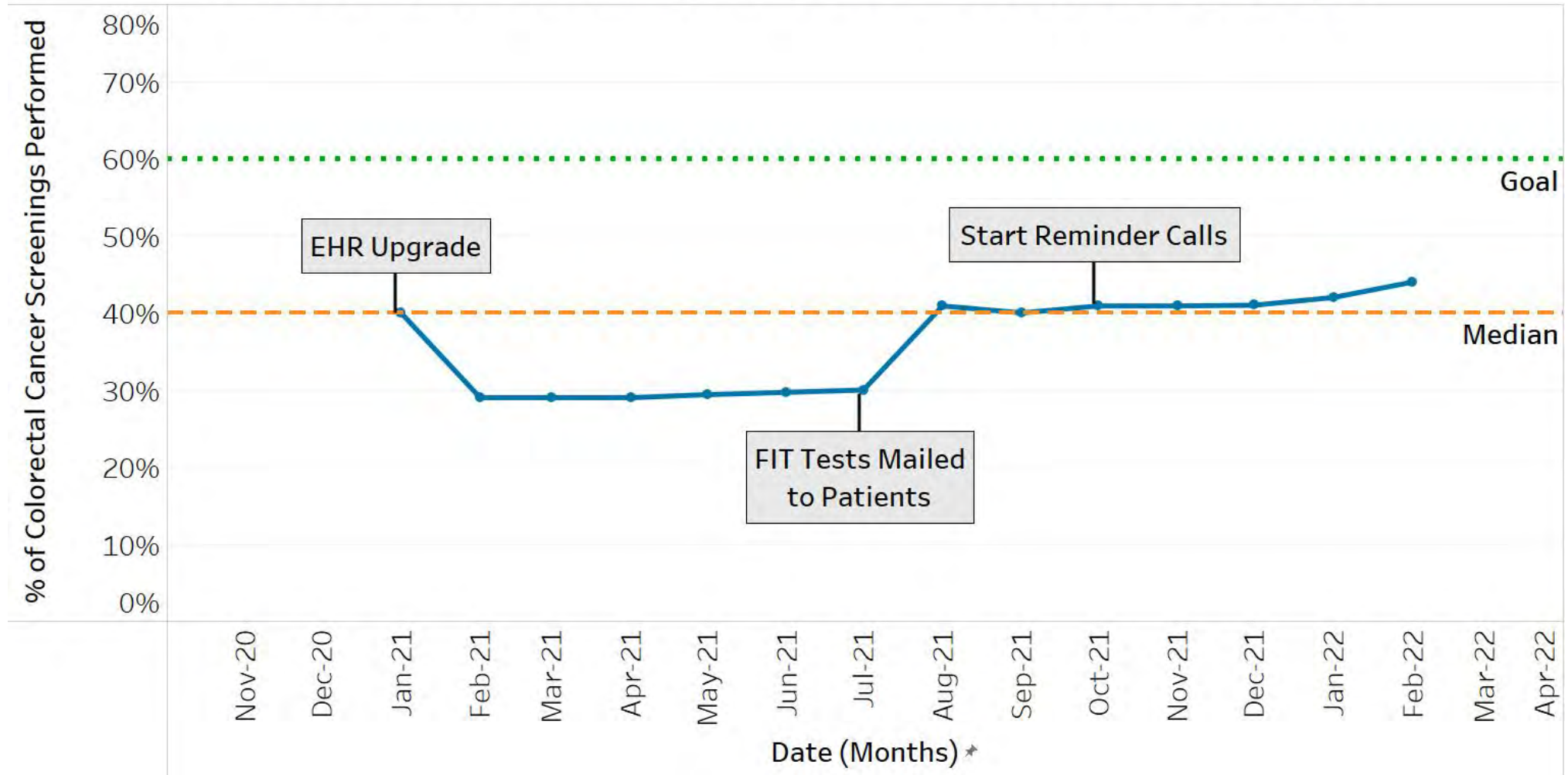
Failure to Understand Variation May Tempt You To . . .

- Deny the data (It doesn't fit my view of reality!)
- See trends where there are none
- Explain natural variation as special events
- Assign unwarranted blame and/or credit to people over which they have no control
- Distort the process that produced the data
- Kill the messenger!



Run Charts Help Evaluate Interventions and Impacts

Colorectal Cancer Screenings for Patients Between the Ages 50-75



Mean versus median

Median: The middle value in a set of numbers arranged in ascending order (from lowest to highest).

Mean (average): The sum of values in a set of data divided by the number of data values

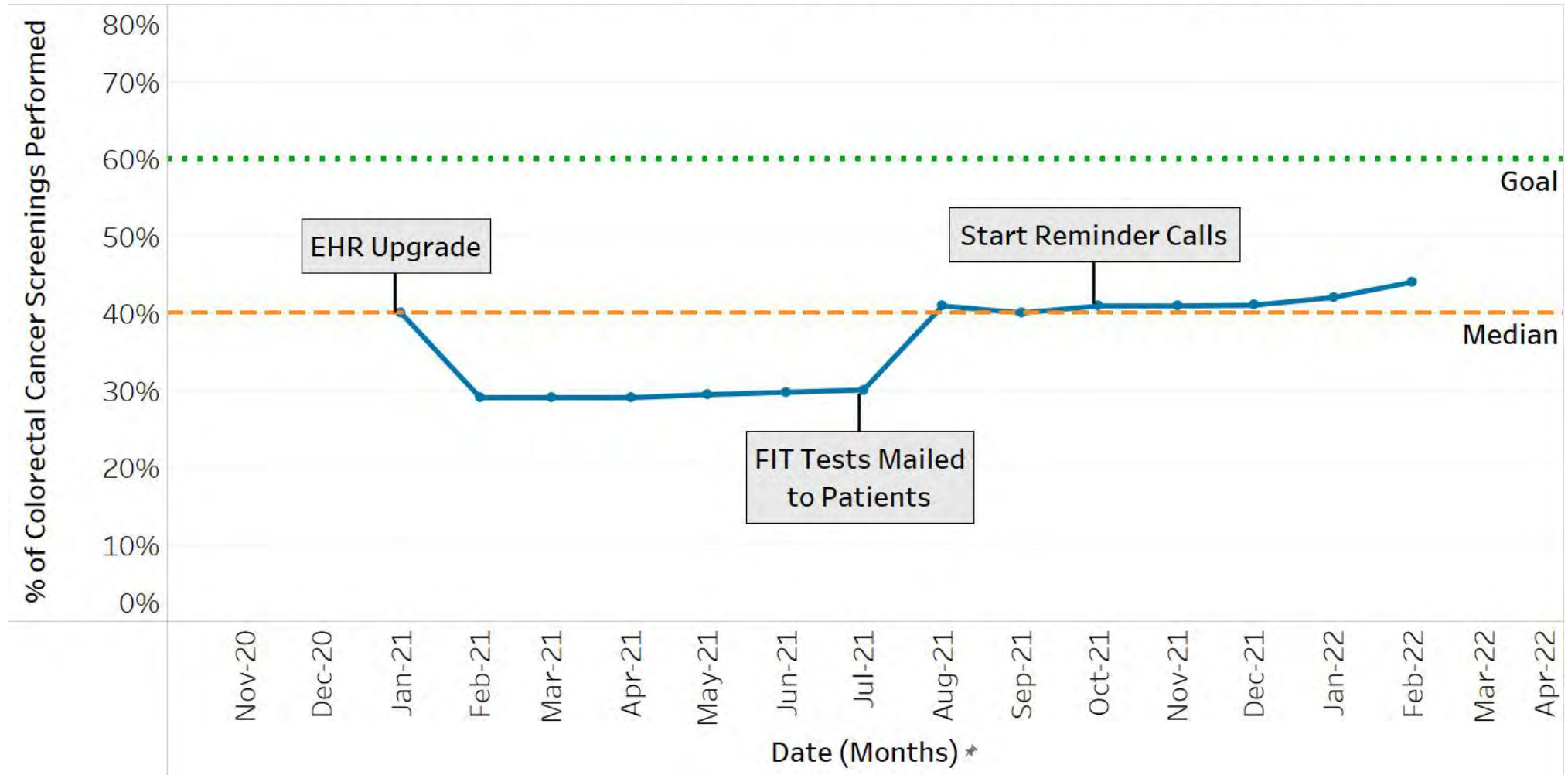
Example:

2, 3, 5, 6, 7, 100

- **Median = 5.5**
- **Mean = $(2+3+5+6+7+100)/6 = 20.5$**

Run Charts Help Evaluate Interventions and Impacts

Colorectal Cancer Screenings for Patients Between the Ages 50-75



Run Chart Rules

Rule 1: Astronomical Point

An obviously different value

- **Note:** Those familiar with the process would recognize as unusual

Rule 2: Shift

Six (6) or more consecutive points either all above or all below the median.

- **Note:** Skip values that fall on the median and continue counting

Rule 3: Trend

Five (5) or more consecutive points all going up or all going down.

- **Note:** If the value of two or more successive points is the same, ignore one of the points when counting

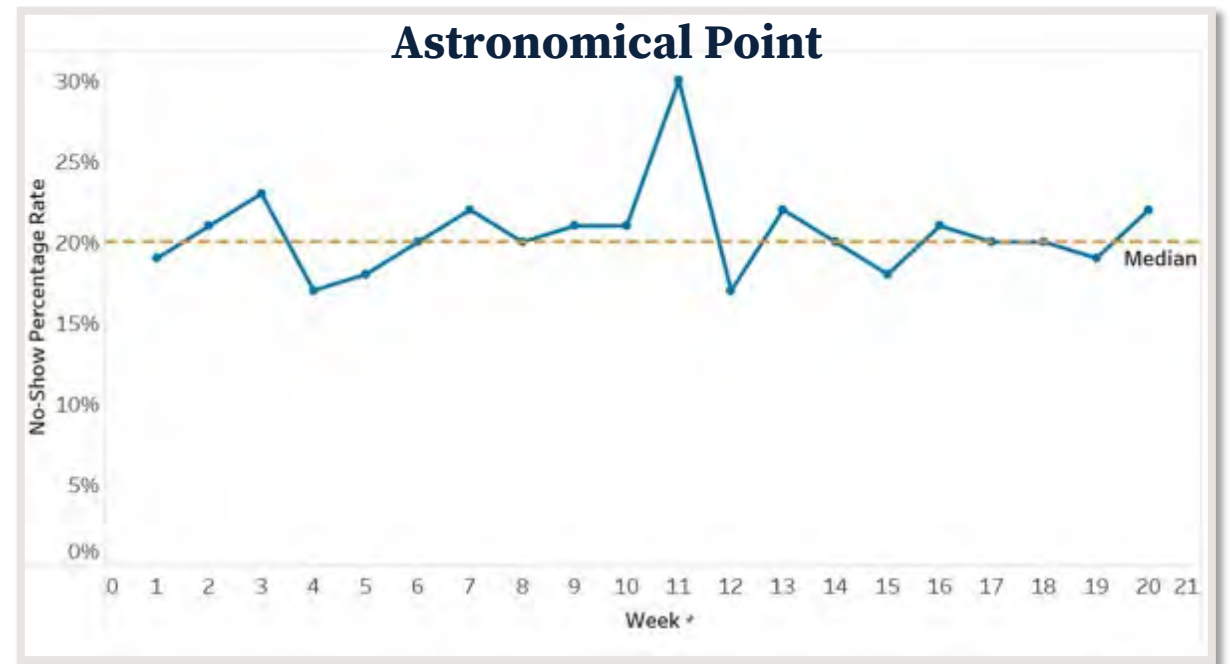
NOTE: Only one rule need apply to signify “special cause” variation

Run Chart Rule #1 - Astronomical Point

Rule 1: Astronomical Point

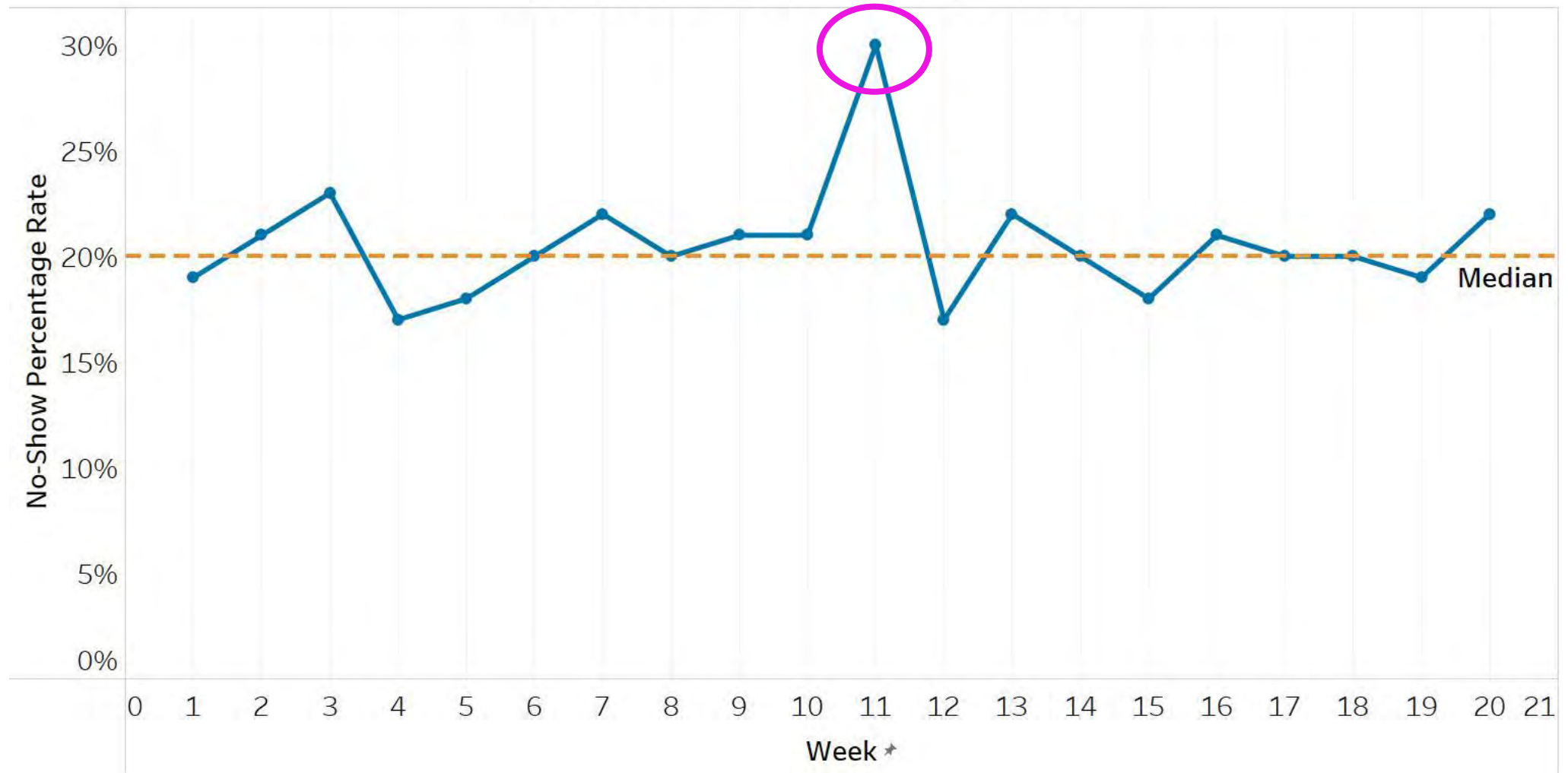
An obviously different value

- **Note:** Those familiar with the process would recognize as unusual



Astronomical Point?

Weekly No-Show Percentage Rate

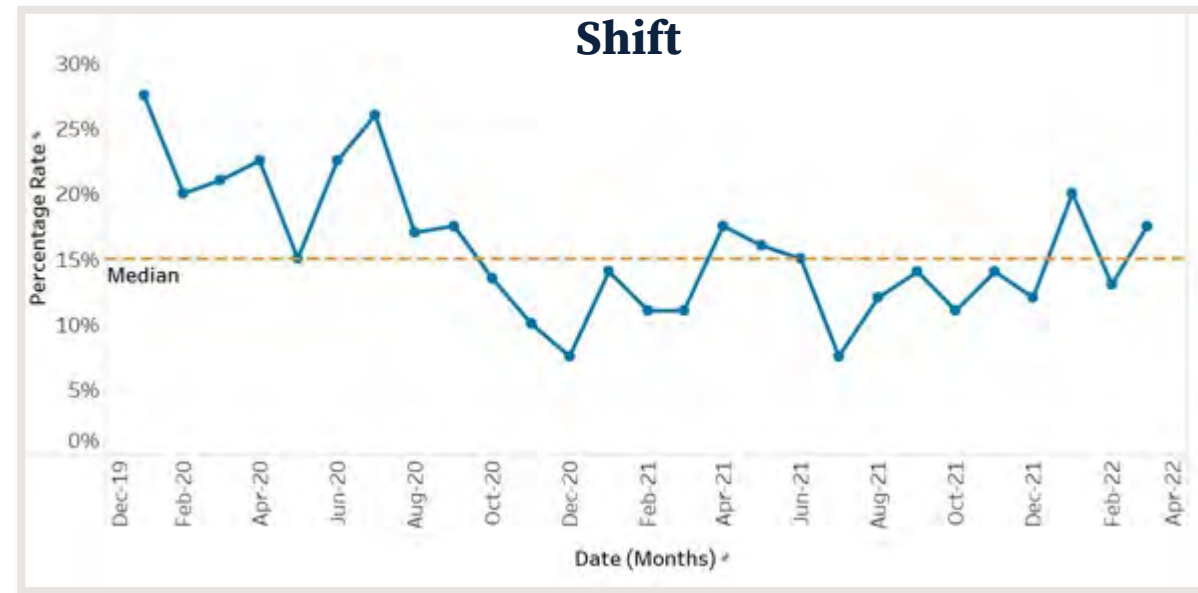


Run Chart Rule #2 - Shift

Rule 2: Shift

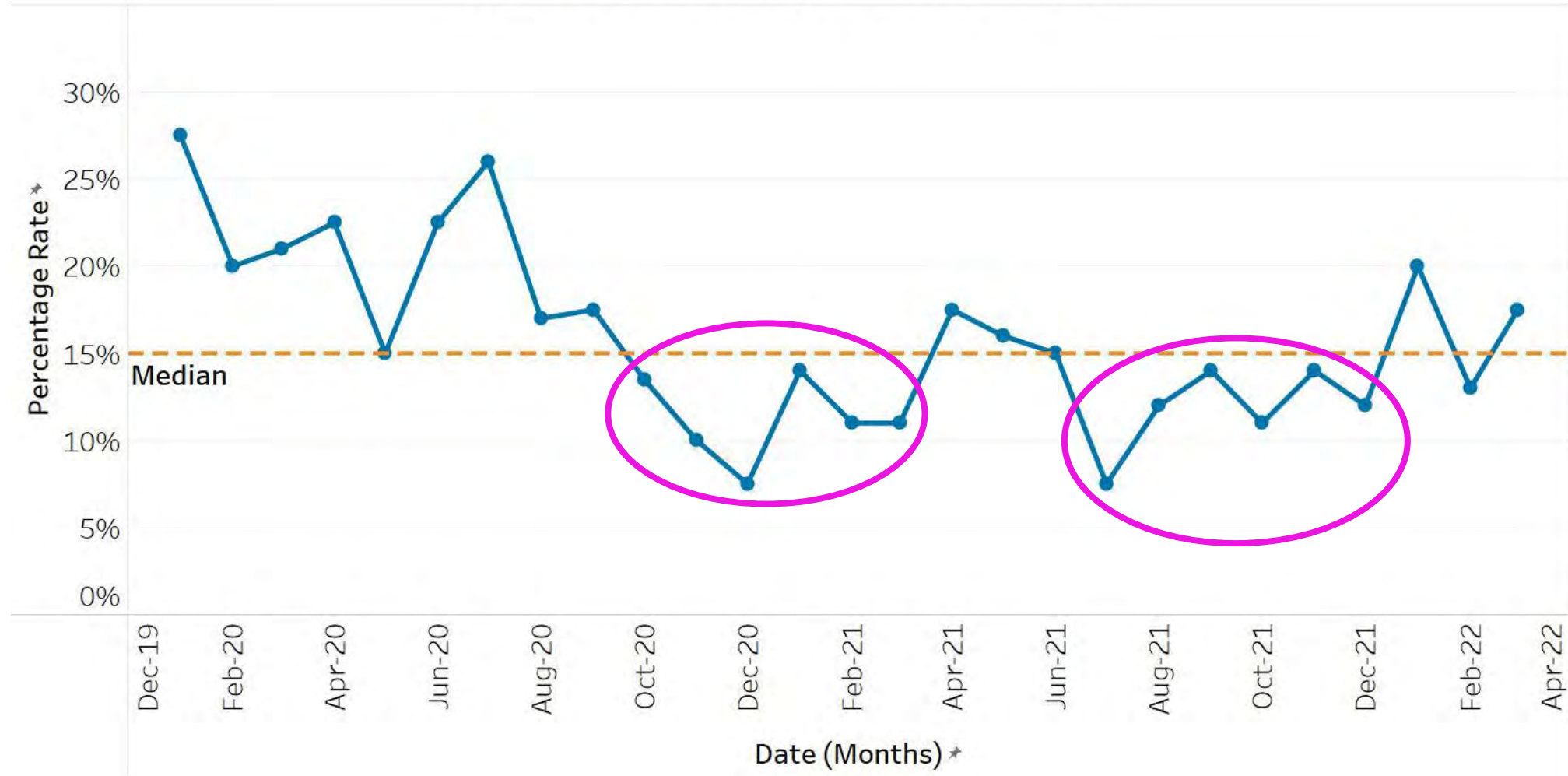
Six (6) or more consecutive points either all above or all below the median.

- **Note:** Skip values that fall on the median and continue counting



Shift?

No-Show Percentage Rate Over Time

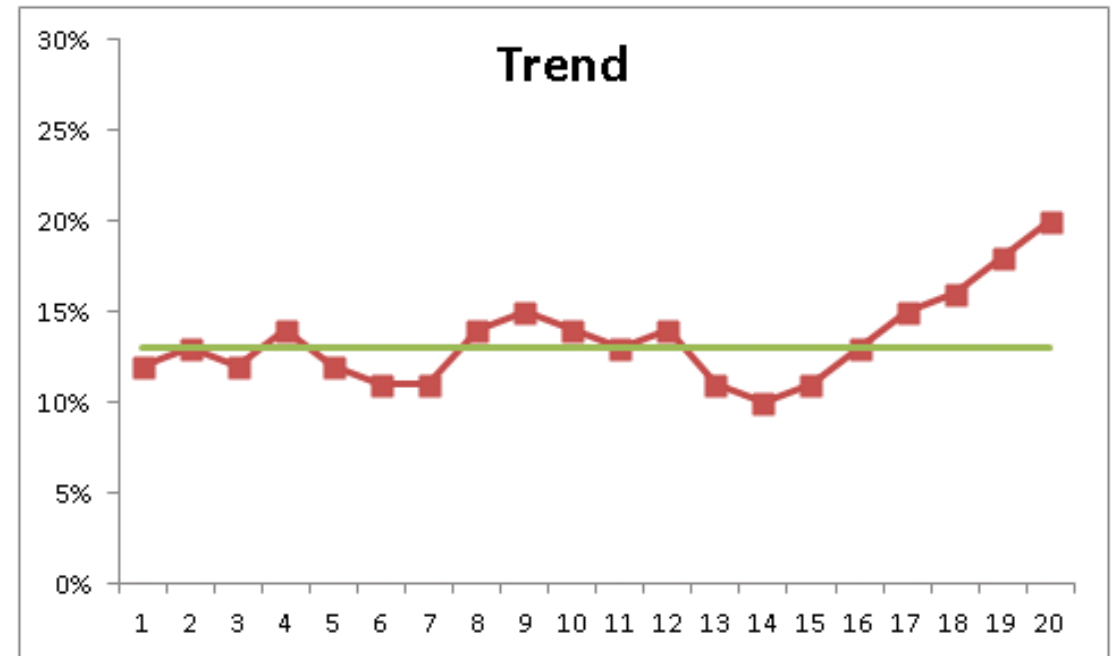


Run Chart Rule #3 - Trend

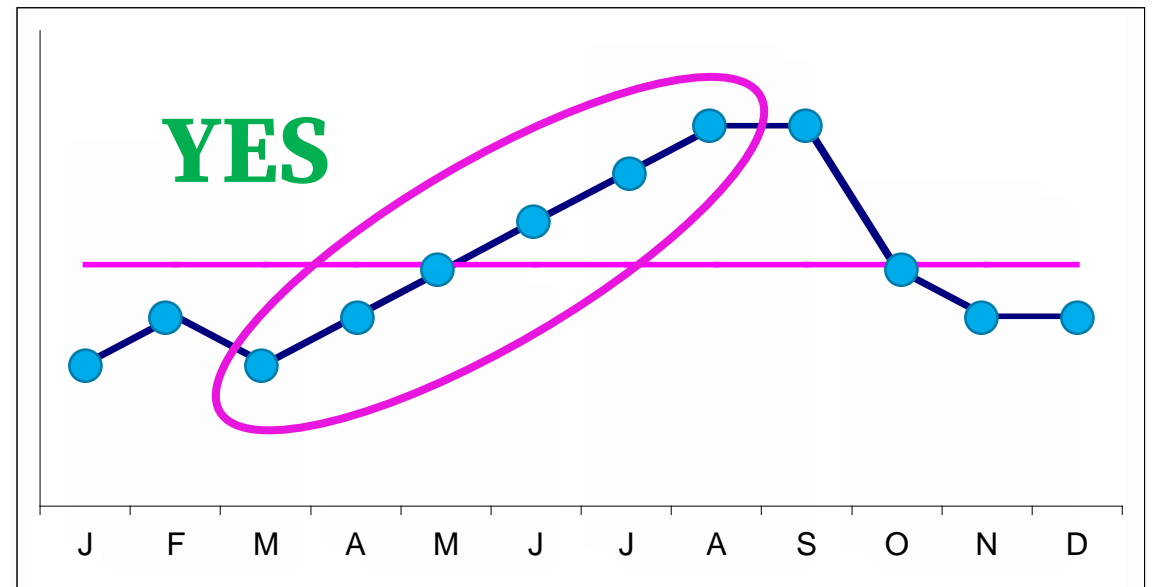
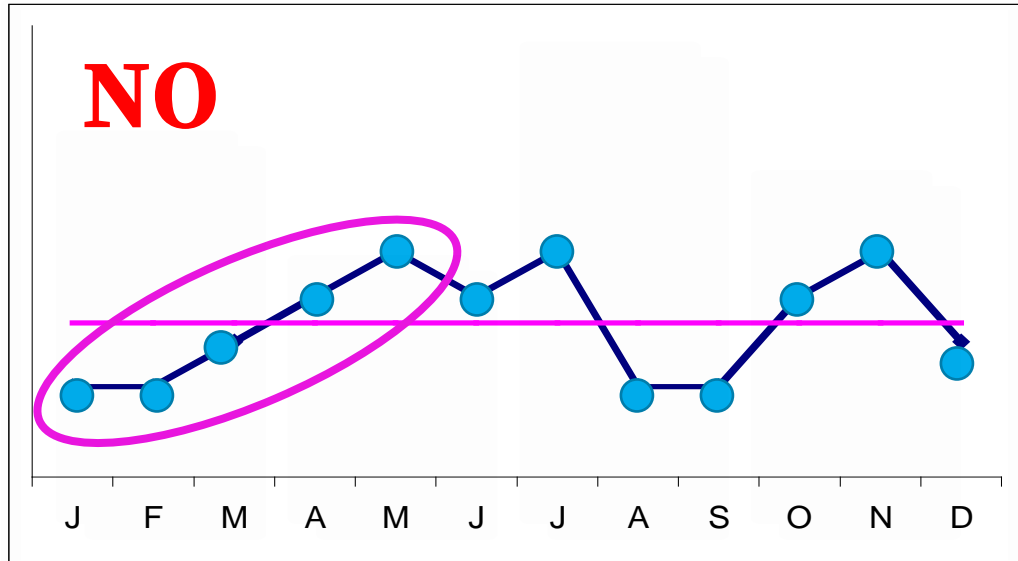
Rule 3: Trend

Five (5) or more consecutive points all going up or all going down.

- **Note:** If the value of two or more successive points is the same, ignore one of the points when counting

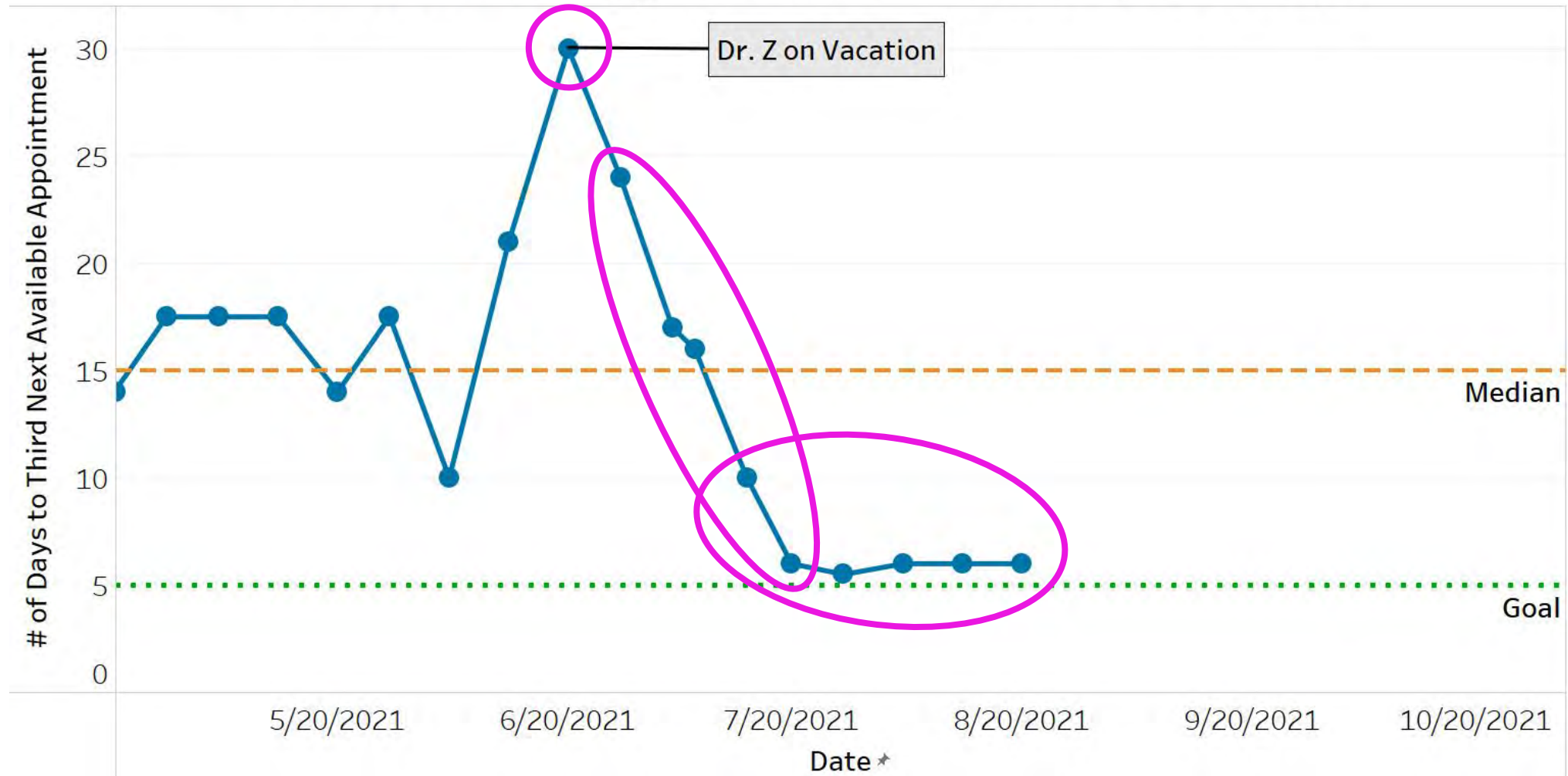


Trends?



Which Run Chart Rule(s) Apply?

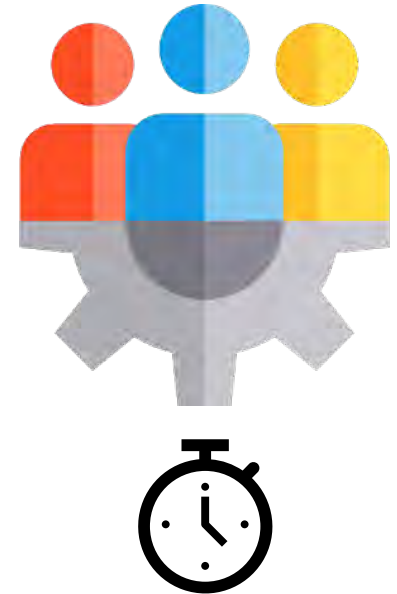
Third Next Available Appointment for Dr. Z's Established Patients



Time to Practice



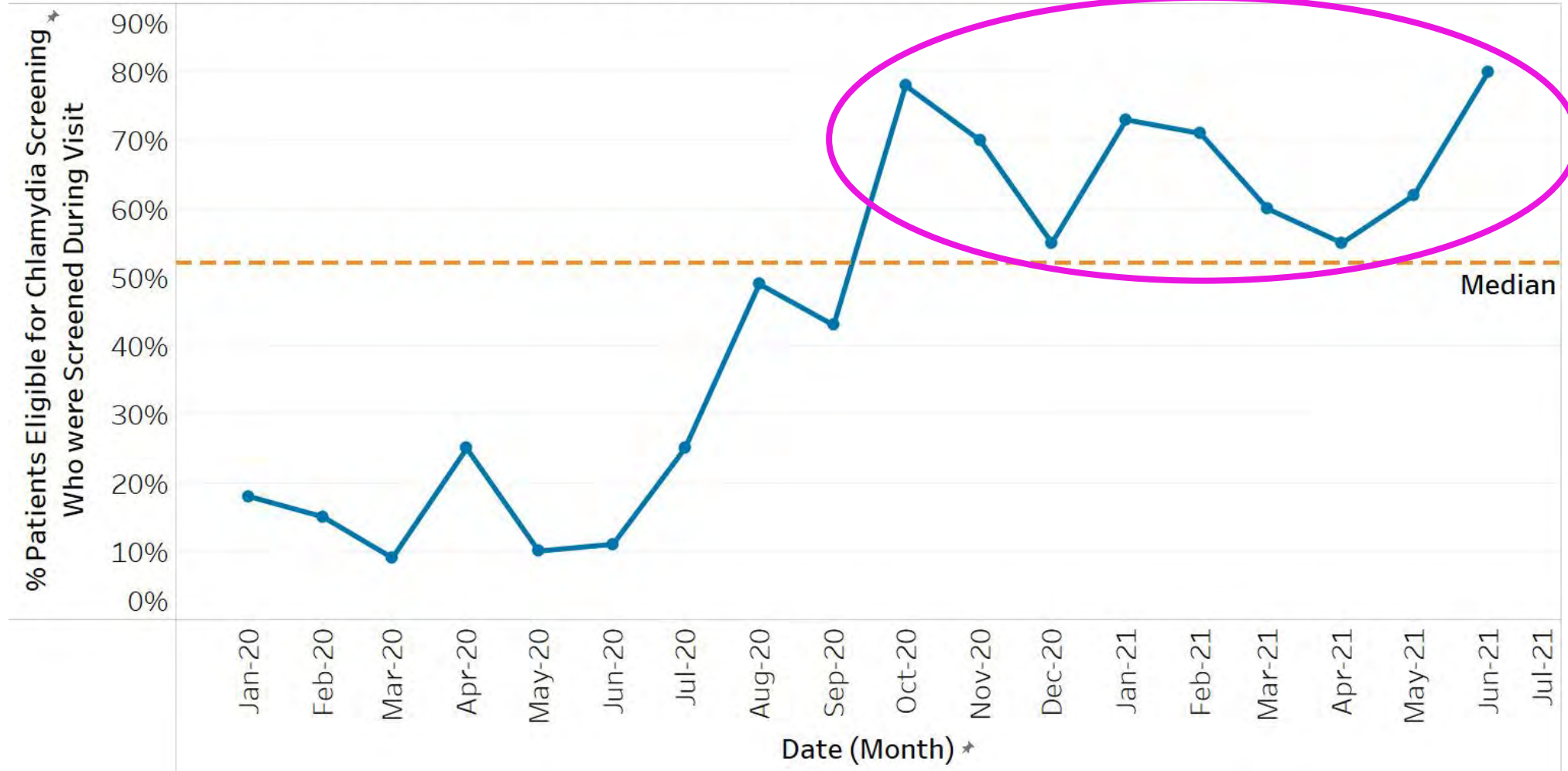
- Return to the group you were most recently assigned to
- Complete Exercises 1 – 3, Interpreting Run Charts in your Workbook, pages 13 - 15



10 MINUTES

Run Chart 1

Percentage of Patients Eeligible for Chlamydia Screening Over Time



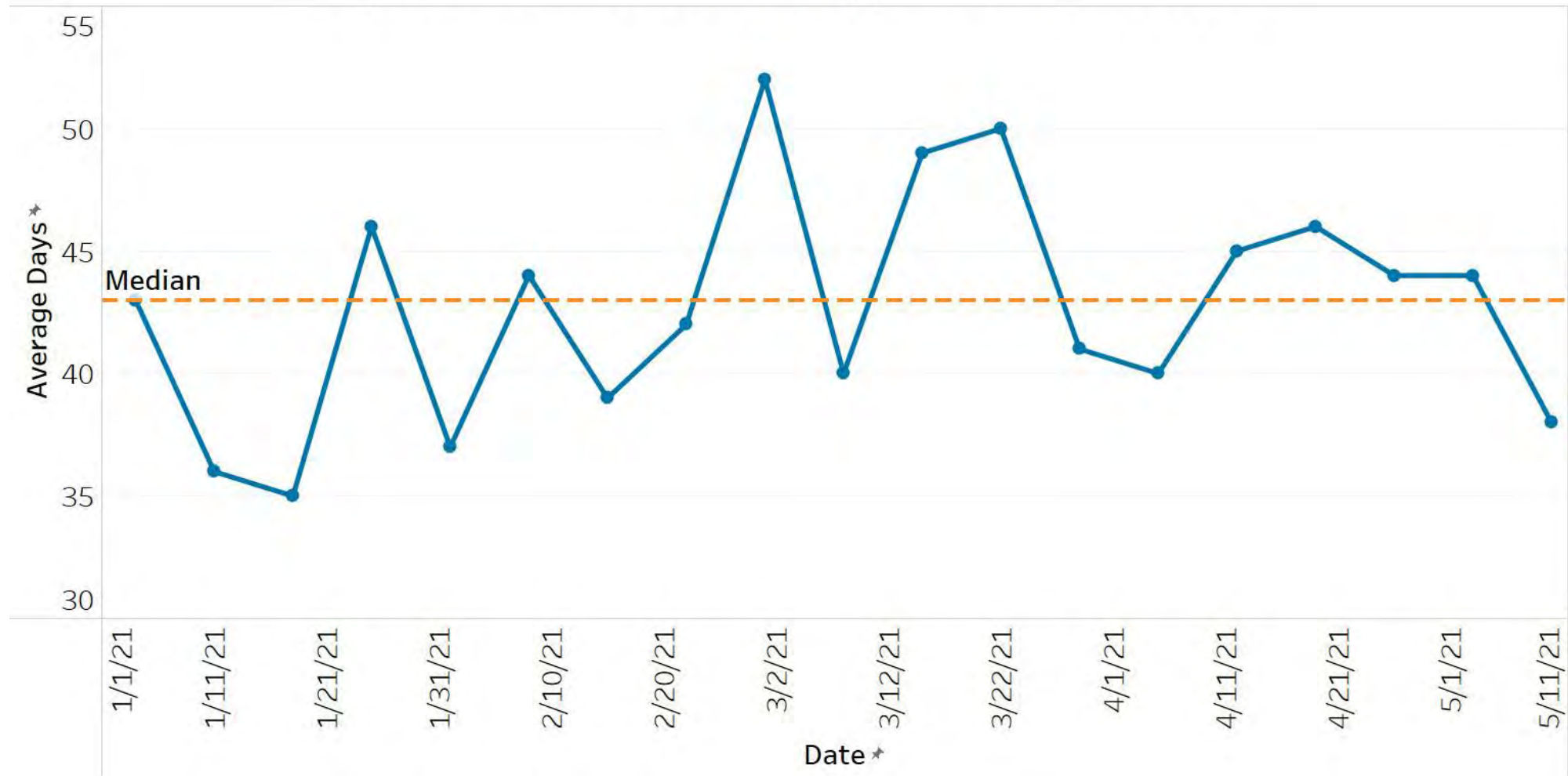
Run Chart 2

Office Visit Cycle Time



Run Chart 3

Days to Third Next Available Appointment - Practice A

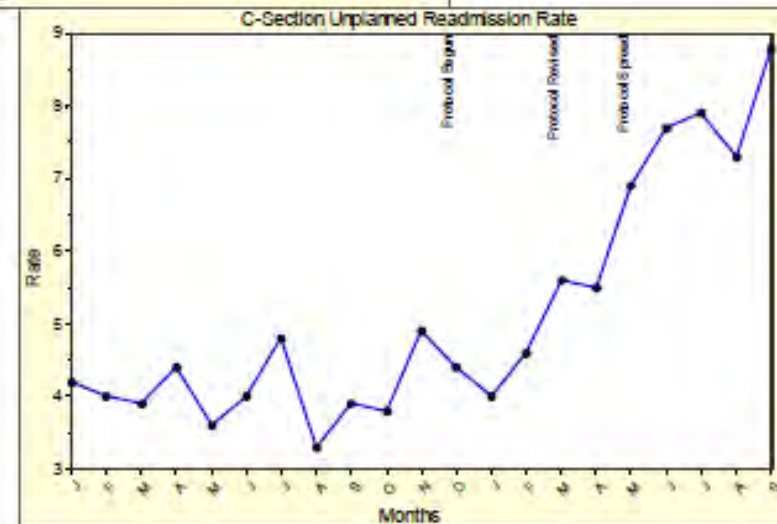
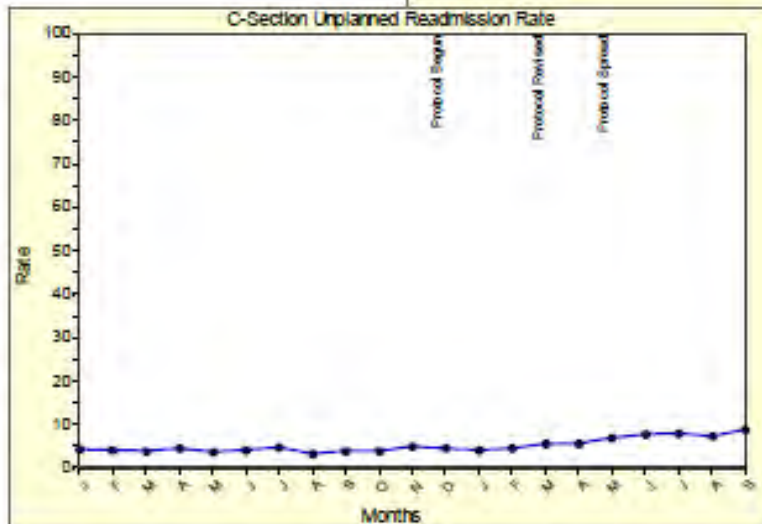
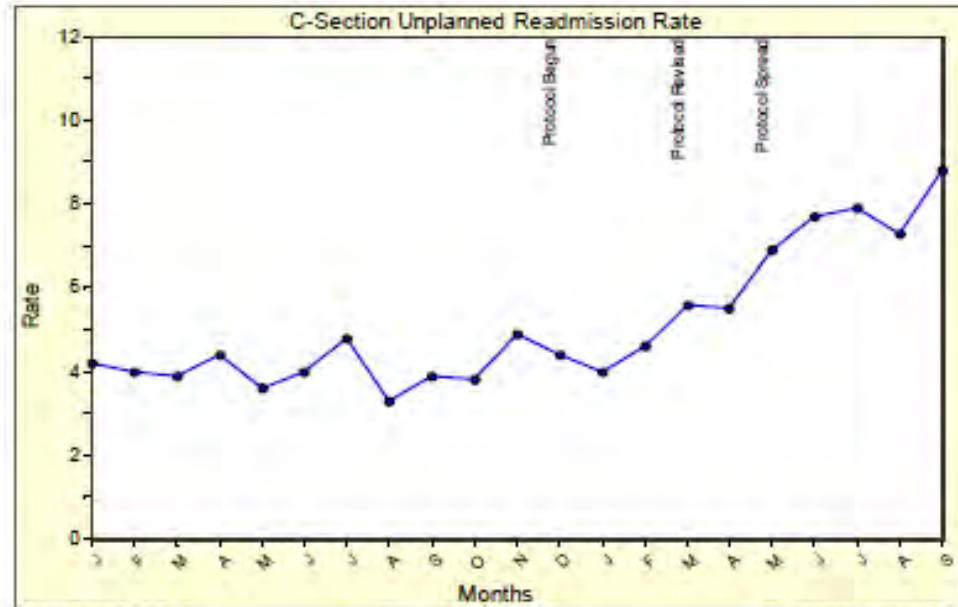


Misinterpreting Variation

- Interpret common cause variation as a special cause variation
 - Claims of improvement when there is none and may result in unnecessary changes to the system
- Ignoring special cause variation
 - Missed opportunity to fix a problem or celebrate a change



Scale Matters



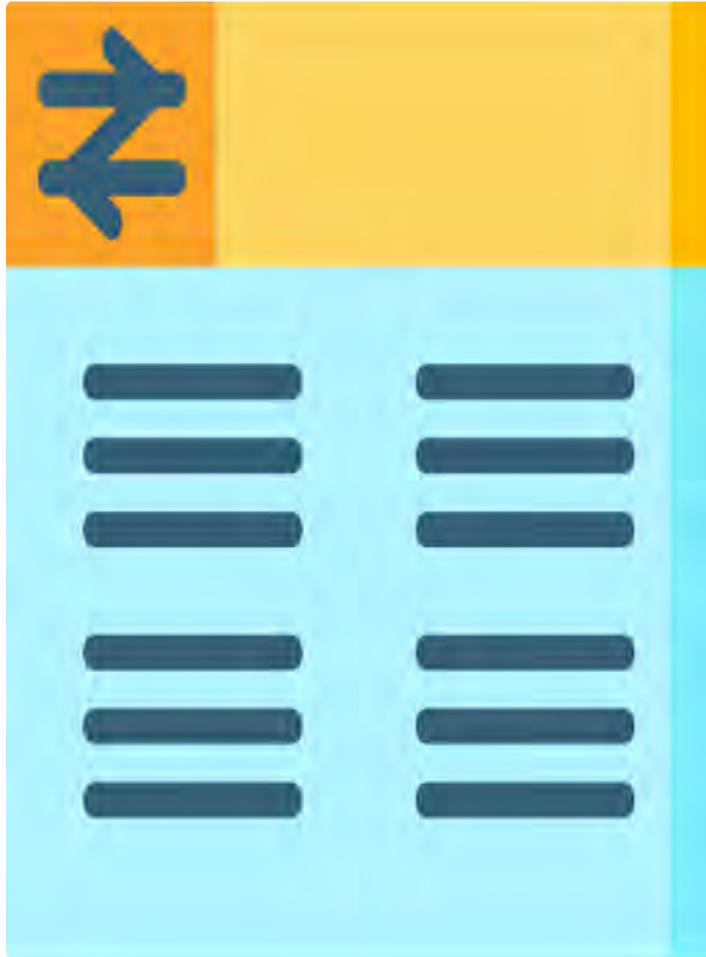
Source: the Institute for Healthcare Improvement

Effective Use of Data

- See usefulness not perfection
- Plot over time
- Annotate changes
- Use stratification to refine knowledge
- Use sampling
- Use pencil and paper until the information system is ready



Using Data for QI Summary



- All data exhibit variation.
 - Common cause or Special Cause
- Tracking data over time helps to understand and classify variation
- A run chart can facilitate data interpretation

What Questions Do You Have?





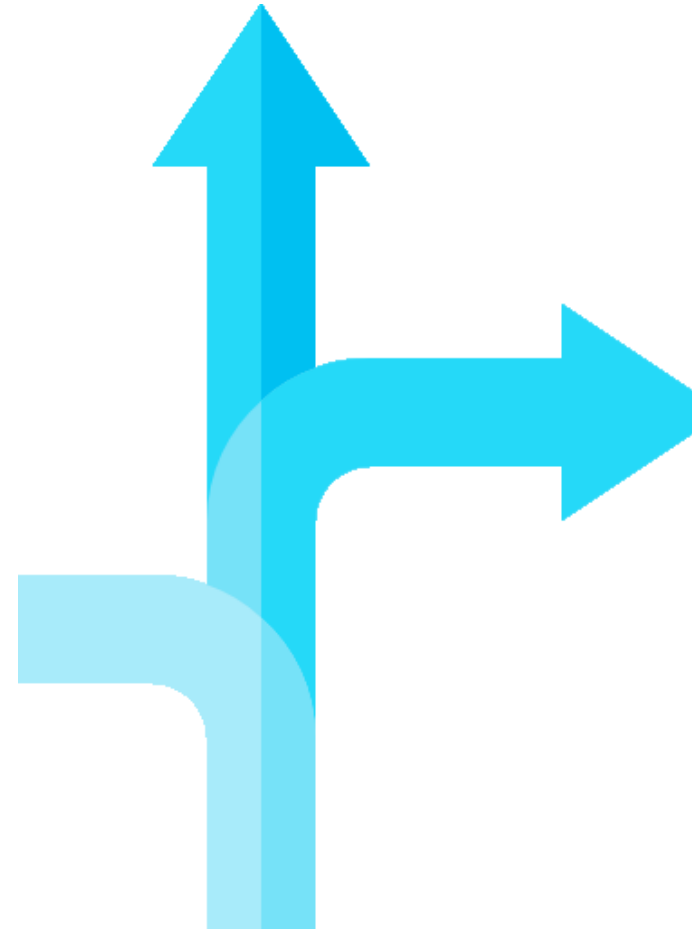
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What Changes Can We Make That Will Result In Improvement?

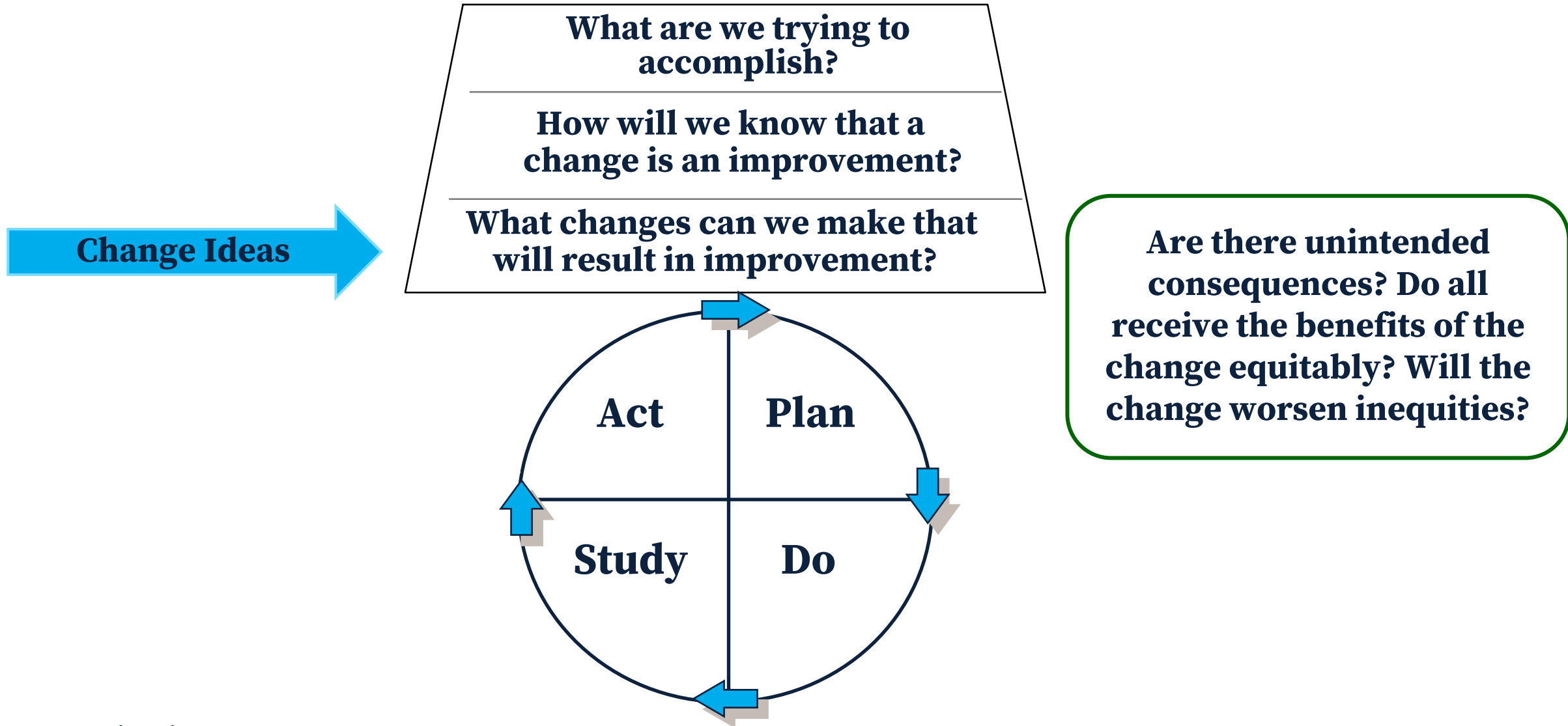
Part 1 – Developing Theories for Change

Think about a change that did NOT result in an improvement

Share with your neighbor



Model for Improvement: Equity Lens



Change vs. Improvement

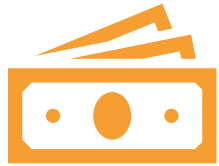
“All improvement requires change, but not every change is an improvement.”



Who will Benefit from Our Change?



Typical Solutions in Developing Change



More of the Same

People

Money

Time

Exhortations to work
harder



Inspection

Doesn't alter the way the
work is accomplished



Utopia Syndrome

The search for perfection

- Action paralysis
- Motivated by fear of failure

Change

- The process or result of making or becoming *different*
- “***Different***” is not the same as “***improvement***”



Reactive vs. Fundamental Change

- **Reactive (First Order Changes)**

- Routinely made to solve immediate problems
- Keeps system running at the current level of performance
- Returns system to prior condition
- Immediate/short-term impact

- **Fundamental Changes (Second Order Changes)**

- Creates new system of performance
- Designs/re-designs some aspect of system
- Fundamentally alters the system
- Long-term impact



Developing Theories (Hypotheses) for Change



Enumerates why we think our proposed change will be good



Helps QI team articulate the basis of predictions that changes will result in an improvement



Allows for tests to be designed that will validate the theories and improve our original change idea



Represents our current knowledge about how some aspect of how the system works



Making predictions in the “Plan”
of *every* PDSA



Using Diagrams

Cause and Effect (Fishbone)

5 Whys



Purpose of Driver Diagrams



TRANSLATES A
HIGH-LEVEL
IMPROVEMENT
GOAL INTO
SUB-PROJECTS



HELPS ORGANIZE
CHANGE
CONCEPTS AND
IDEAS

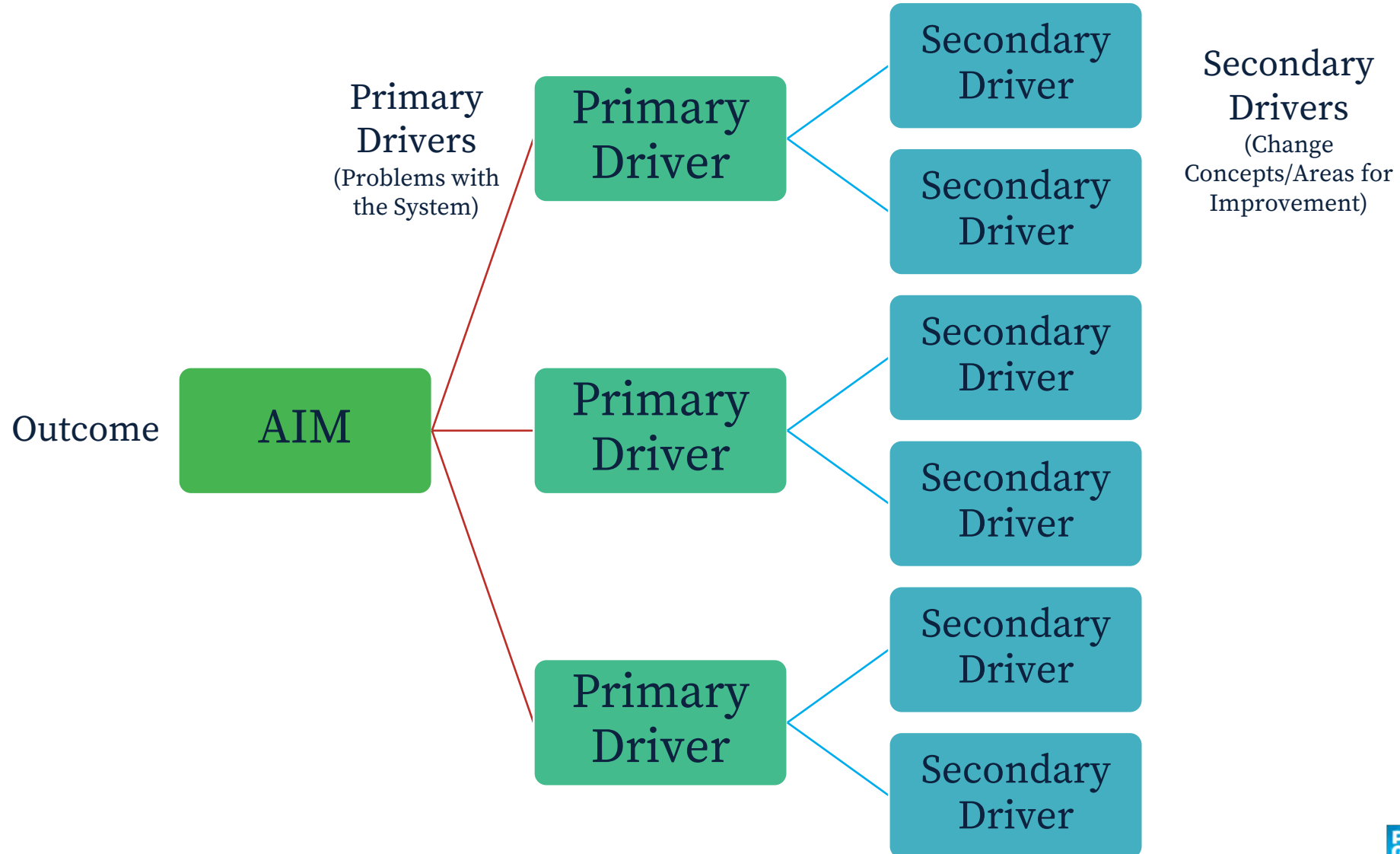


TESTS THEORIES
ABOUT CAUSE
AND EFFECT

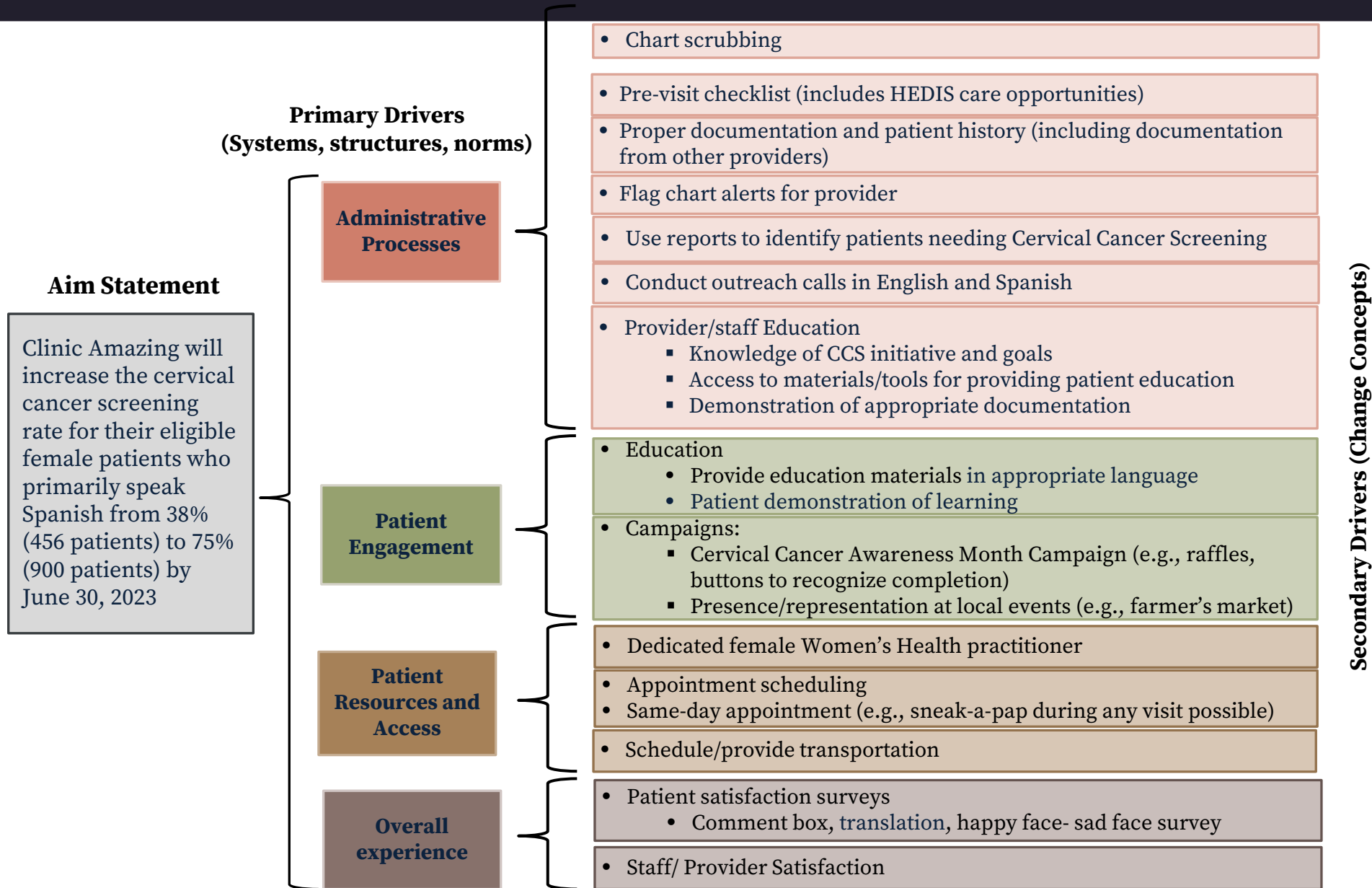


SERVES AS A
COMMUNICATION
TOOL

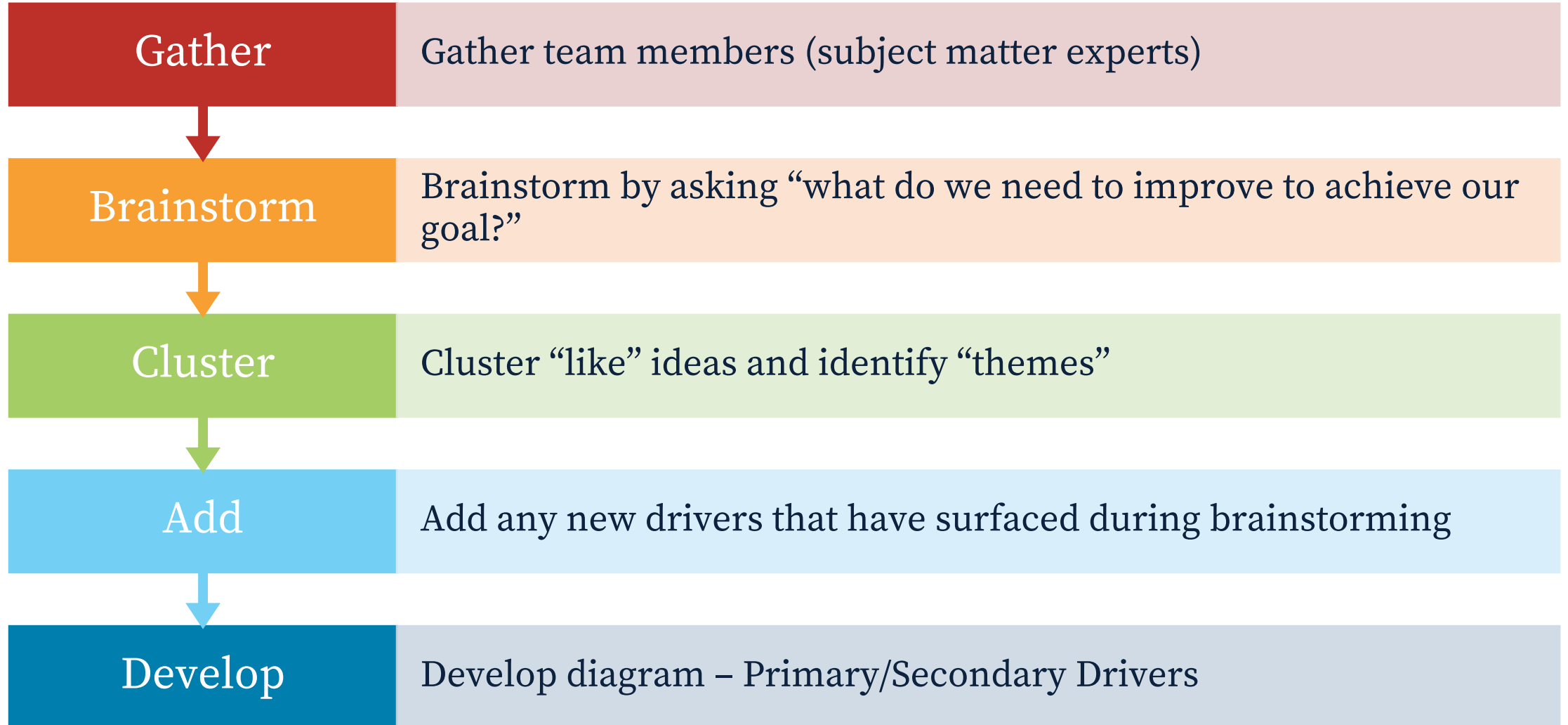
Driver Diagram



Cervical Cancer Initiative – Driver Diagram



Developing a Driver Diagram



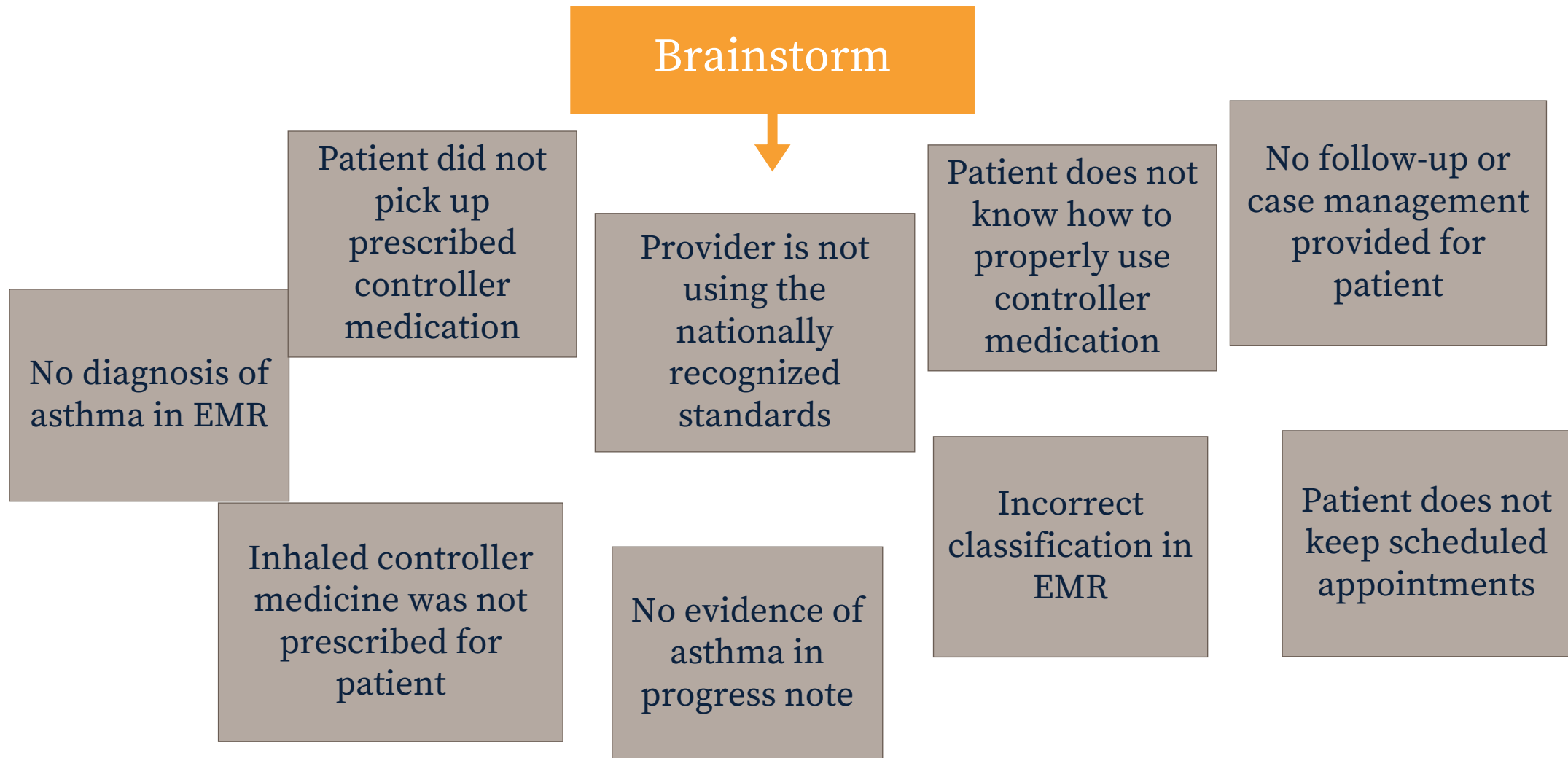
Asthma Management Example

Gather

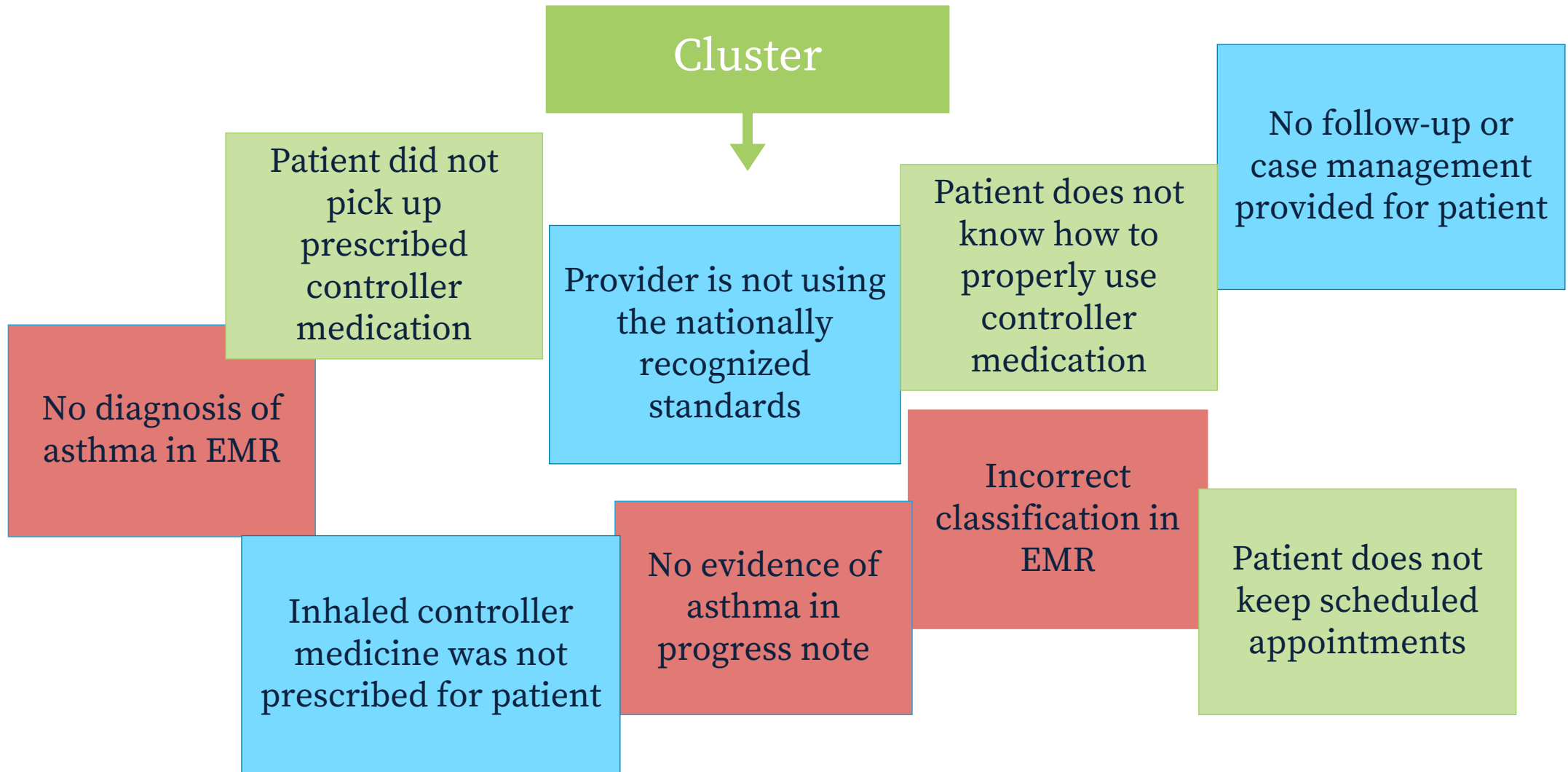


- Providers
- Nurses
- Medical Assistants
- Pharmacists
- Emergency Department Staff
- Patients

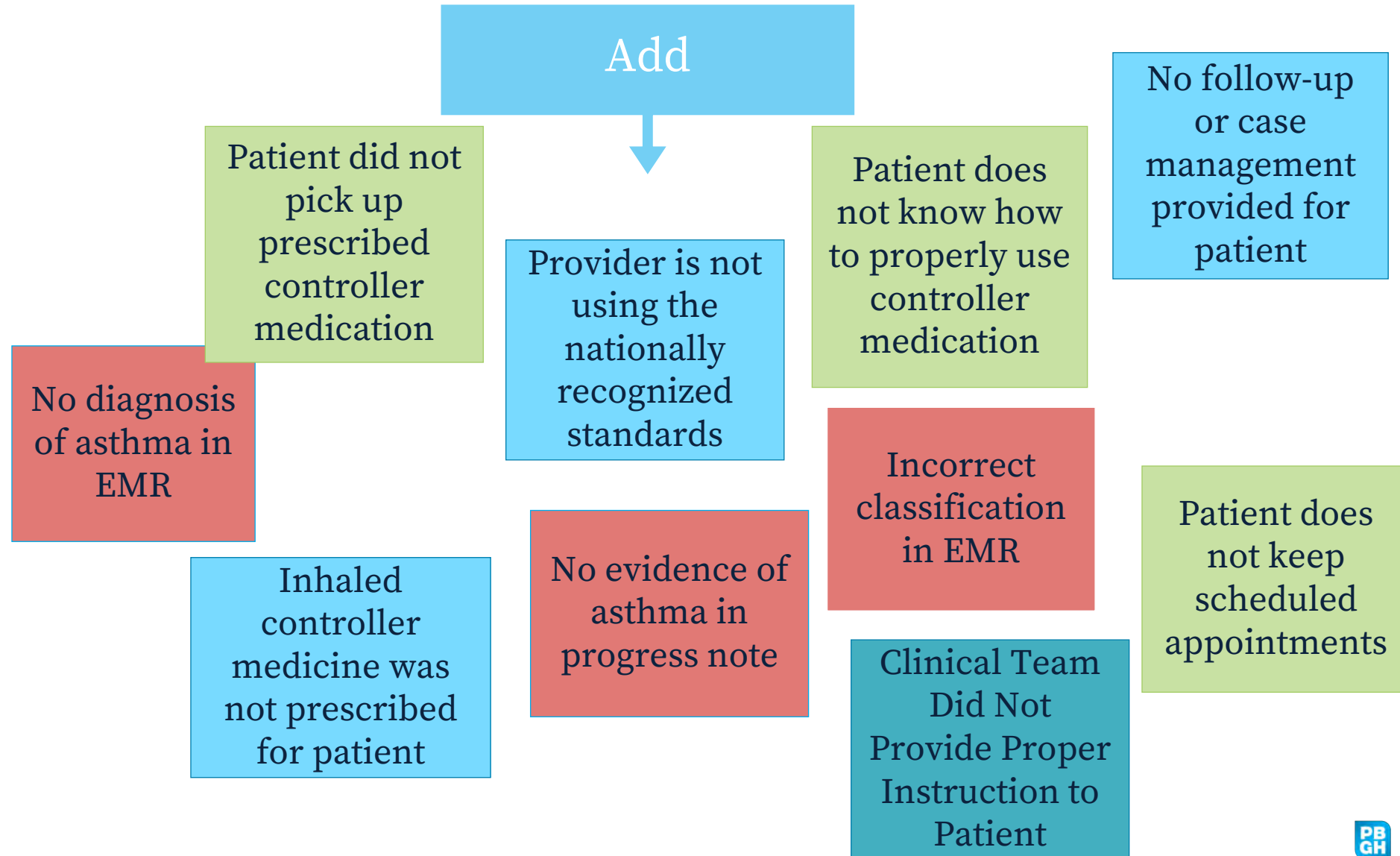
Asthma Management Example



Asthma Management Example



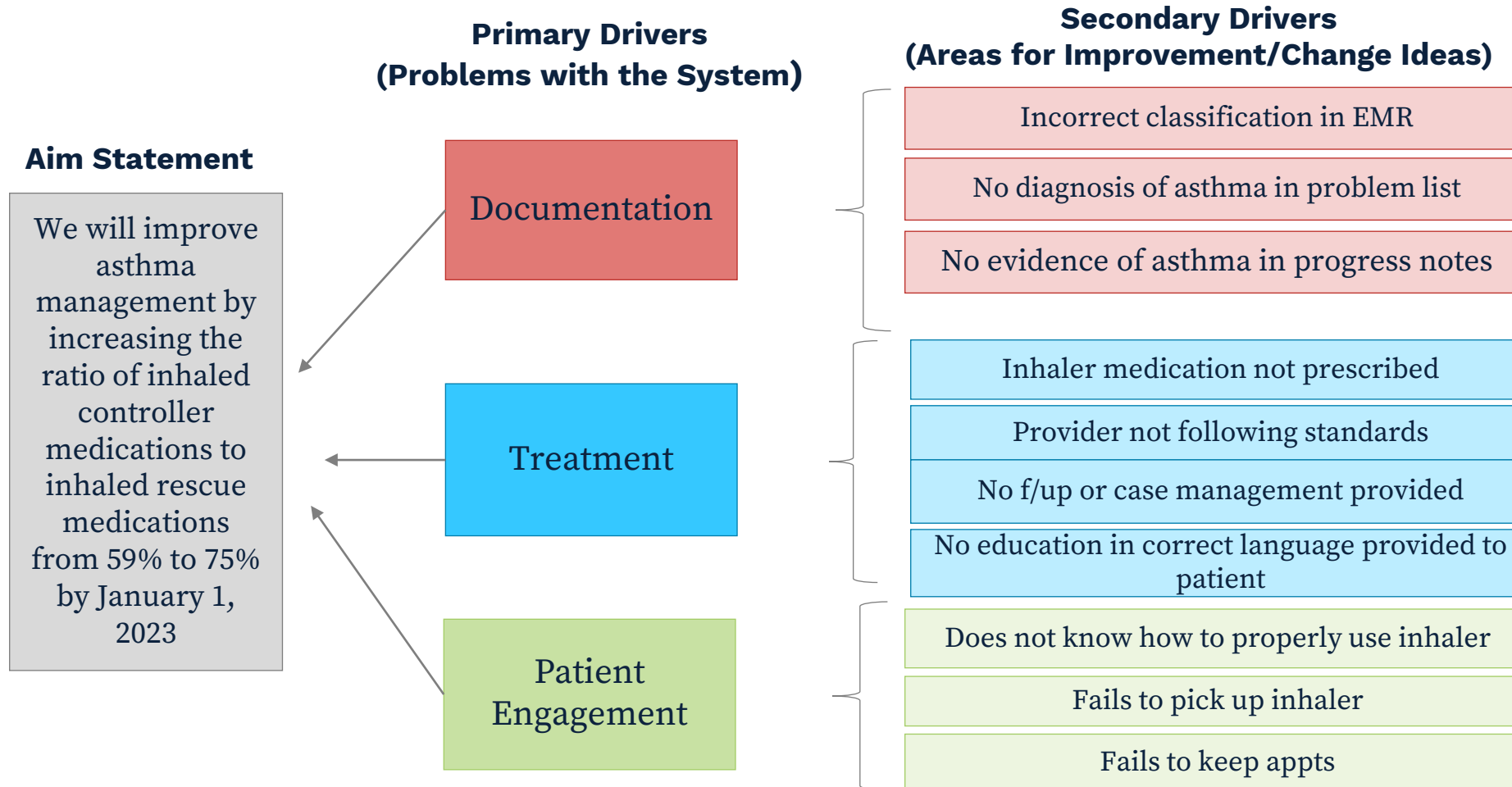
Asthma Management Example



Asthma Management Example

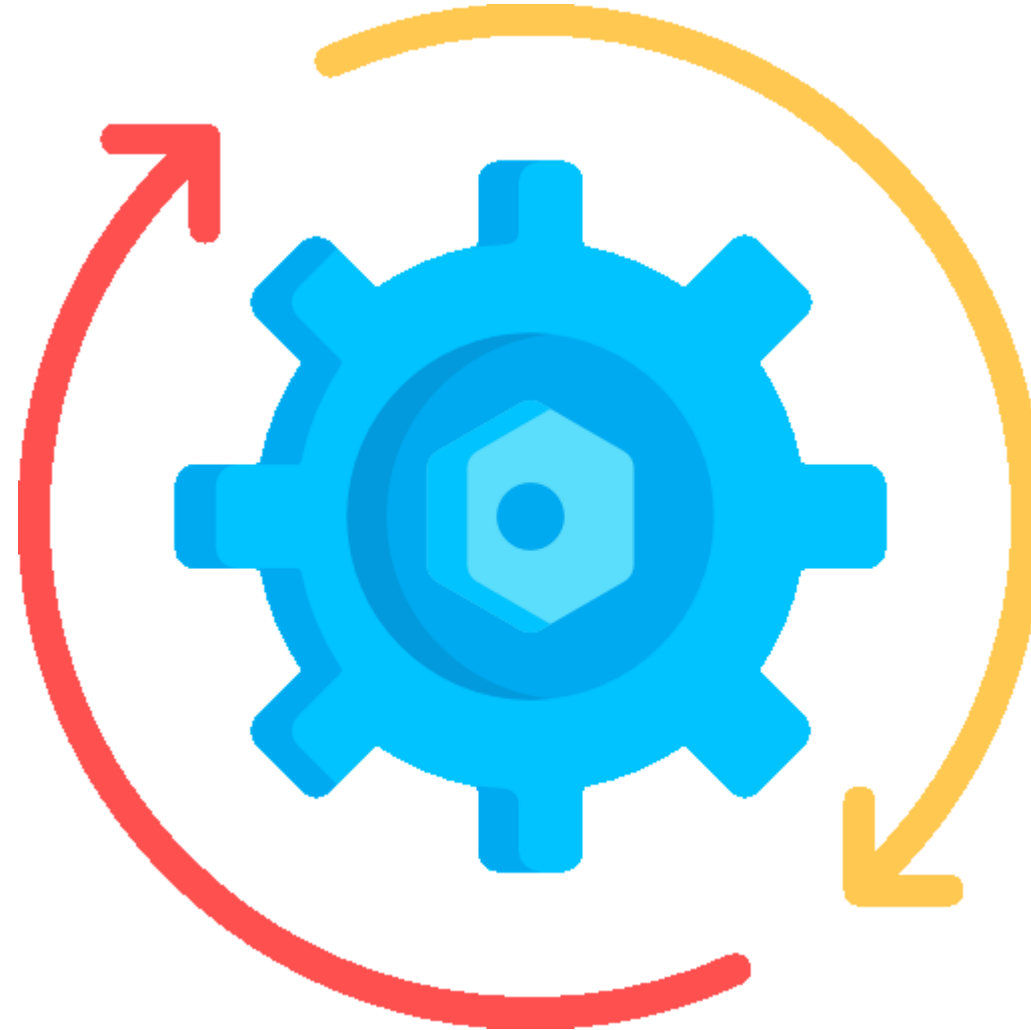


Develop



Let's Build One Together

Let's Build
One
Together



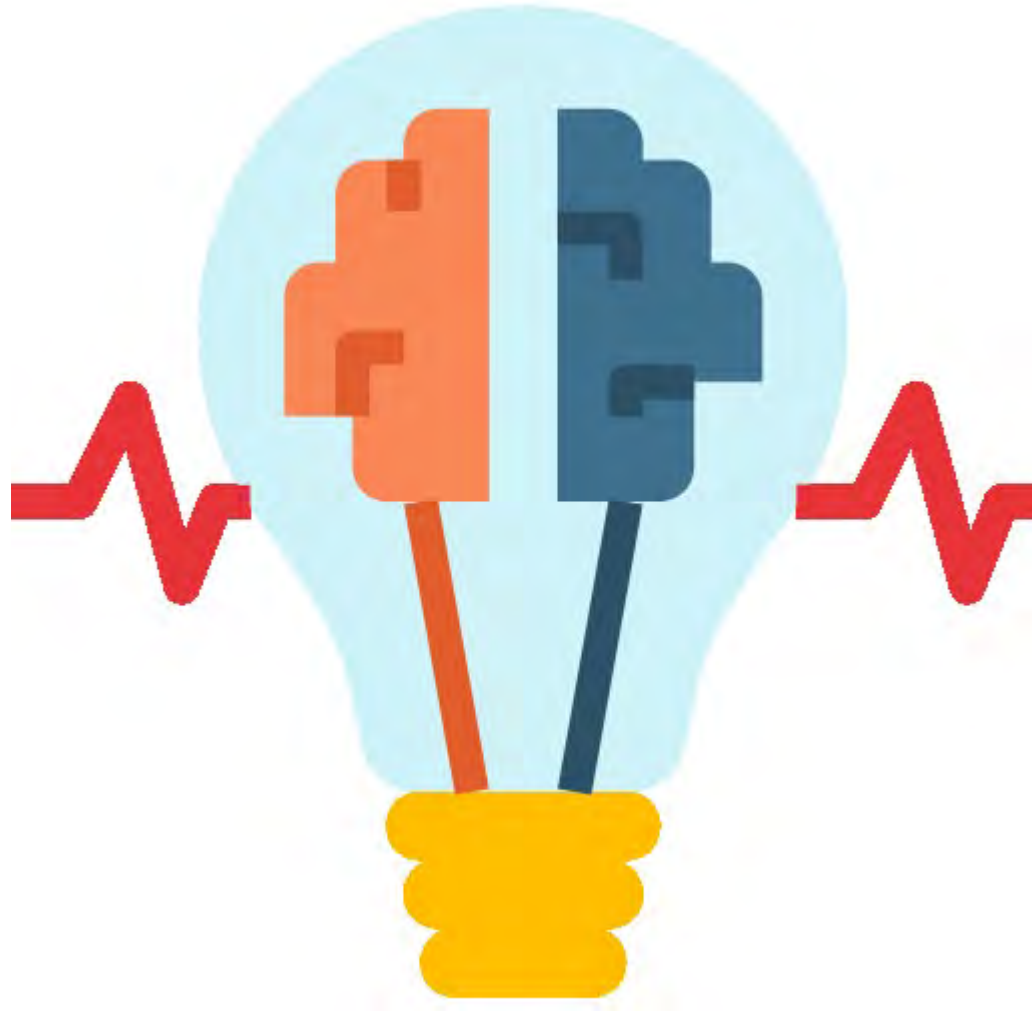
Step 1 – Gather Experts

Step 1 – Gather
Experts



Step 2 – Brainstorm

Step 2 -
Brainstorm



What is the Value of Brainstorming?



The Value of Brainstorming

- Generates ideas quickly
- Expands the portfolio of alternatives
- Gets people unstuck
- Injects insights from a broader group
- Builds enthusiasm

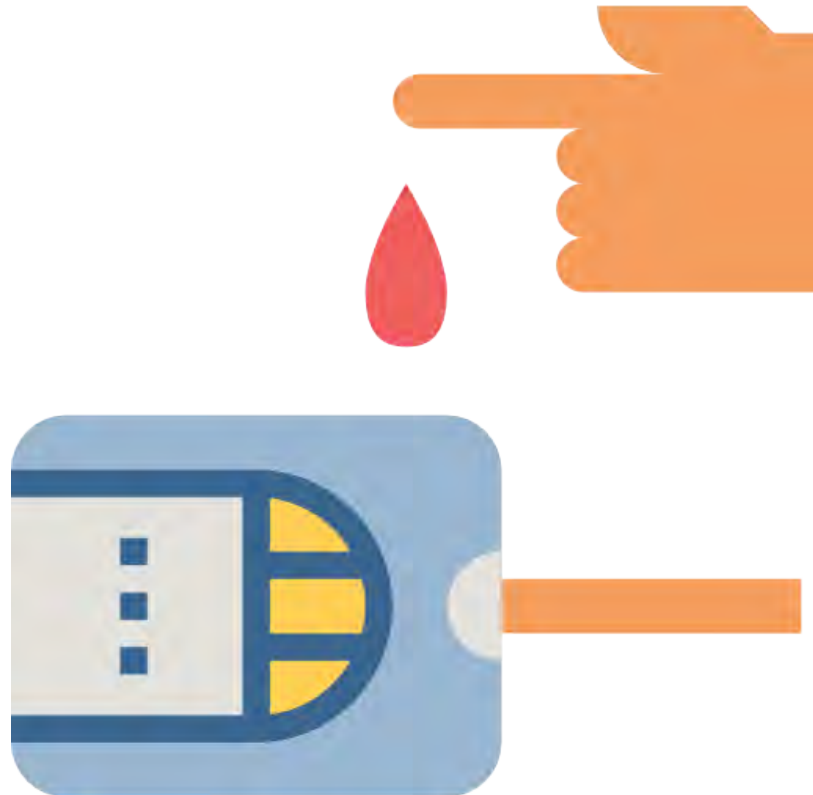


Guidelines for Brainstorming

- Defer judgment
- Encourage wild ideas
- Build on the ideas of others
- Stay focused on the topic
- One conversation at a time
- Be visual
- Go for quantity



Silent Brainstorming



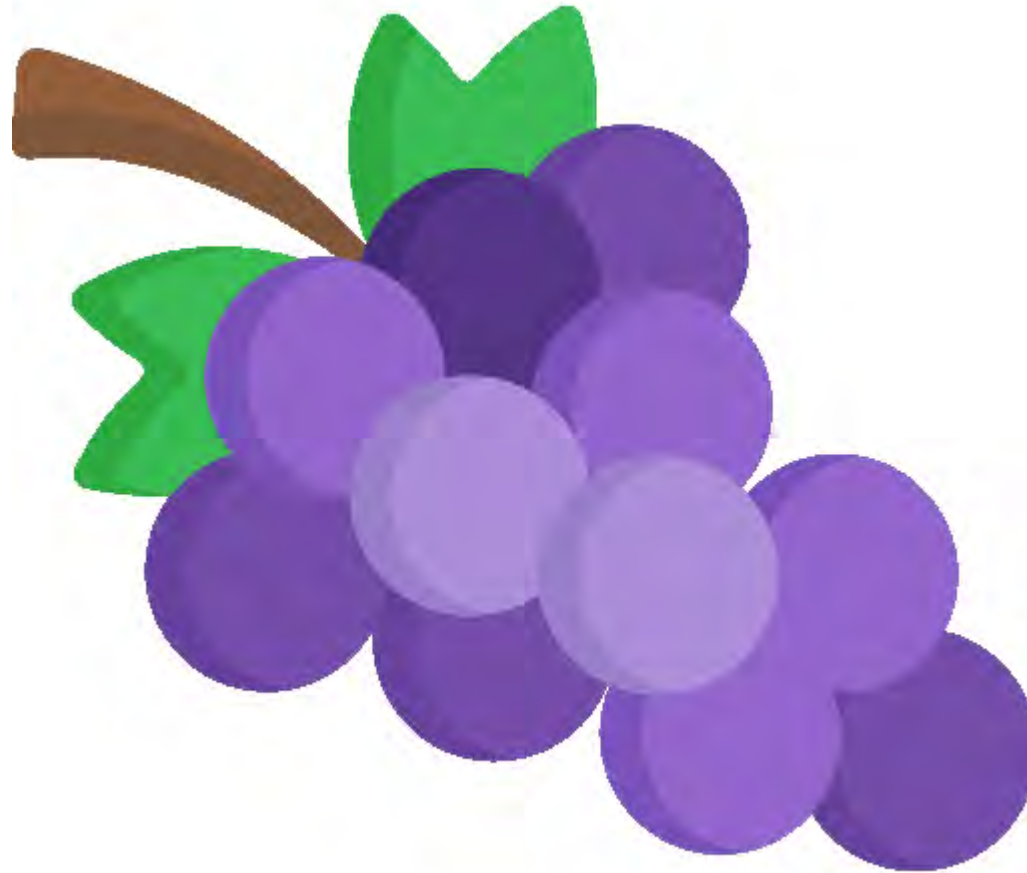
- Each person has a stack of “sticky notes”
- At start of timer, write as many ideas as possible . . .

1 PER STICKY NOTE

- Topic for brainstorming is:
 - Aim: ABC Clinic will improve the health of its diabetic patients by decreasing the % of patients with uncontrolled diabetes whose primary language is not English and whose (HbA1c < 9) from 8.7% [15 patients] to 15.34% [90 patients] by December 31, 2024.
- Brainstorming Question:
 - Why aren't we meeting this target?

Step 3 – Cluster Similar Ideas to Find “Themes”

Step 3 –
Cluster
Similar Ideas
to Find
“Themes”



Step 4 – Add Any New Drivers that Surfaced During Brainstorming

Step 4 – Add
Any New
Drivers that
Surfaced
During
Brainstorming

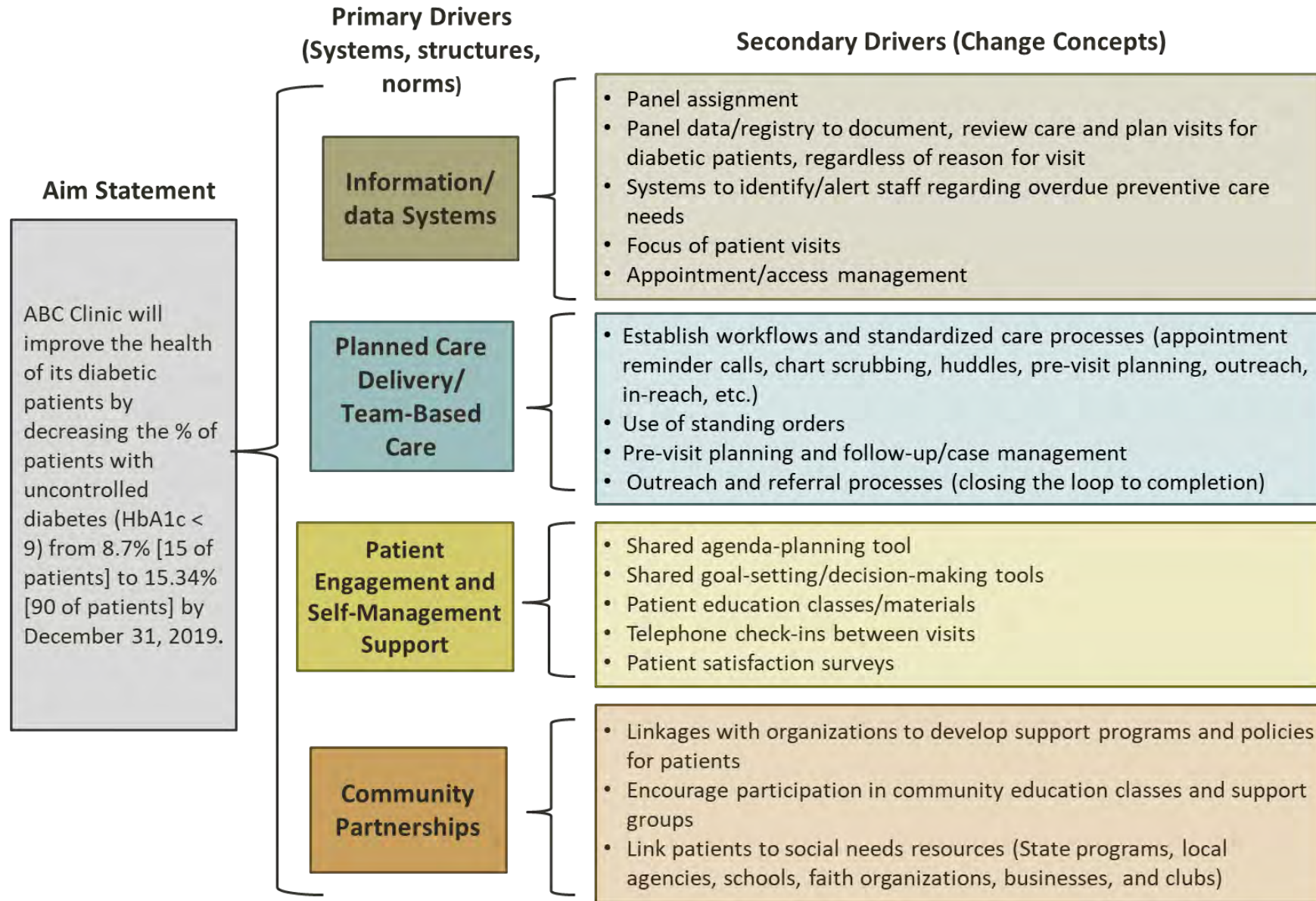


Step 5 – Develop Driver Diagram

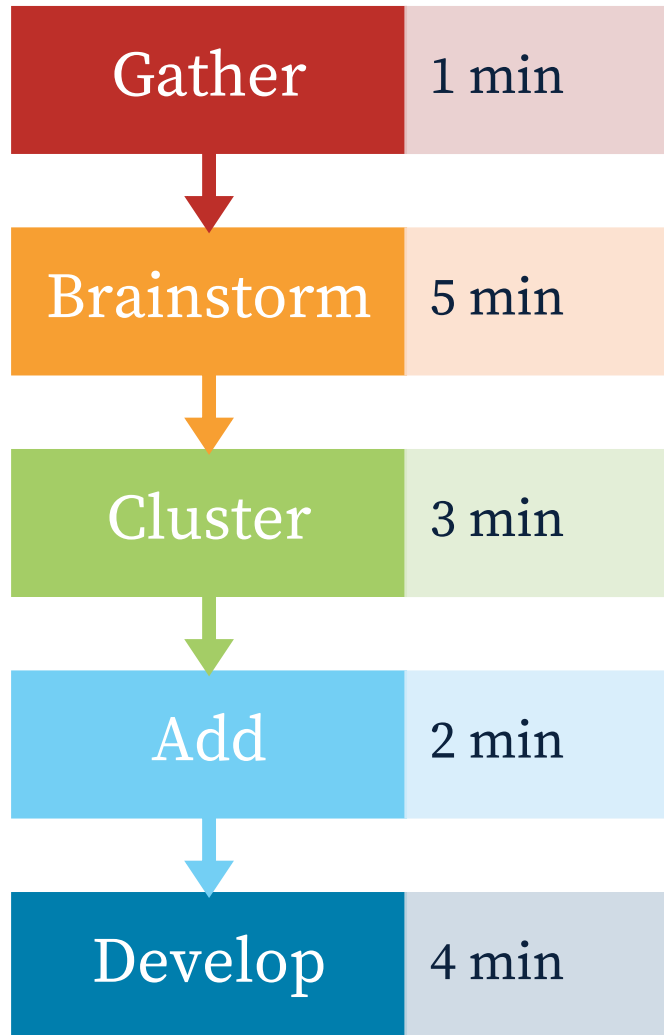
Step 5:
Develop
Driver
Diagram



Brainstorming for Driver Diagram



Time to Practice



Begin developing a driver diagram for the initiative you identified earlier this morning in Aim Statement



15 MINUTES

Things to Remember About Driver Diagrams

- Include those who know the work best
- Two ways to start:
 - Primary drivers can be stated – brainstorm each primary driver
 - If primary drivers are less evident – brainstorm the secondary drivers (working backwards)
- No right or wrong



Developing Theories (Hypotheses) for Change



Enumerates why we think our proposed change will be good



Helps QI team articulate the basis of predictions that changes will result in an improvement



Allows for tests to be designed that will validate the theories and improve our original change idea



Represents our current knowledge about how some aspect of how the system works

What Questions Do You Have?



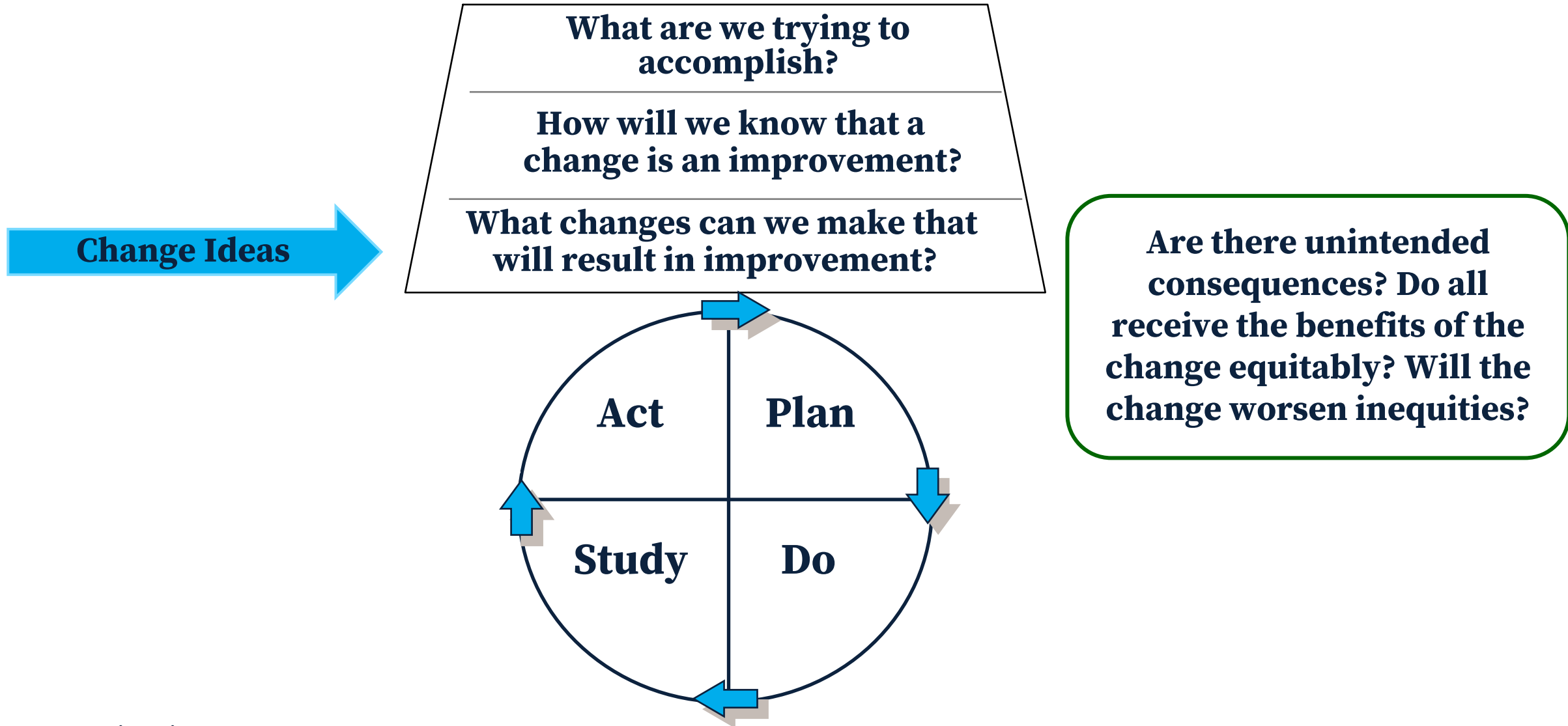


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What Changes Can We Make That Will Result In Improvement?

Part 2 – Methods for Developing Fundamental Change

Model for Improvement: Equity Lens



Methods for Developing Fundamental Change



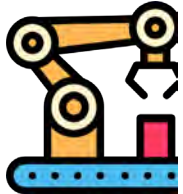
Logical thinking about the current system

Reflect on the system of interest



Benchmarking or learning from others

1. Published information
2. Interviews
3. Site Visits
4. Shadowing



Using technology

- Equipment
- Materials
- Information Systems
- Methods



Creative thinking

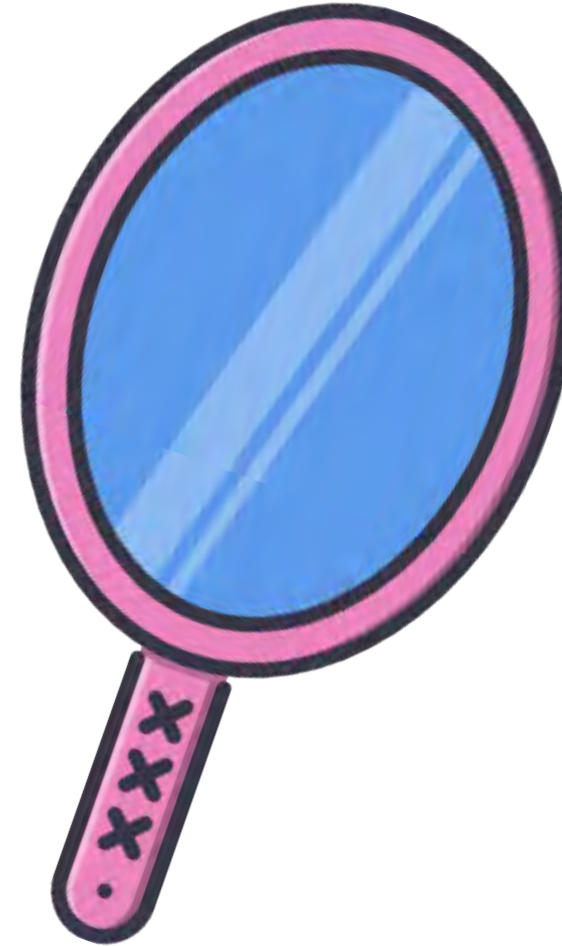
- Three modes of thinking
 1. Creative
 2. Logical positive
 3. Logical negative (critical)

Using change concepts



1. Logical Thinking About the Current System

Reflecting on existing subject-matter

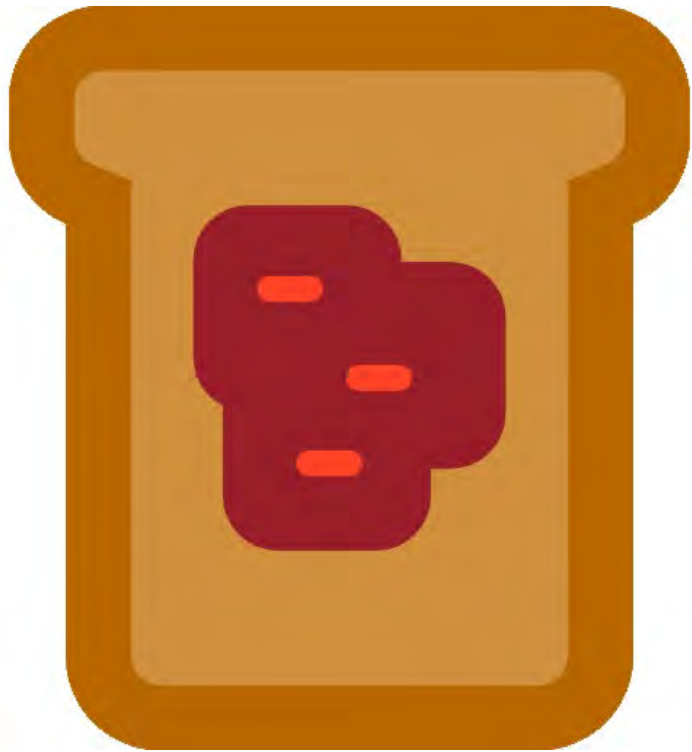


Peanut Butter and Jelly



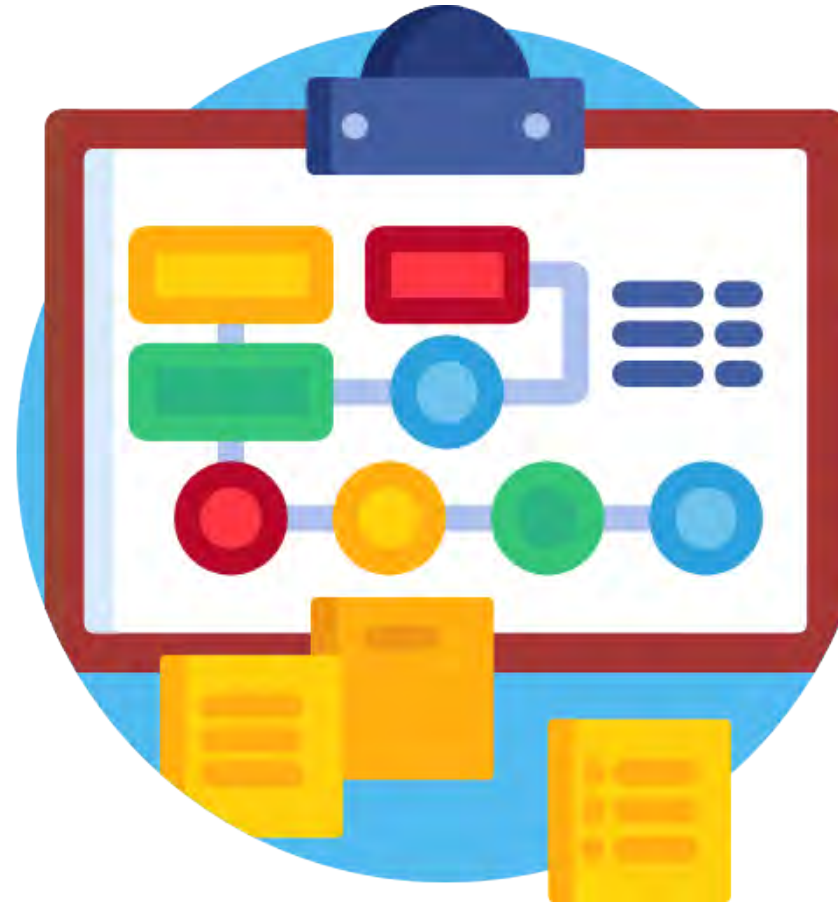
Write down the steps to prepare a Peanut Butter and Jelly sandwich

What Did We Learn from this Activity?



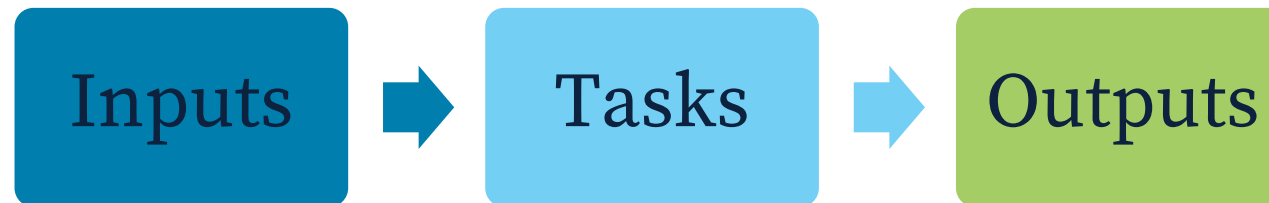
What is a Process?

- From Dictionary.com:
 - “A systematic series of actions directed to some end.”
 - “A continuous action, operation, or series of changes taking place in a definite manner.”



What is Process Flow Mapping?

- Visual representation of a process or work flow
- Depicts each step sequentially
- Source for understanding what needs to be improved



Developing a Process Flow Map



Gather Subject Matter Experts

Representatives who will provide firsthand accounts of how the process **REALLY** works



Process Flow Mapping: Begin with High-level Process



Shop for
ingredients

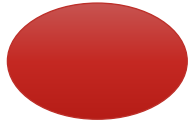
Gather
ingredients
and supplies

Assemble
sandwich

Mapping the Detail



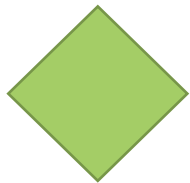
Process Mapping Symbols



- **Start and End:** Oval used to show inputs (materials, information or action) that starts a process and outputs (the results) at the end of a process



- **Activity:** Rectangle represents one task/ activity/step in the process

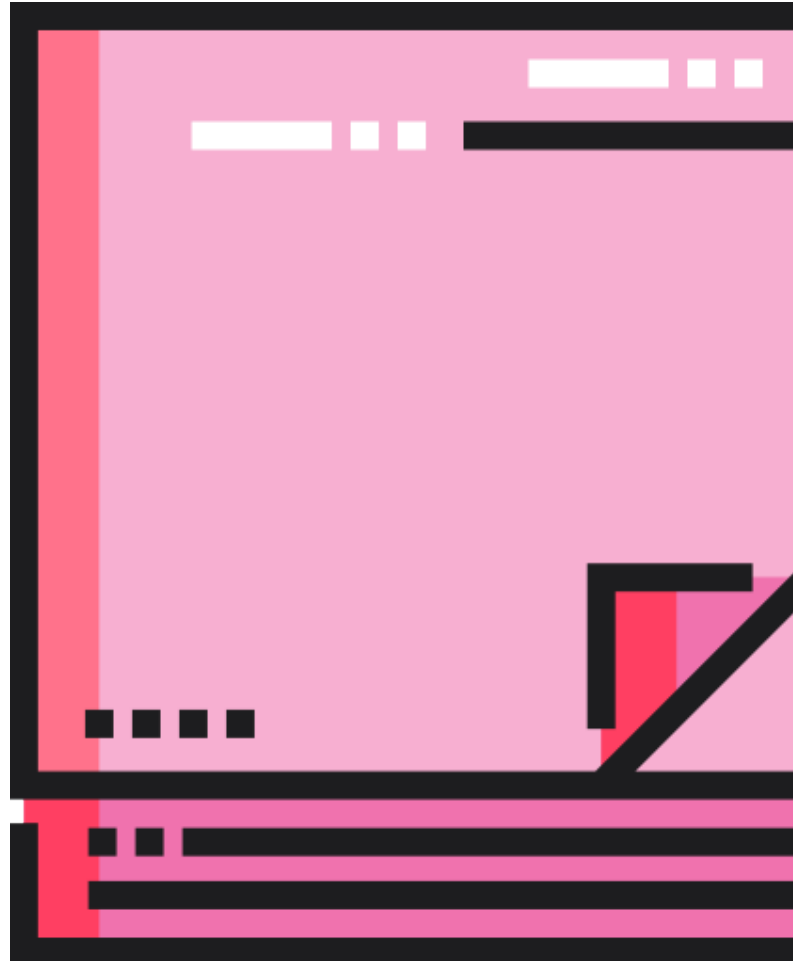


- **Decision:** Diamond represents a decision point in the process

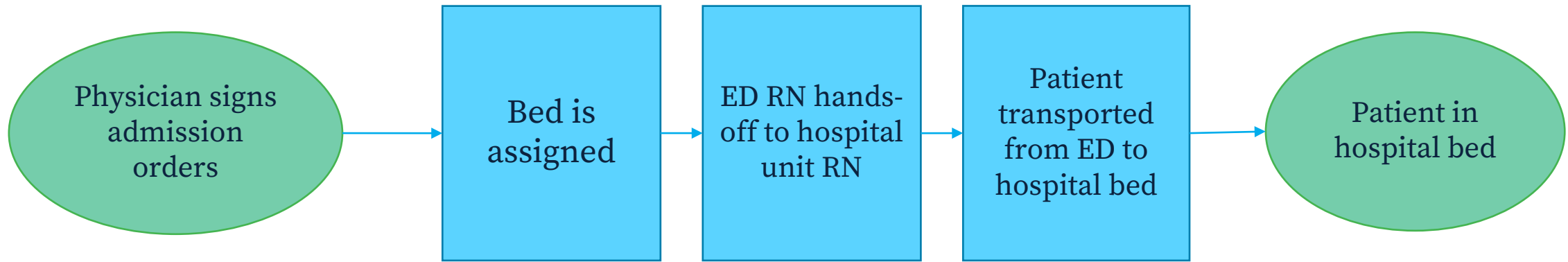


- **Break:** A circle identifies a break in the process

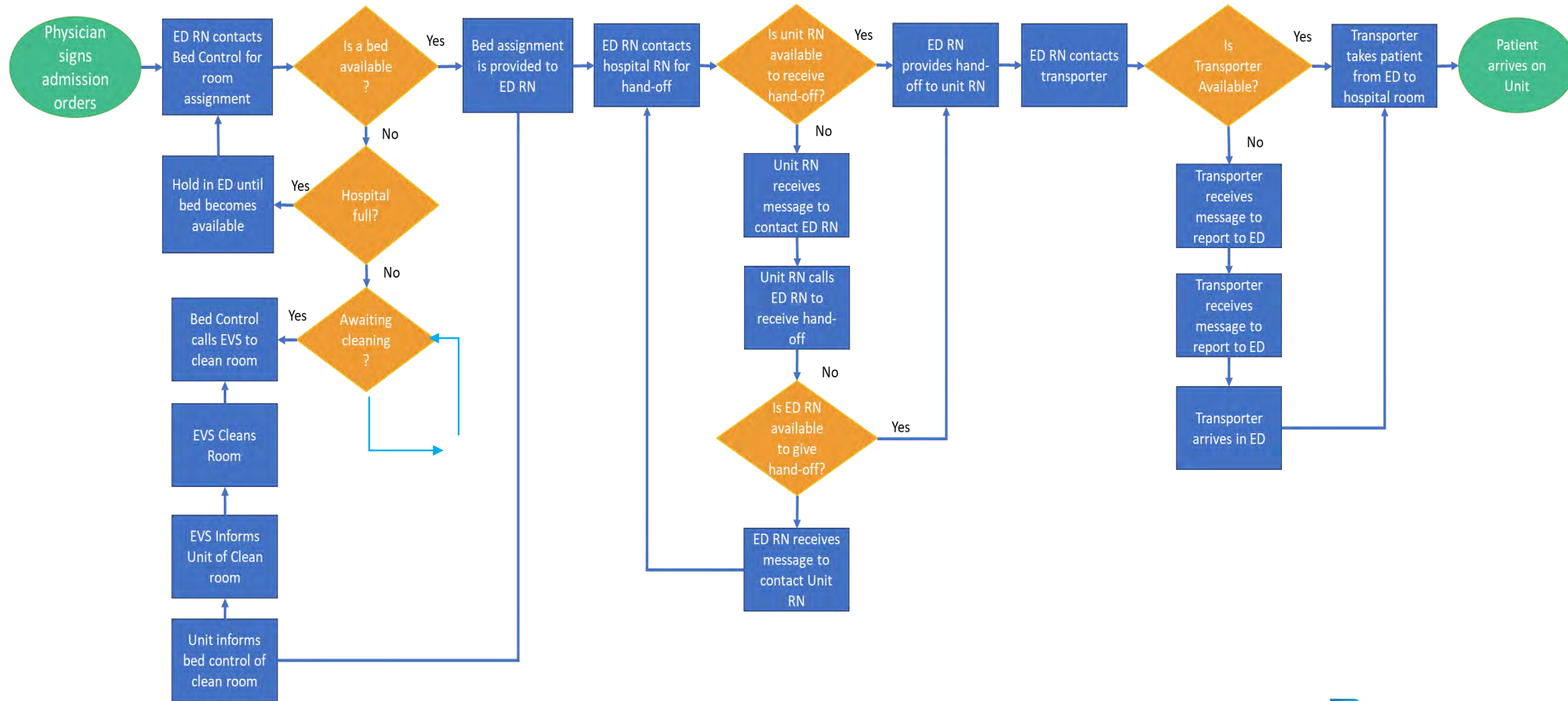
Sticky Notes are a Process Flow Mapper's Best Friend!



Process Flow Map – High Level ED Admission to Hospital Bed



Process Flow Map – Detailed ED Admission to Hospital Bed



Methods for Developing Fundamental Change



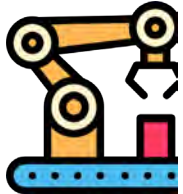
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Using technology

- Equipment
- Materials
- Information Systems
- Methods



Creative thinking

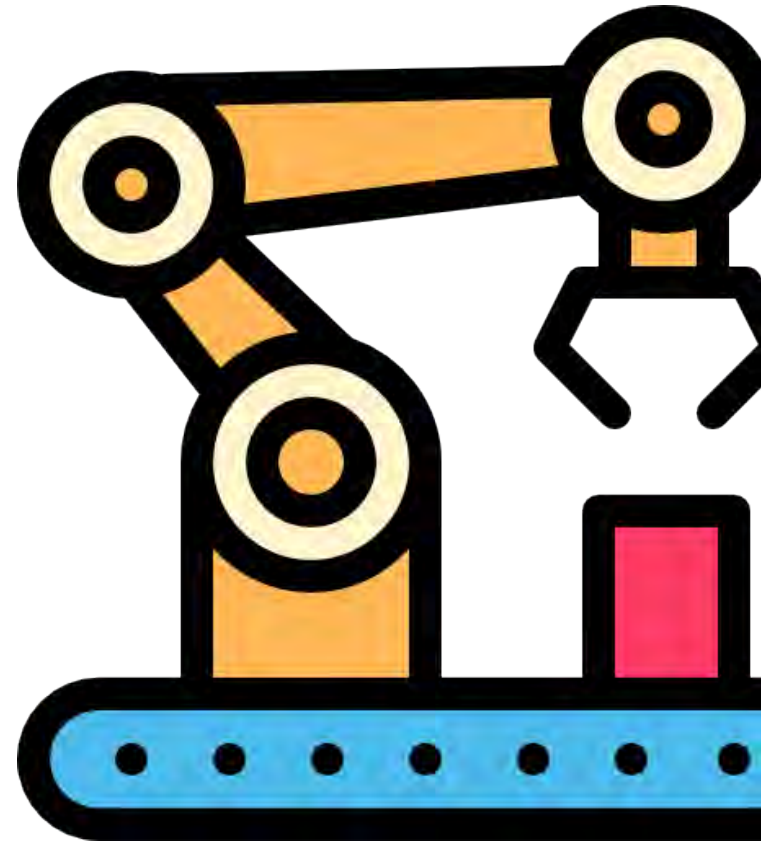
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Using change concepts

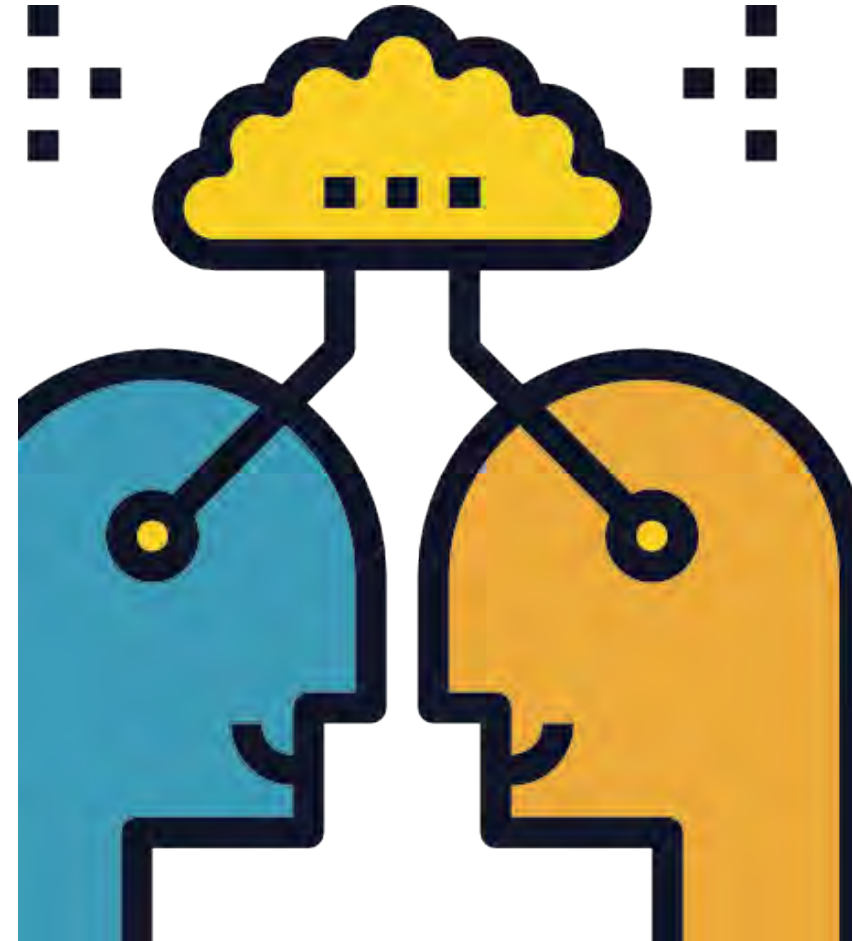
Considerations Regarding Technology

- Don't automate a bad system
- Use to improve a stable system
- Direct changes at bottlenecks
- Unreliable systems are worse than having none at all

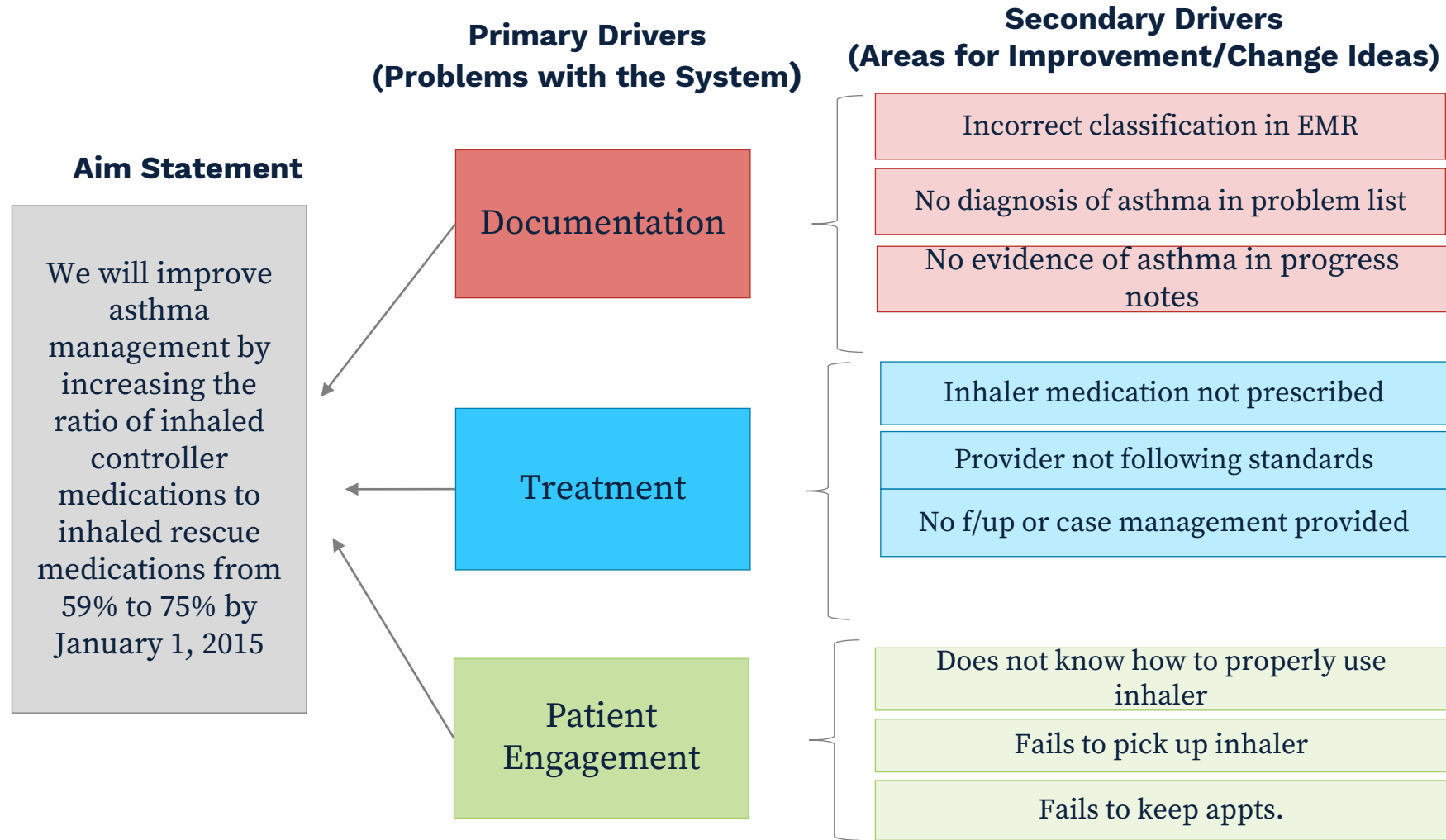


Provoking New Thought Patterns

- Take time
- Observe processes
- Challenge the boundaries
- Attack the solution
- Use *unrealistic* goals
- Focus on the need



Use Change Concepts/Secondary Drivers



5. Change Concepts



SELECT
CONCEPTS
THAT RELATE
TO THE AIM



CHOOSE A
CONCEPT
THAT THE
TEAM THINKS
WILL
GENERATE
NEW IDEAS



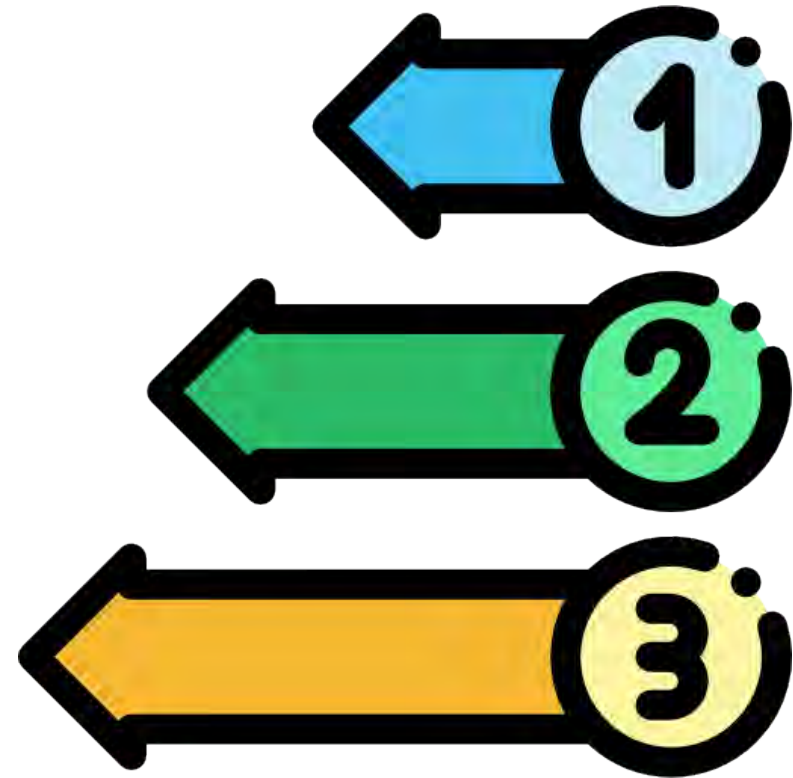
CHOOSE A
CONCEPT
THAT HAS
NOT BEEN
TRIED
BEFORE



MAKE A
RANDOM
SELECTION

Selecting and Prioritizing Change Ideas

- Establish criteria
 - Which idea would most address . . .
 - Clinical quality?
 - Waste reduction?
 - Finances?
 - Patient/family care experience?
 - Which idea is . . .
 - Easy to try?
 - Important to staff?
 - Important to leadership?
 - Most likely to get attention if it's successful?



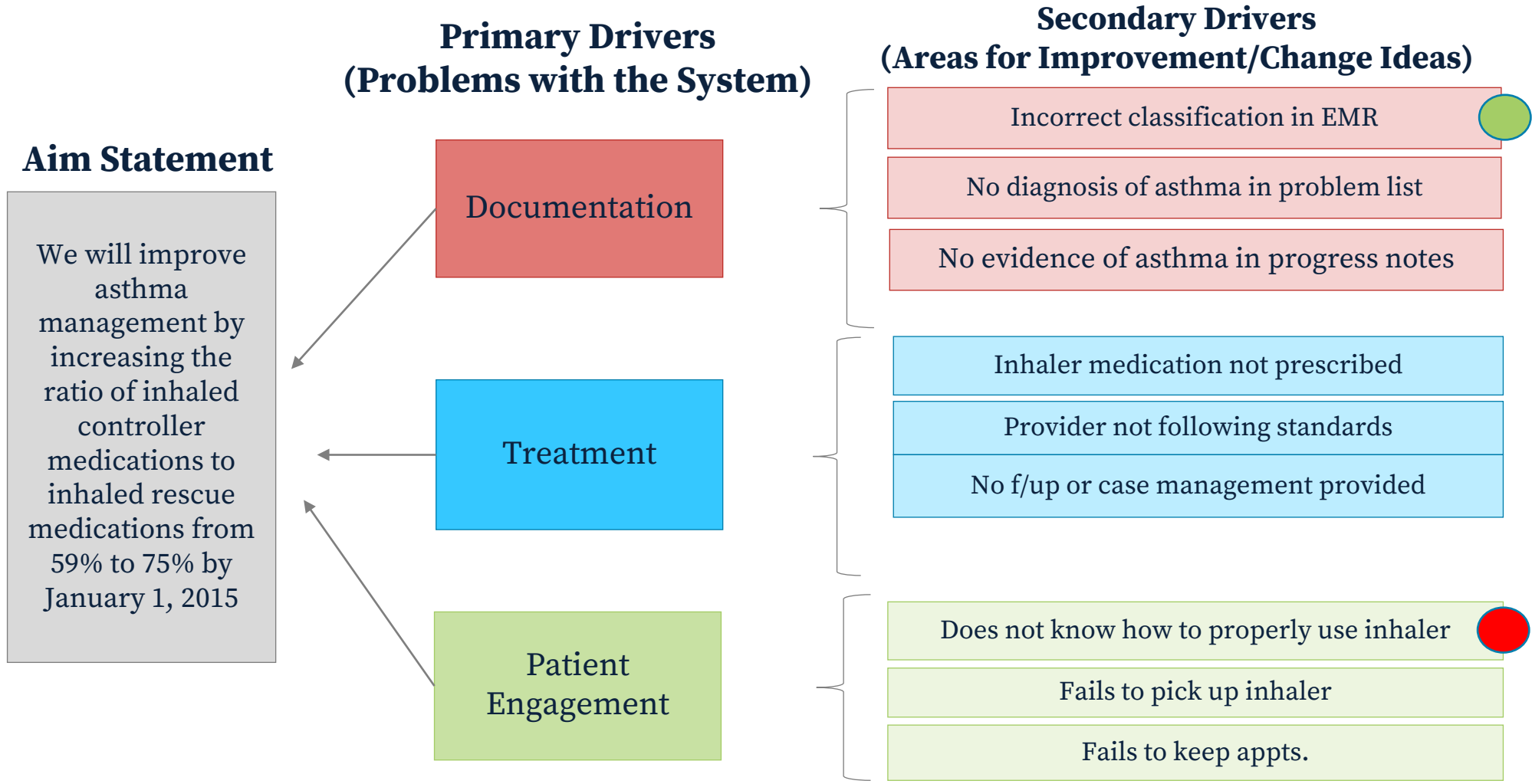
Asthma Example

Issue	Clinical Quality Improved? - is impact on quality of care positive?	Waste reduced with improved financial impact? - improved financial performance?	Patient Care Experience Improved? - Pt satisfaction improved?	Ease of Implementation?	Leadership Support	Frontline Engagement	Overall SCORE TOTAL
Pt. keeps scheduled appt.	3	2	3	1	3	1	13
Correct classification in EMR	3	1	1	3	3	2	13
Pt. F/up with case manager	3	1	3	1	2	2	12

Instructions:

1. Score each item 1-3 (1 is lowest, 3 is highest)
2. Total scores across all categories
3. What is your #1 highest ranked small bone to test?

Use Change Concepts/Secondary Drivers



What Questions Do You Have?



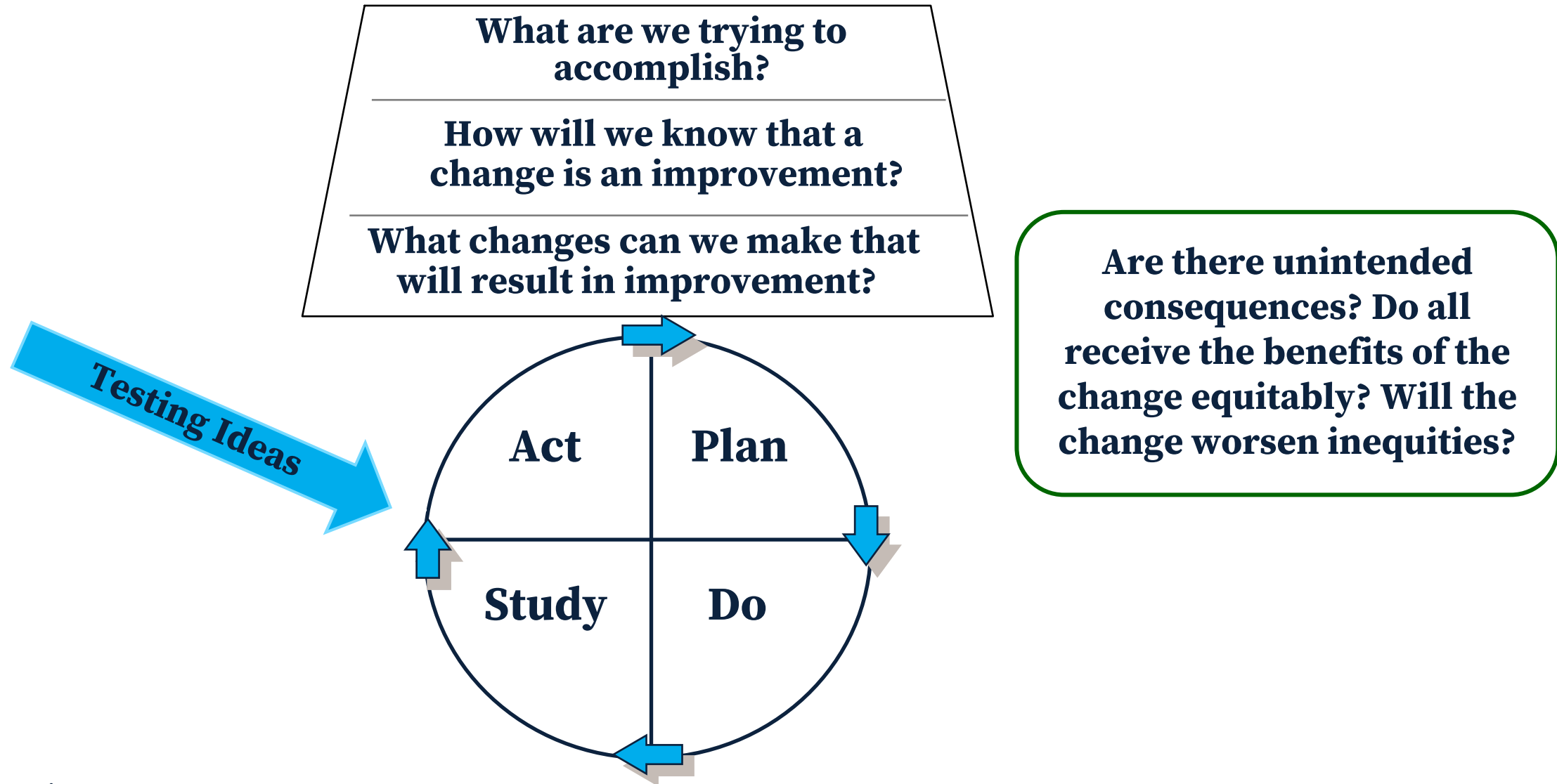


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PDSA

Conducting Small Tests of Change

Model for Improvement: Equity Lens



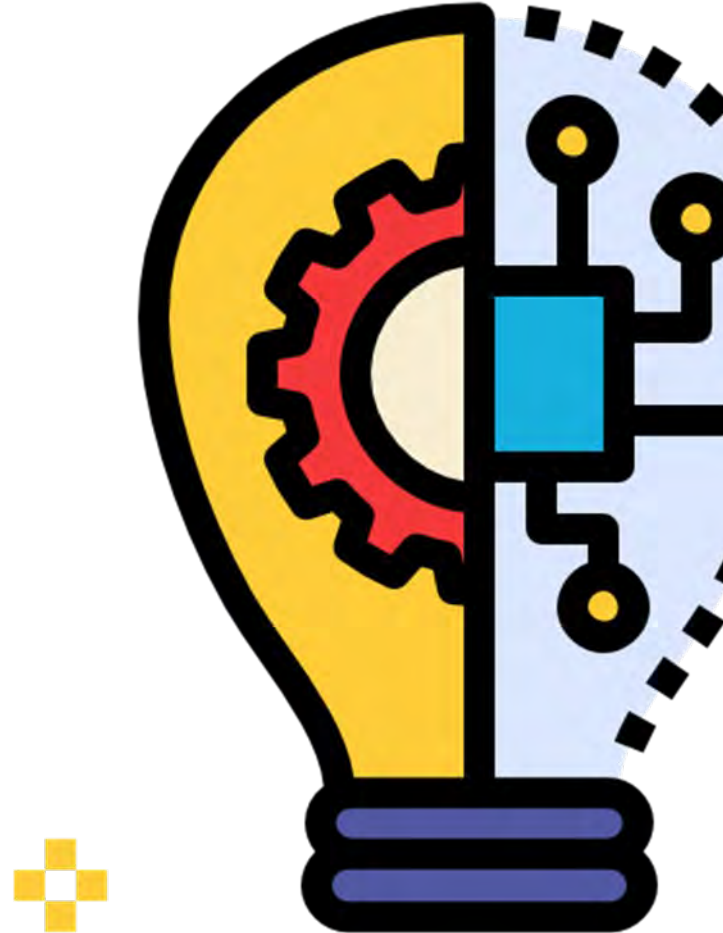
Why Do Small Tests of Change

- Learn from a temporary situation
- Understand whether the change **WILL** result in improvement
- Understand limitations of change
- Address unexpected consequences **EARLY**
- Gain buy-in



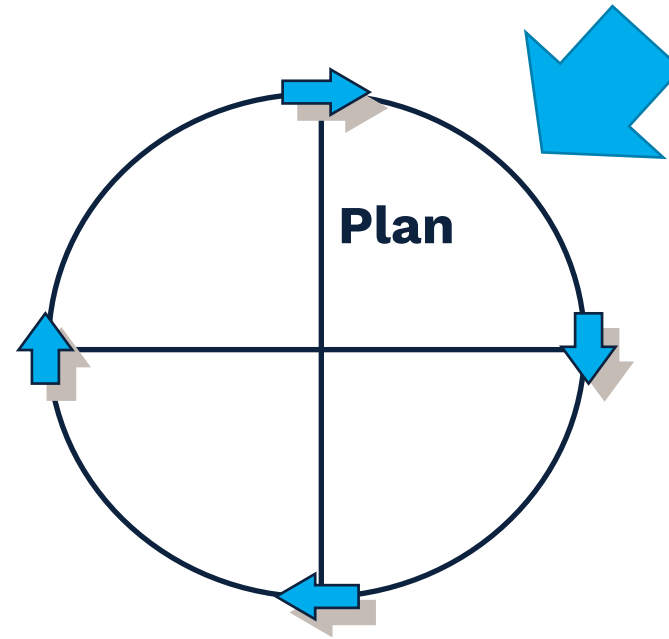
Testing Changes

- Small scale tests = BIG changes
- Experimentation is required
- Small, rapid tests of change
→ PDSA cycle



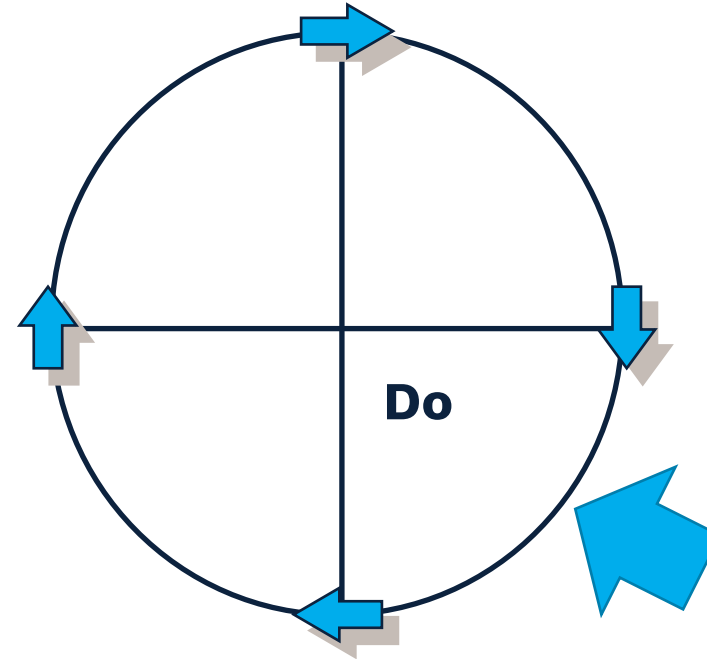


- Record details of the test
 - Who, what, where, when
- Formulate predictions
- Determine data collection needs for test evaluation



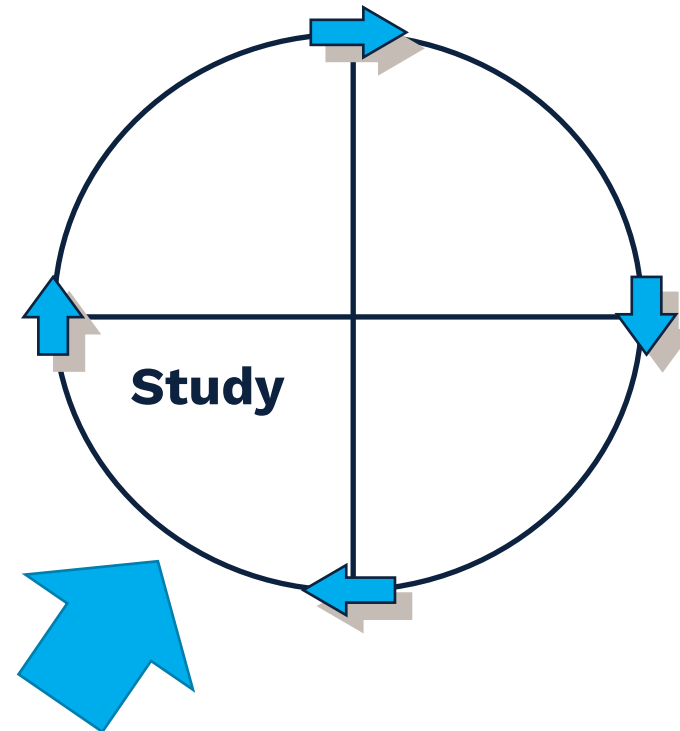
PDSA - Do

- Carry out the plan
- Document problems and observations
- Collect data and begin analysis



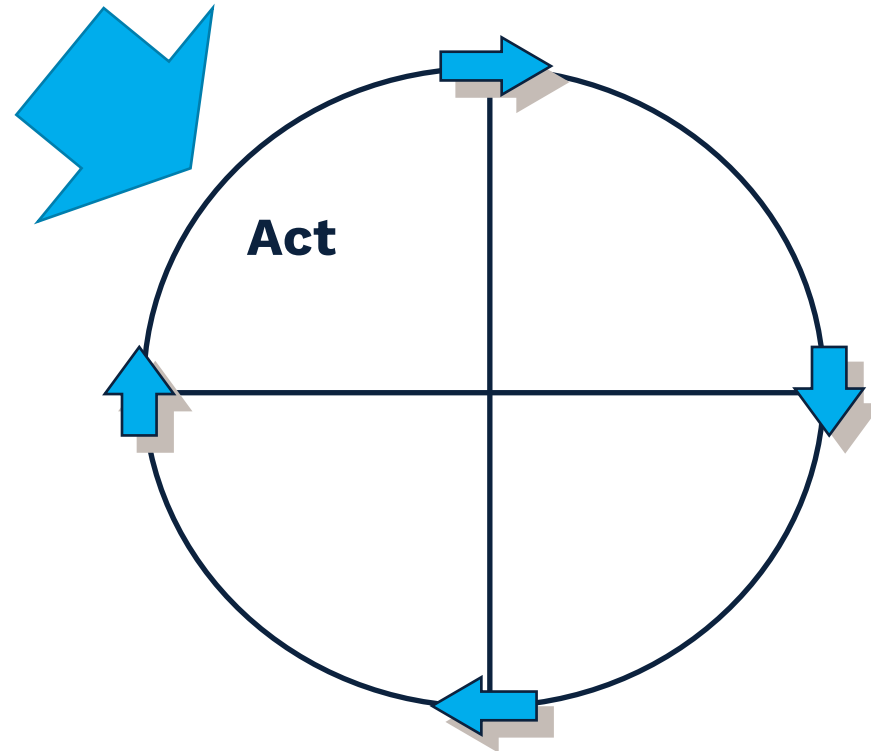
PDSA - Study

- Complete data analysis
 - Leave time for reflection about the test
 - What is your “gut” reaction?
- Compare data to predictions
 - What happened?
 - Did you get expected results?
 - Did anything unexpected happen?
- Summarize what was learned



PDSA - Act

- What will you do next?
 - Adopt
 - Adapt
 - Abandon
- Plan the next cycle or test iteration
 - Refine changes
 - Try it on a larger scale

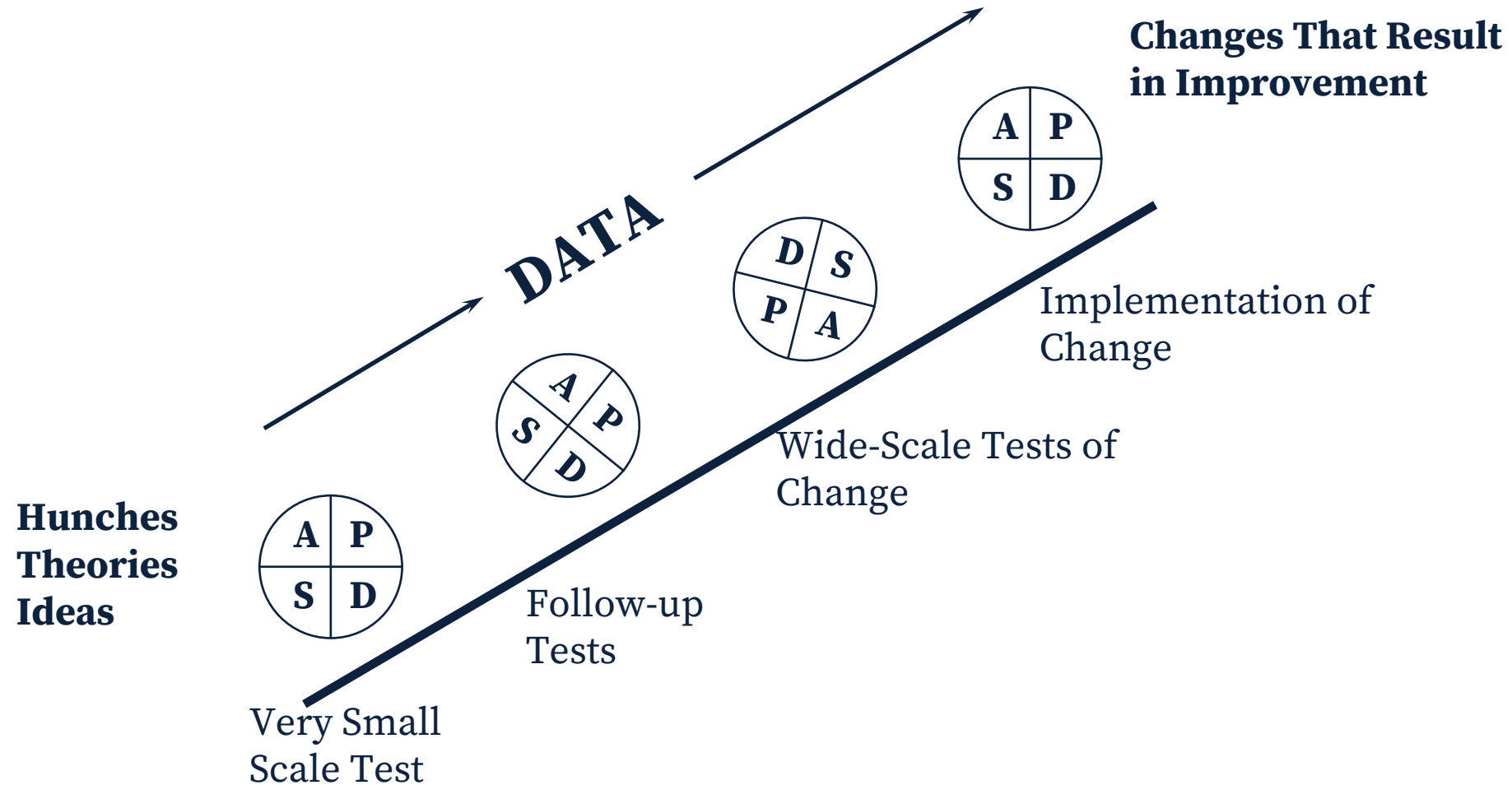


A quote from IDEO



“Fail often
to succeed
sooner.”

Repeated Use of PDSA Cycle



PDSA Cycle Considerations

- Conducting simultaneous tests can be done
 - Keep testing populations separate
- Bundling tests can be done
 - If your prediction is that BOTH elements are necessary for improvement

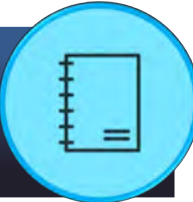




- Review Workbook:
 - PDSA Worksheet
 - PDSA Tracker worksheet



Model for Improvement: Equity Lens



Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

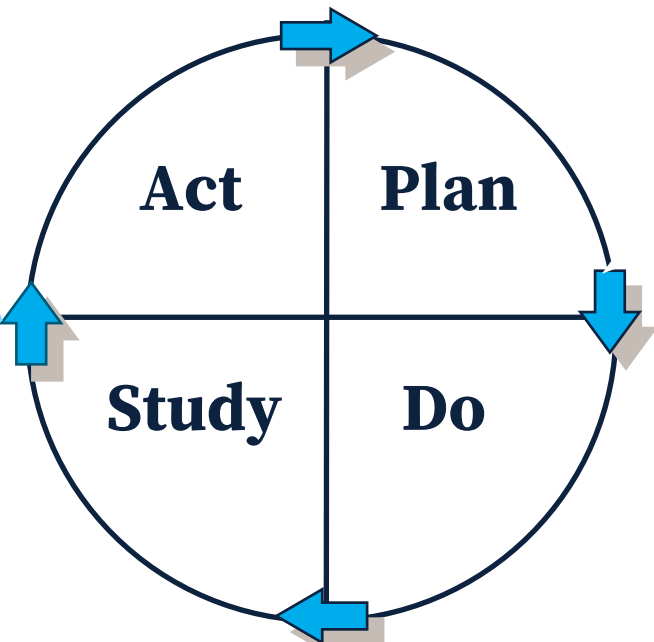
What changes can we make that will result in improvement?

Aim →

Measure →

Change Ideas →

Testing Ideas →



**In which populations?
Experiencing what barriers?**

**For whom? Under what
circumstances? Who might we
miss?**

**Are there unintended
consequences? Do all receive the
benefits of the change equitably?
Will the change worsen
inequities?**

What Questions Do You Have?



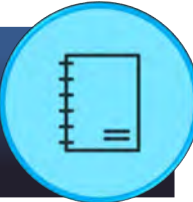


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Day 1 Capstone Activity

Conduct an Improvement Project

Model for Improvement: Equity Lens



Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

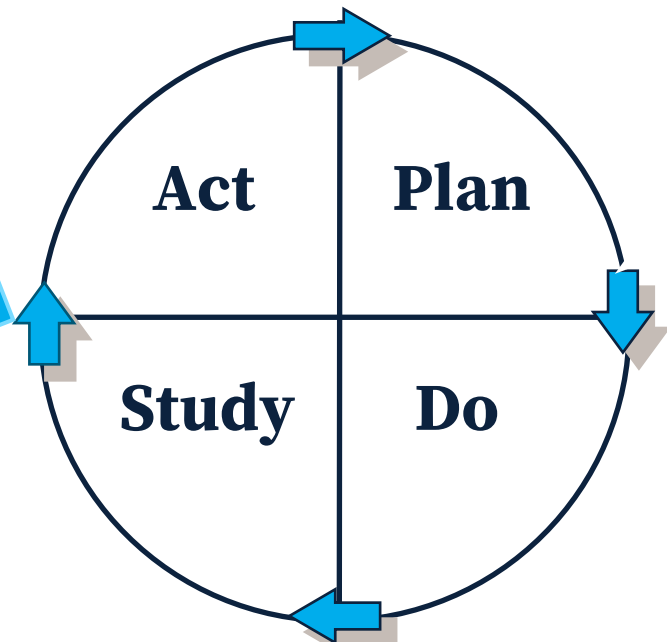
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Aim →

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Testing Ideas →



**In which populations?
Experiencing what barriers?**

**For whom? Under what
circumstances? Who might we
miss?**

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consequences? Do all receive the
benefits of the change equitably?
Will the change worsen
inequities?**

Mr. Potato Head Factory



What Questions Do You Have?

