VPQHC
Quality Improvement Training
Session 4
PDSA Cycles and Measurement

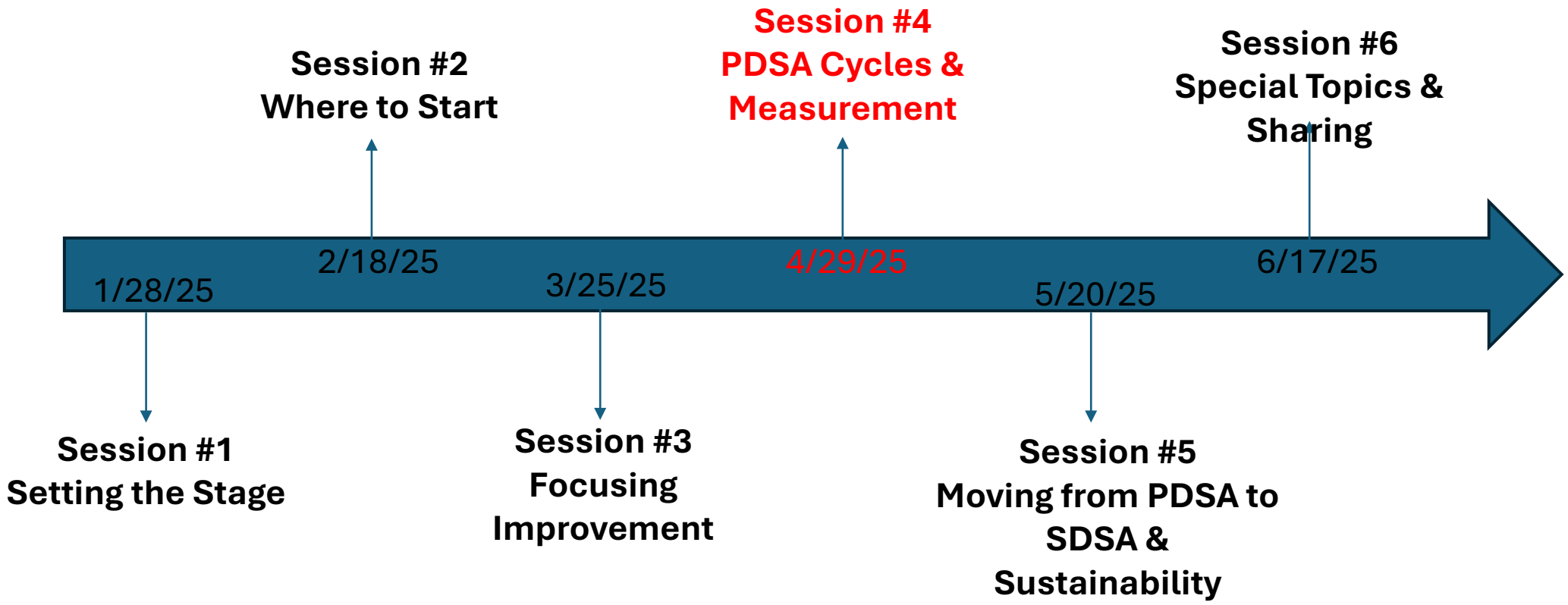
April 29th, 2025

12:00 to 1:30 PM

VPQHC

Vermont Program for Quality in Health Care, Inc.

Welcome and Program Summary



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Session 4 Agenda

1. Session Agenda Review and Questions
2. Session 3 Evaluation Results
3. Change Idea to Planning for PDSA
4. Measurement Plans
5. Simple variation

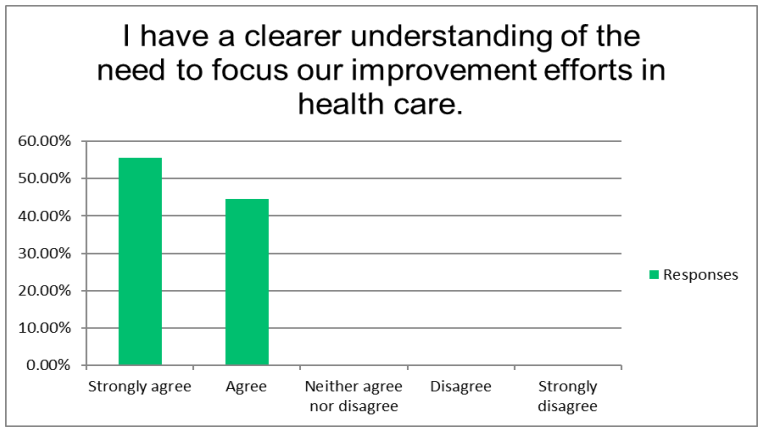
Session 4 Learning Objectives

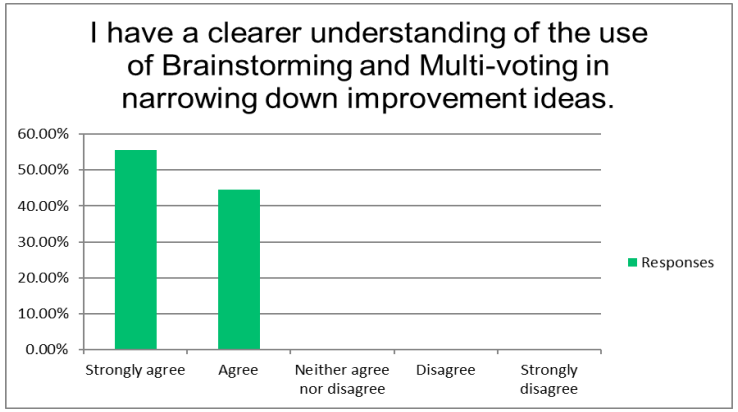
1. Create a PDSA Cycle Plan: Develop a PDSA cycle plan using a template, understand the importance of small sample sizes, and measures.

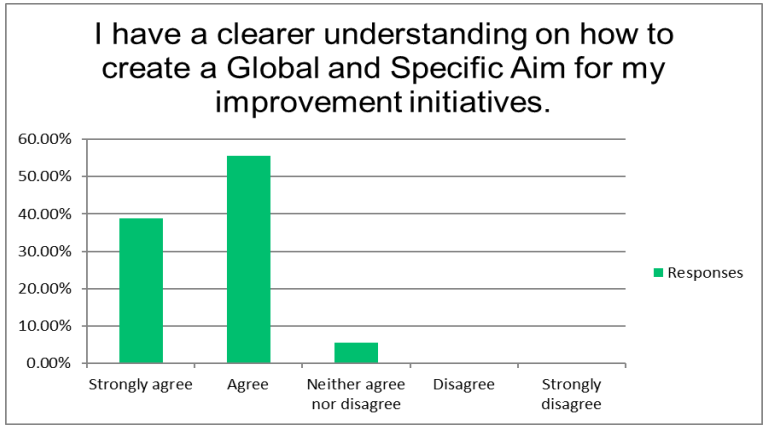
2. Design a Measurement Plan: Understand conceptual and operational definitions.

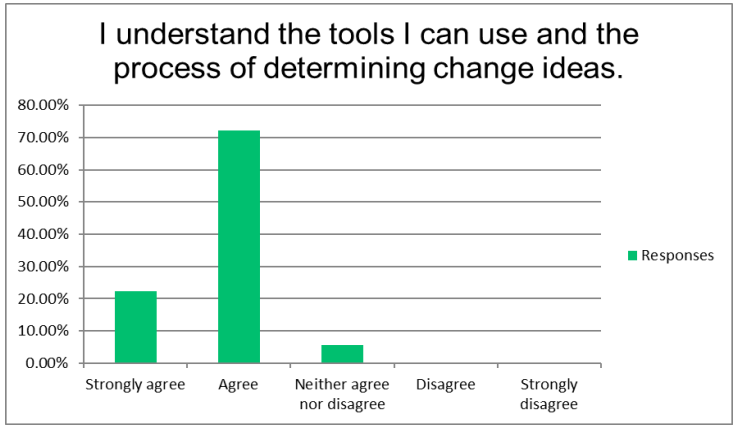
3. Understand Simple Variation: Explain the concept of simple variation and descriptive analysis.

Session 3 Satisfaction Survey Results (N=18)

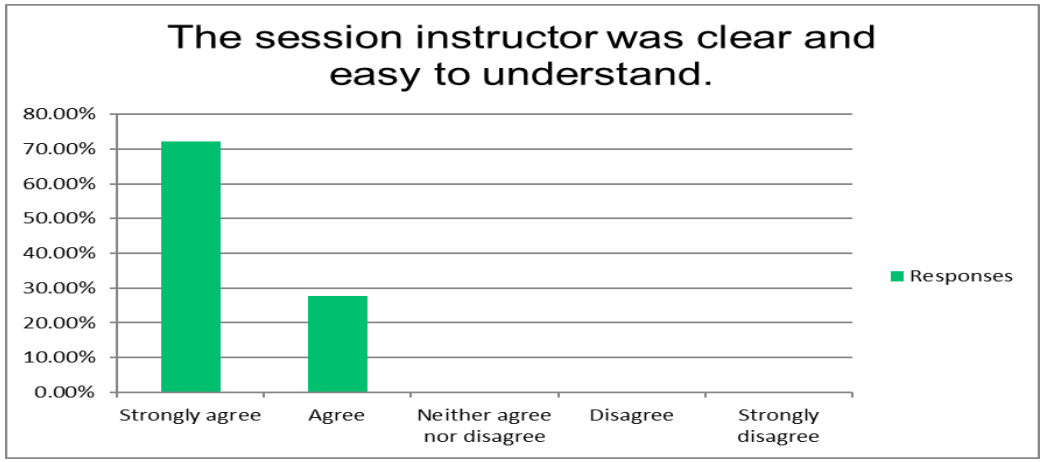


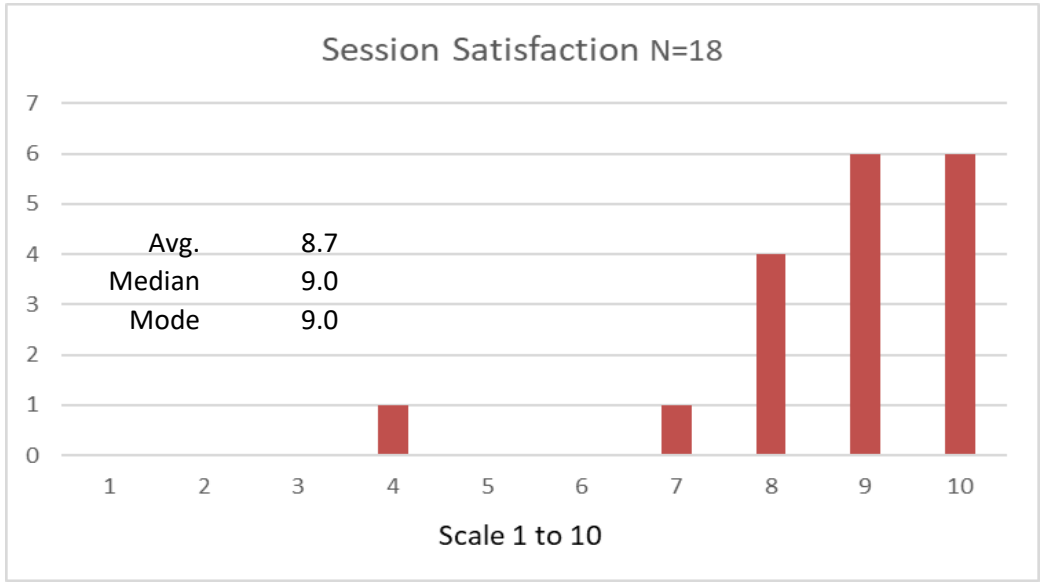






Session 3 Satisfaction Survey Results





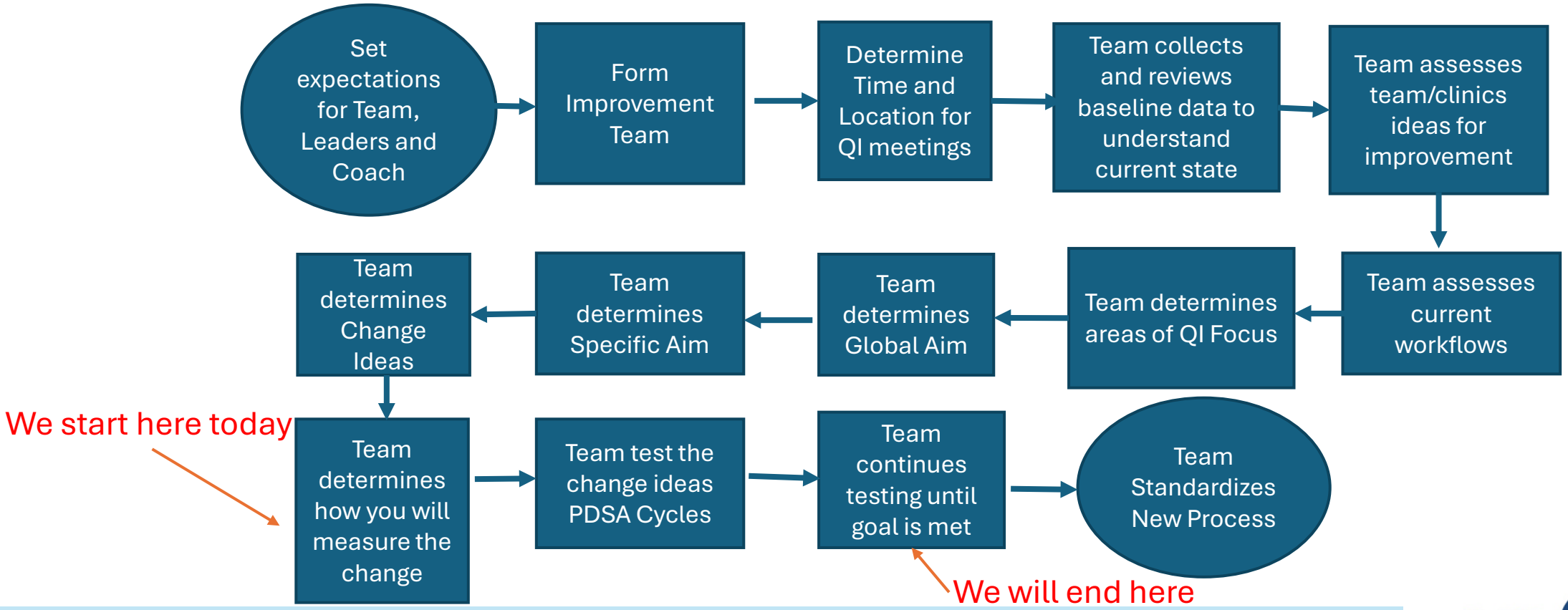
Positive Comments

-I appreciated the inquiry/invitation to have current project snapshots.
-You might invite folks to treat it as a virtual poster session and ask presenters to create a 1-page Slide as a poster to present for 5 min. and then have Q and A .
-Thank you! This content is so helpful as we continue to further develop our Quality Team and processes.
-Absolutely, especially helping leaders and team to understand The difference between "buy-in" and "ownership" related to QI
-I have spent a lot of hours spinning to get buy in. I get more traction when leadership backs ownership
-I appreciate the discussion of the distinction and the intersection
-Liked the idea of post it brainstorming

Constructive Comments

-still need some additional time to absorb this. appreciate the recommendation to purchase recommended books, that is definitely a way I take in information more thoroughly

QI Took Kit Process Outline



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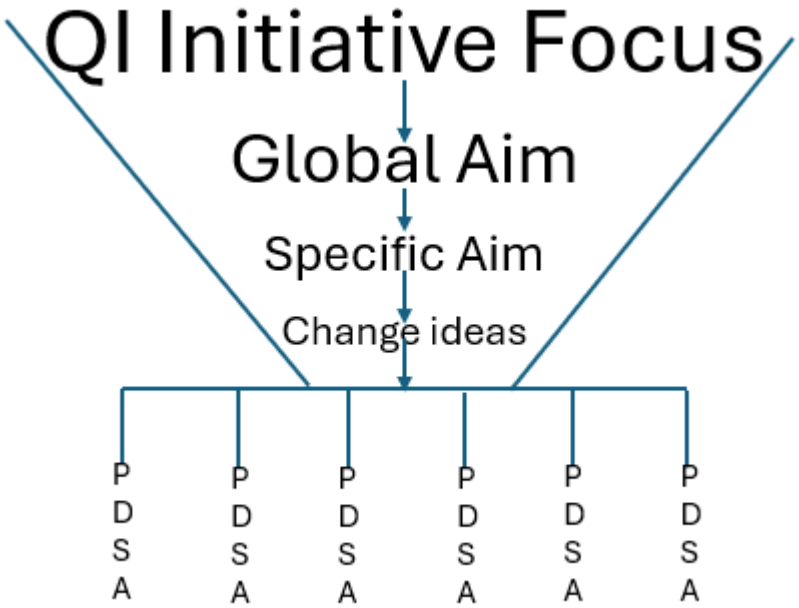
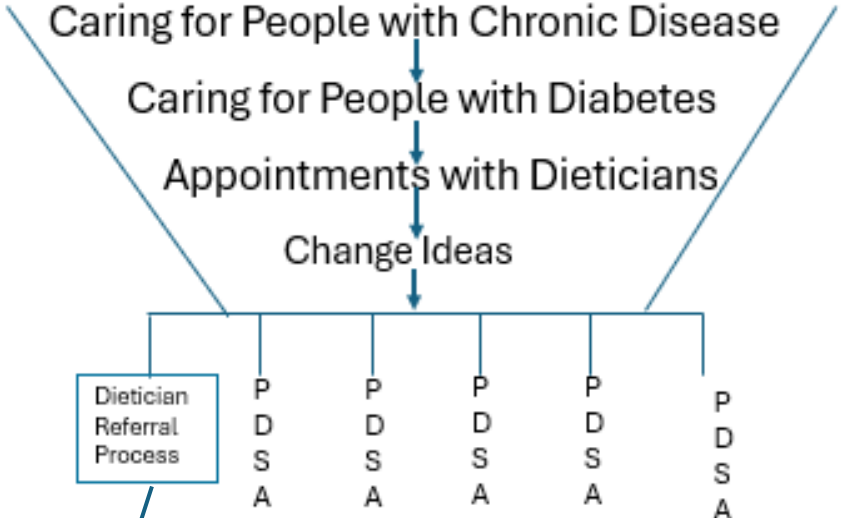
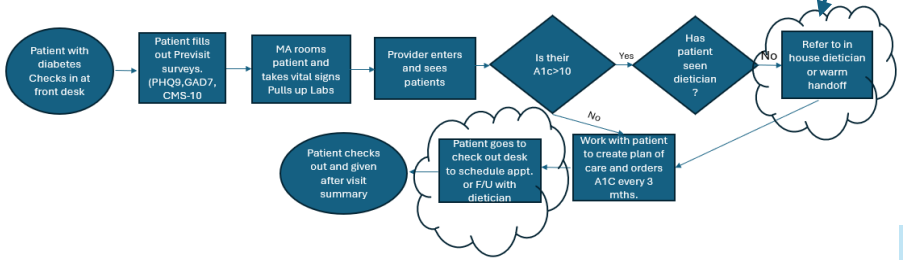
Connecting the Steps Leading to PDSA Cycles







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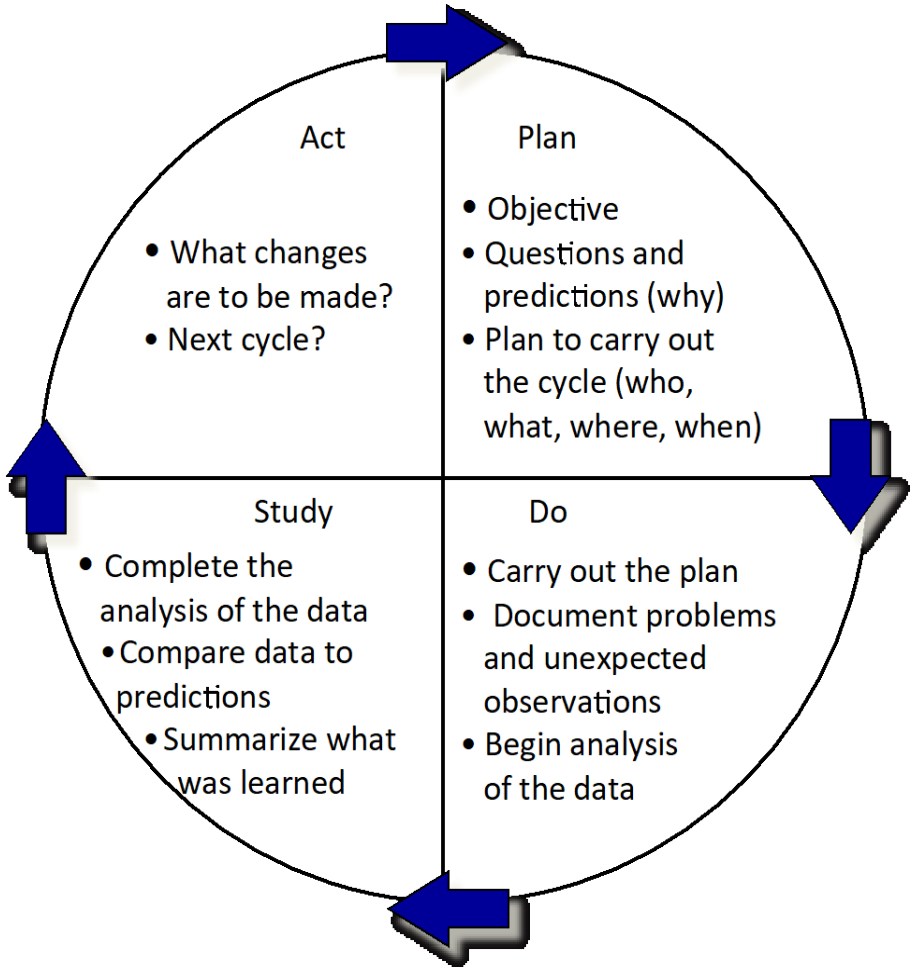
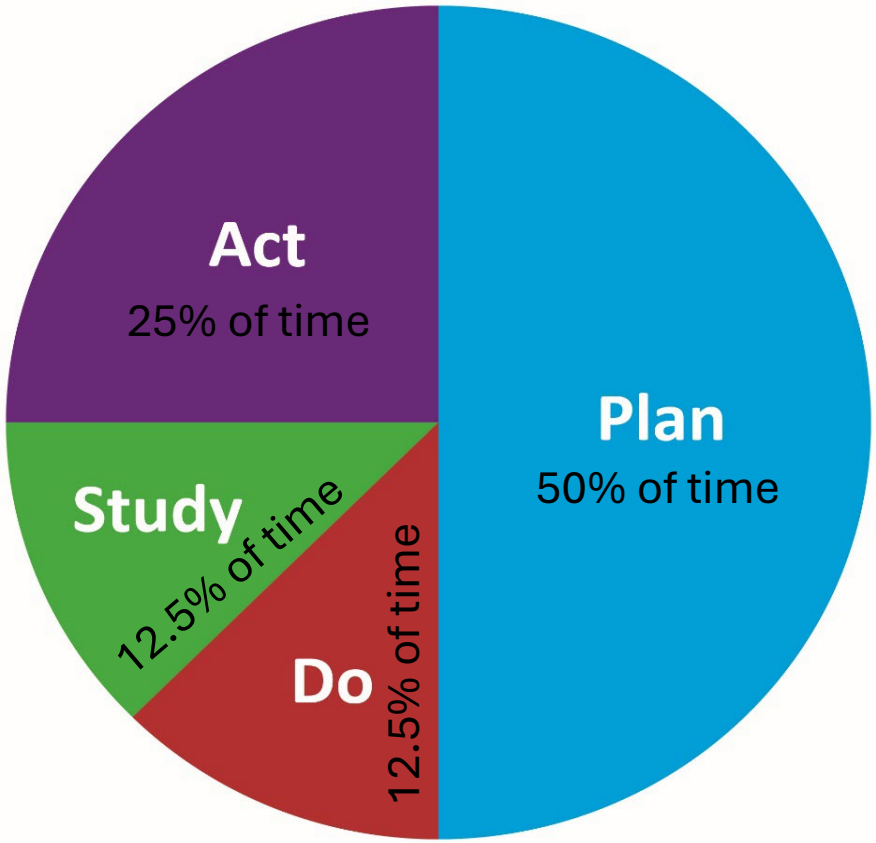
The PDSA Cycle





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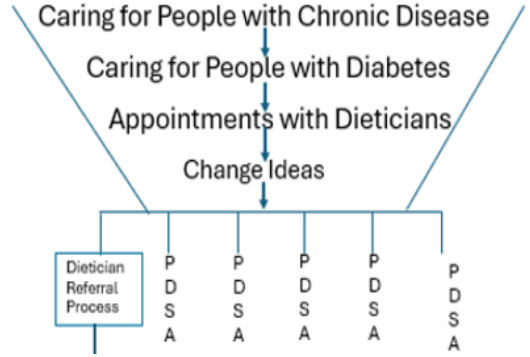
Poll

Determine Plan/Do/Study/Act Cycle to Test Your Change Plan

Change Idea:				
Task	**Who**	**When**	**Tools Needed**	**Measures**

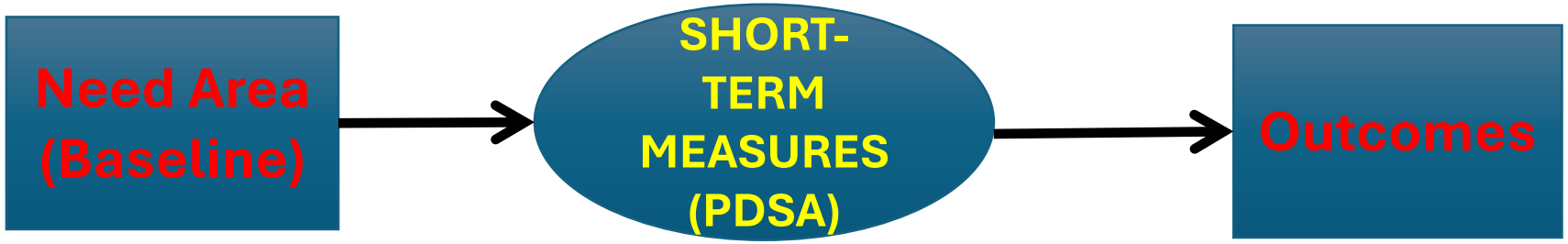
Case Study - Plan for PDSA



Change Idea: Standardize the referral process to the dietician

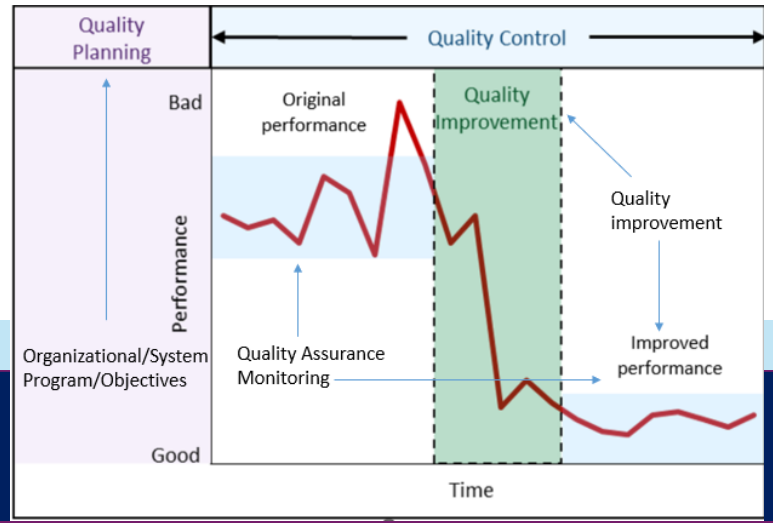
Task	Who	When	Tools Needed	Measures
RN will generate a list of patients with A1c>10 who have a clinic appt.	Barabara RN	1 day prior to clinic	Computer, patient schedules, printer	Task completed on time?
List given to scheduler who will schedule patients with dietitian as part of clinic visit.	James, Scheduler	1 day prior to clinic	Computer, patient schedules, printer	Task completed on time?
During morning huddle team review patient roster to ID patients.	Clinic Team	Each morning	Patient clinic roster	Was morning huddle held?
Provider does a warm handoff to RD at the end of appointment	Provider/RD/Identified patients	Each clinic	Identified patient, RD	# of patients identified who saw the RD.

Phases of Data



Current System Outcome Measures → Process Measures → New System Outcome Measures

# of people with A1C>10 → #/% of people identified who saw RD → # of people with A1C>10



Poll

Data Definitions

Conceptual Definition

Tells **what** will be measured

Operational Definition

Tells **how** it will be measured

Elements of an Operational Definition

Criterion: Standard(s) against which to evaluate results of the test. (What)

Test: Procedure for measuring a characteristic. (How)

Decision: Determination whether test results show the characteristic meets the criterion. (Evaluation)

“Clean Rooms”

Operating Room

Five Star Hotel

Teenager’s Bedroom

<u>Conceptually</u>

Each one of these rooms could be defined as “clean”.

<u>Operationally</u>

The **standards** that we establish and how we confirm they are meeting the standards will differ.

Measurement Plan

Change Idea: Standardize the referral process to the dietician

Measurement Conceptual Definition (what will you measure): We will measure the % of eligible patients who see RD.

Operational Definition (how will it be measured): Weekly % of patients with A1C>10% seen by RD. Calculated as # of eligible patients seen by RD/# of eligible patients.

Who (Who will collect the data?)	What (What data will be collected?)	How (How will it be collected?)	When (When will it be collected?)
Barbara RN	Scheduled patients with A1C>10.	Review clinic visit schedule to identify patients with A1C>10.	Will check schedule 1 day prior to clinic.
Julie RD	# of eligible patients that she sees	Julie will use the patient clinic roster prepared by RN and check off those she sees.	Each clinic session
Bill (scheduler)	Julie will give Bill her completed roster.	Bill will calculate the #/% seen by #seen by RD/# eligible to be seen.	After each daily clinic.
Bill (scheduler)	Daily/weekly calculation of #/% seen by RD.	Summarize the daily data to show a weekly and daily rate. Graph data using a line graph.	Weekly at the end of clinic on Friday.

PDSA Cycle Documentation

Do- Test Your Change- Repeat until you reach your goal.

Cycle 1			
What (will be done)	Who (will do it)	How (will it be done)	When

Study- What was learned?
Act- What will be changed or standardized?

Cycle 1

Do the Plan - Study the Results-Act & Adjust as Needed

Who (Who will collect the data?)	What (What data will be collected?)	How (How will it be collected?)	When (When will it be collected?)
Barbara RN	Scheduled patients with A1C>10.	Review clinic visit schedule to identify patients with A1C>10.	Will check schedule 1 day prior to clinic.
Julie RD	# of eligible patients that she sees	Julie will use the patient clinic roster prepared by RN and check off those she sees.	Each clinic session
Bill (scheduler)	Julie will give Bill her completed roster.	Bill will calculate the # seen by #seen by RD/# eligible to be seen.	After each daily clinic.
Bill (scheduler)	Daily calculation of # seen by RD.	Summarize the daily data to show a weekly and daily rate. Graph data using a line graph.	Weekly at the end of clinic on Friday.

Study- What was learned?

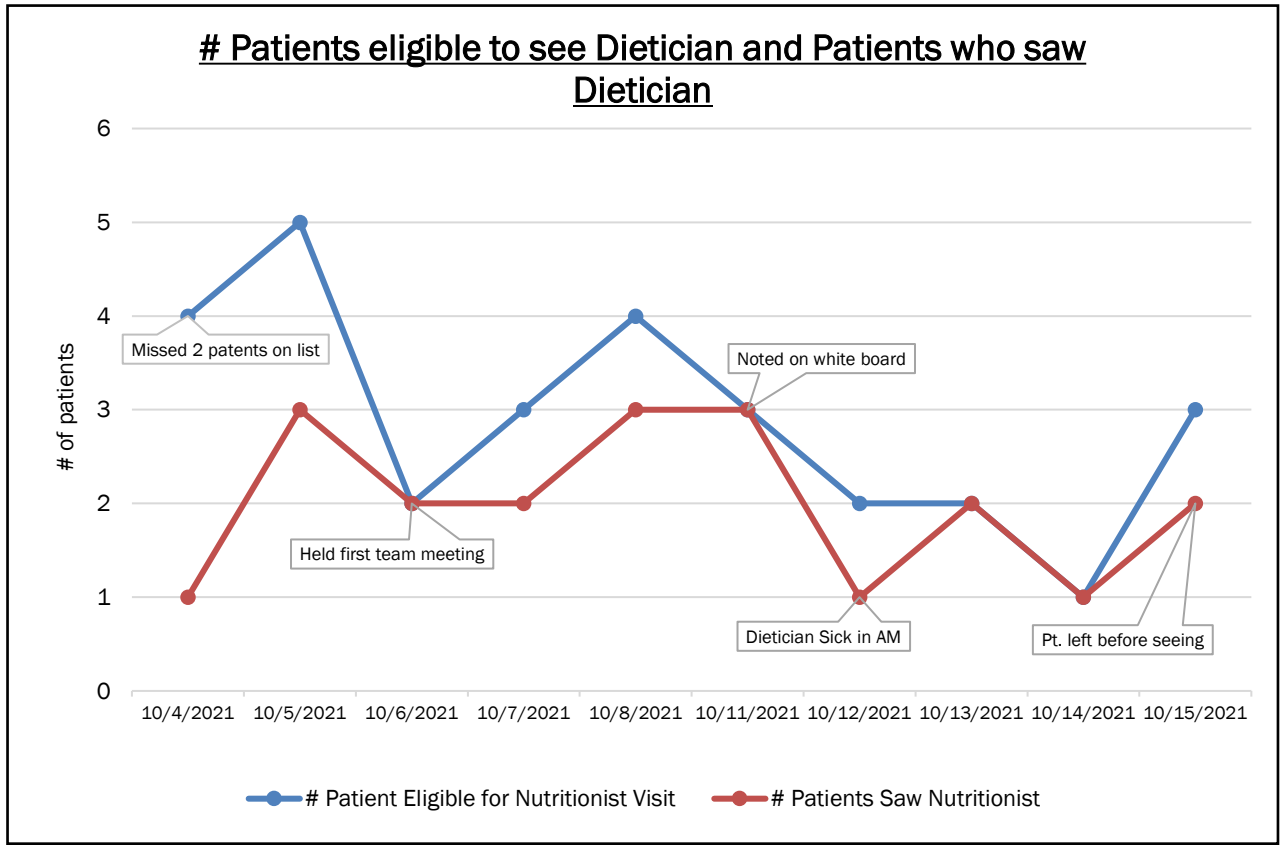
Providers missed the warm handoff to the RD on a couple of patients.

Act- What will be changed or standardized?

The MA will write RD on the whiteboard at the start of each clinic visit for a patient who has been identified on the schedule to help remind the provider to notify the RD at the end of the visit.

Case Example - Data Table and Line Graph

	Date	# Patient Eligible for Dietician Visit	# Patients Saw Dietician	% Saw Dietician	Comments
	10/4/2021	4	1	25.0%	Forgot to include 2 patients on list
	10/5/2021	5	3	60.0%	
	10/6/2021	2	2	100.0%	Held First Team Huddle
	10/7/2021	3	2	66.7%	
Week 1	10/8/2021	4	3	75.0%	
	Total	18	11	61.1%	
	10/11/2021	3	3	100.0%	Noted on whiteboard
	10/12/2021	2	1	50.0%	Nutritionist Sick in PM
	10/13/2021	2	2	100.0%	
	10/14/2021	1	1	100.0%	
Week 2	10/15/2021	3	2	66.7%	Patient left before being seen
	Total	11	9	81.8%	
	10/18/2021	3	1	33.3%	Dietician called to hospital
	10/19/2021	3	2	67%	Patient left before being seen
	10/20/2021	3	2	67%	Missed one on first list
	10/21/2021	4	3	75%	
Week 3	10/22/2021	5	4	80%	Patient refused to be seen
	Total	18	12	67%	
	10/25/2021	5	4	80%	
	10/26/2021	6	5	83%	
	10/27/2021	7	6	86%	
	10/28/2021	7	6	86%	
Week 4	10/29/2021	4	4	100%	Changed how we introduce Dietician



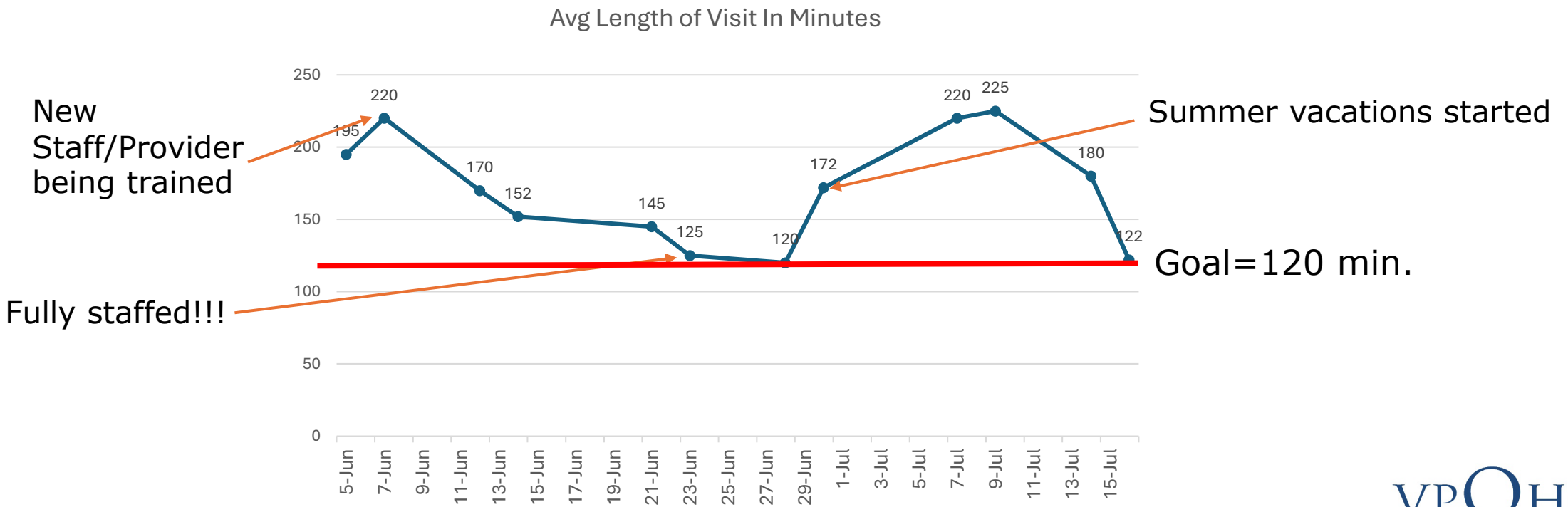
Simple Variation/Descriptive Analysis

- Highest Value
- Lowest Value

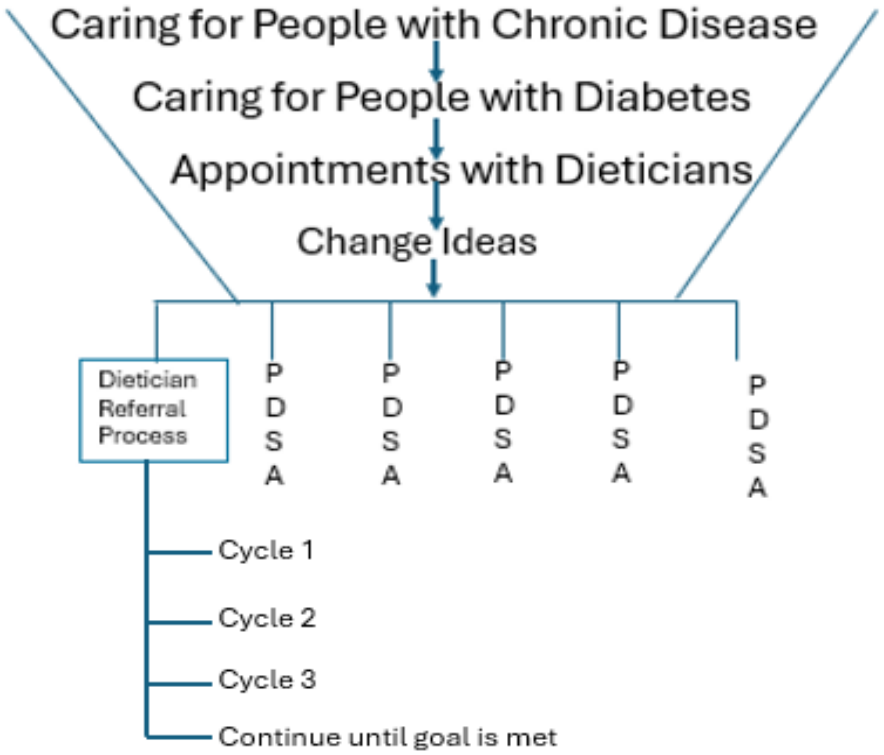
Is the high value acceptable?
Is the low value acceptable
Is the difference large or small?
Is this variation acceptable?

Are the values going in the direction of your goal?

Is this desired?
Do you know the cause?
What is this telling you?



Connecting the Steps Through PDSA Cycles



Session 4 Summary

- Ensure you spend time PLANNING how you will test your change idea.

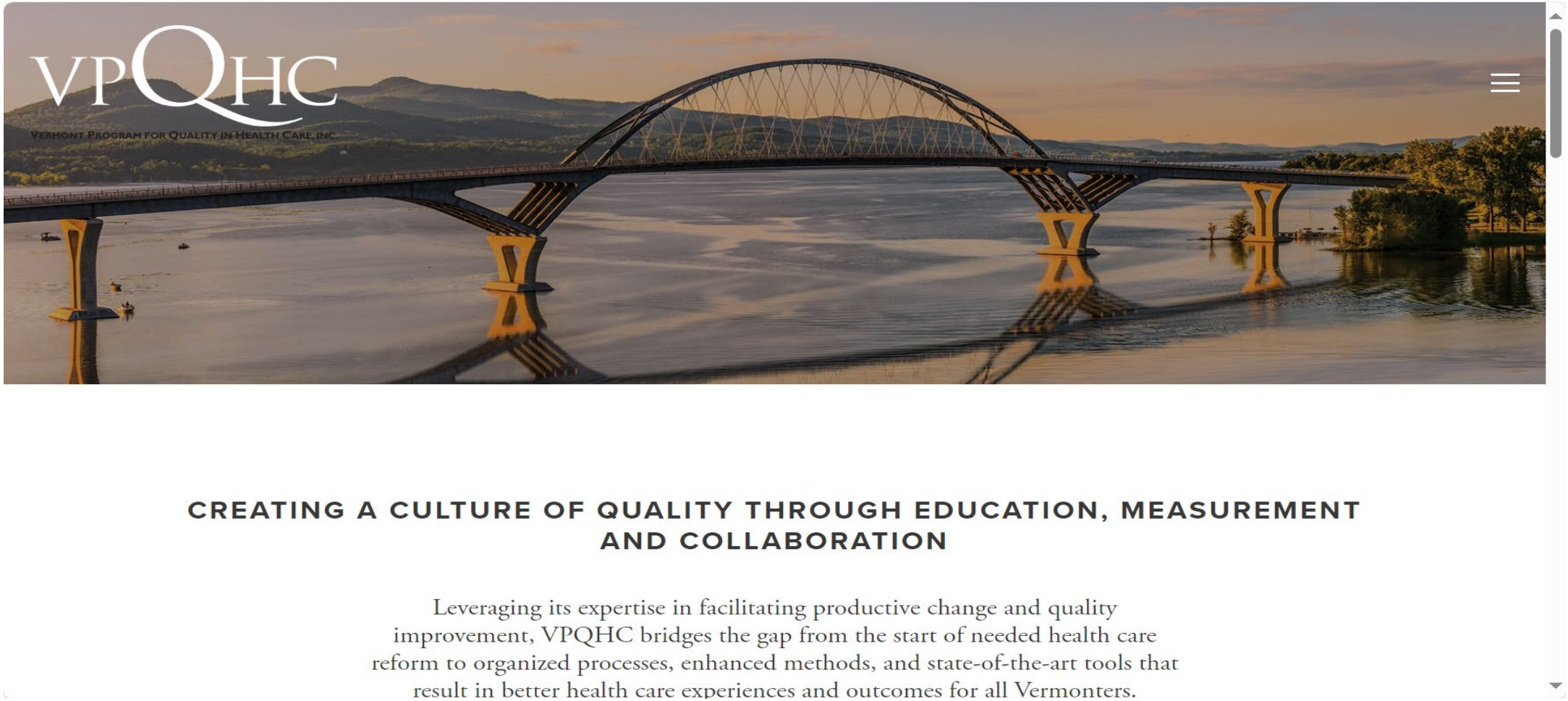
  (If you don't have the time to do it right, when will you have time to do it over? Author unknow.)
- A Measurement Plan is an integral part of the PDSA.
- It is important to Conceptually and Operationally define your measures to ensure they are clear to everyone.
- Document your test of change so you have the information you need to learn and make changes as you test again.
- Keep repeating your PDSA cycles until you meet your Aim/Goal.
- Data tables and annotated line graphs hold information to inform your improvements.
- Simple Variation or Descriptive Analysis at times and with many data types is more valuable and provides more meaningful information than a statistical analysis (XmR, S or P chart)
- Remember all of this work is connected to your QI Focus, Global Aim, Specific Aim and Change Idea.

Next Session

Session 5 will be May 20th at Noon

Session 5 Learning Objectives

1. Transition from PDSA to SDSA: Determine when it is appropriate to move from PDSA to SDSA.
2. Develop a Sustainability Plan: Create a plan to ensure the sustainability of improvements.
4. Representing your data
5. Process and Outcome Measures and a Balanced set of measures
6. Simple Variation to Common Cause and Special Cause variation



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Session Satisfaction Survey:
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