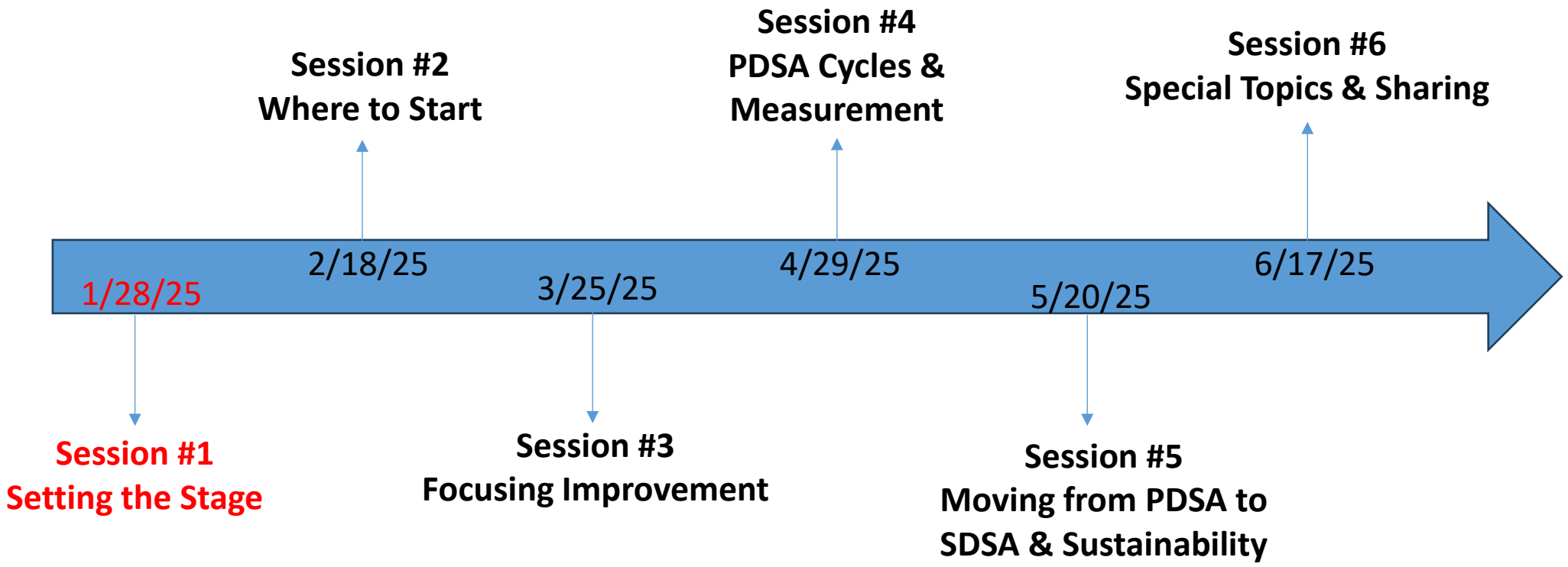
VPQHC
Quality Improvement Training
Session 1
Setting The Stage
January 28, 2025
12:00 to 1:30 PM

VPQHC
Vermont Program for Quality in Health Care, Inc.

Session 1 Agenda

- Introductions- 5 minutes
- QI Training Program Outline- 10 minutes
- Different Types of QI- 20 minutes
  - Quality Assurance
  - Quality Improvement
  - QI Projects vs. QI Initiatives
- Comparing QI Methods- 15 minutes
- QI Tools- Their Place In the Improvement Process- 10 minutes
- What's next? 5 minutes

Welcome and Program Summary



Suggested Texts/Reference

- *Quality by Design 1st Edition*- Nelson, Batalden, Godfrey
- *Quality by Design 2nd Edition*- Godfrey, Foster, Johnson
- *The Health Care Data Guide*- Provost and Murray
- *Practical Measurement For Health Care Improvement*- Oliver, Ogrinc
- *The Team Handbook*-Scholtes, Joiner, Streibel
- *Helping*- Edgar Schein
- *Humble Inquiry*- Edgar Schein
- *Listening Well*- William R. Miller

All Available on Amazon.com

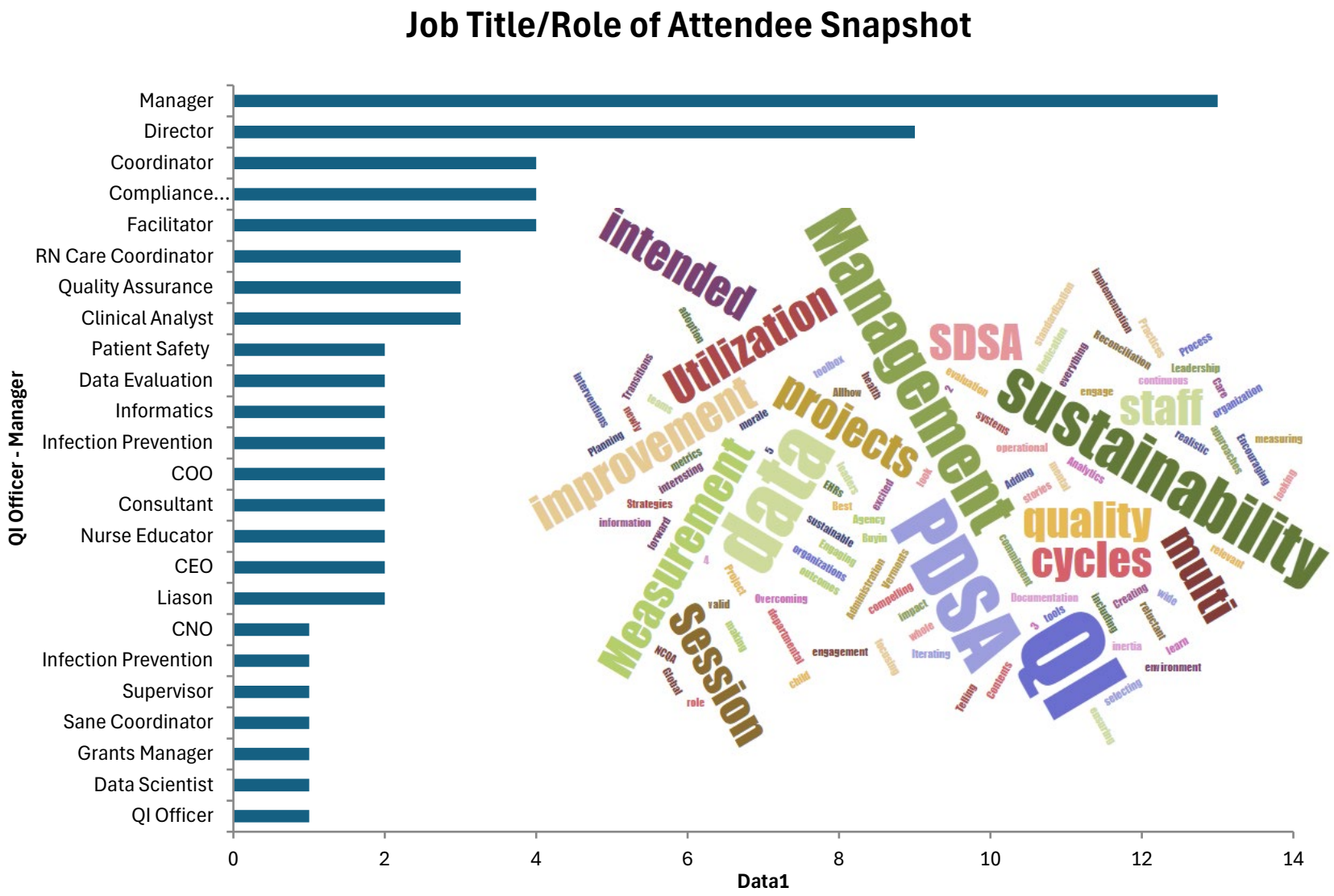
Session 1 Learning Objectives

1. Understand the Program Structure: Describe the session process, content, dates, times, and expectations for participation.
2. Differentiate Types of Quality Improvement (QI): Distinguish between Quality Assurance, Quality Improvement, and QI Projects versus QI Initiatives.
3. Identify QI Methods: Recognize and compare various QI methods such as Lean/Six Sigma, IHI, DAMAIC, and Clinical Microsystems, understanding their strengths and limitations.
4. Utilize QI Tools: Explain the role of QI tools like RCA, FMEA, Fishbone Diagrams, Process Flow Maps, and A3 in the improvement process.

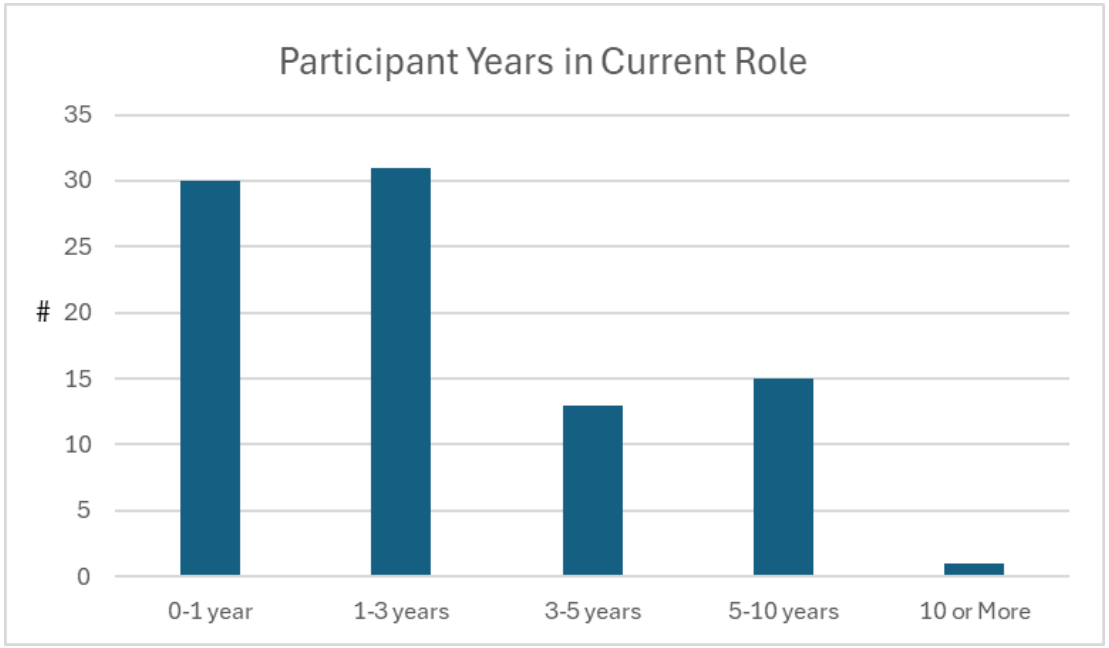
Who is With Us ?

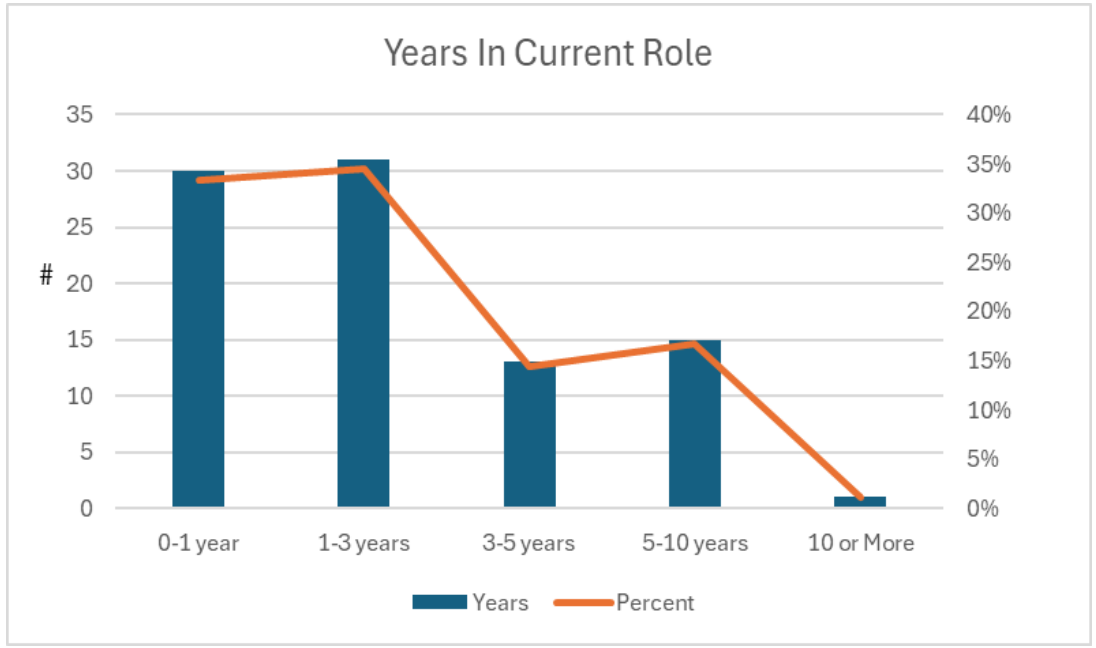
What is Their Role ?

What are You Looking For?



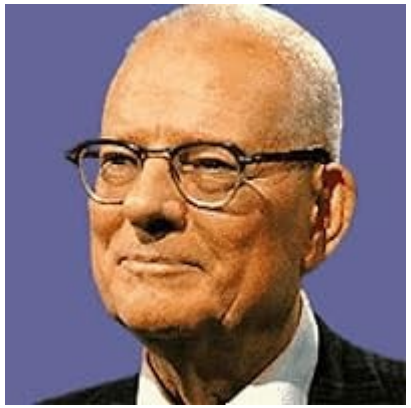
Years in Current Role





Donabedian Framework

- Structure- What materials, people, equipment, supports are present.
- Process- What systems and processes are in place to utilize and or work within the available structure.
- Outcome- What outcomes are you getting from the processes working with in the available structure.



“Every System is perfectly designed to get the result that it does” Deming

Therefore

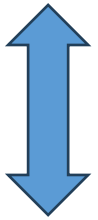
We need to understand the Current State before we can plan on how to make changes to the current Structure and Processes across the patient care continuum in order to get better Outcomes!

Quality Assurance vs. Quality Improvement

Comparison

Attribute	Quality Assurance	Quality Improvement
Focus	Preventive	Corrective
Goal	Ensure compliance with standards	Enhance processes and outcomes
Approach	Proactive	Reactive
Scope	Organization-wide	Specific projects or processes
Responsibility	Everyone's responsibility	Quality improvement team **
Methods	Inspections, audits, reviews	Data analysis, root cause analysis
Focus on	Preventing defects and errors	Identifying and resolving issues
Timeframe	Ongoing and continuous	Periodic or as needed

QA- Focuses on preventing defects, ensure quality and meet quality standards. It establishes, processes, procedures and guidelines.

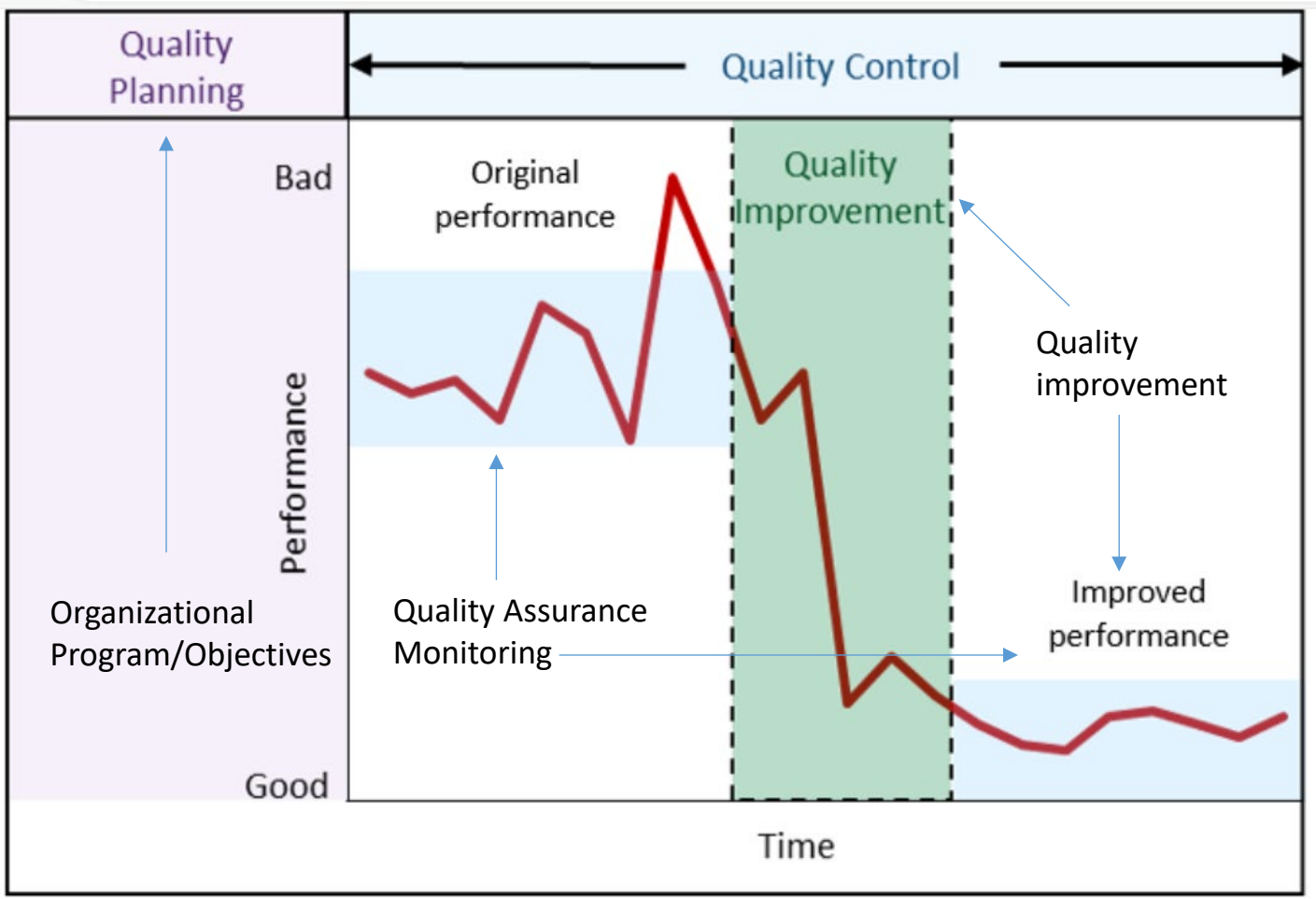


QI- Identify and address areas in need of improvement. It involves analyzing data, identifying root causes, implementing corrective actions, improving systems and process and enhance overall quality and efficiency.

https://thisvsthat.io/quality-assurance-vs-quality-improvement

**This is one that I disagree with. QI is EVERYONES JOB

The QI Planning and Quality Control Continuum



guide-to-quality-improvement-methods.pdf

QI Projects vs. QI Initiatives

Project	Initiative
Starts with a planned set of tasks	Starts with and idea or strategy
Aims to bring about change/improvements	Aims to bring about change/improvements
Has a specific outcome	Has a desired target or goal
Has a defined beginning and end. Time limited/temporary.	Ongoing, sustained, monitored, flexible based on changing needs or environment.

“BUY-IN” versus “OWNERSHIP”

Ownership- “Is when you own or share the ownership of an idea, a decision, or an action plan; it means that you have participated in its development, that you chose on your own accord to endorse it. It means that you understand it and believe in it. It means that you are both willing and ready to implement it.”

Buy-In- “Someone else or some group of people has done the development, the thinking, the cooking and now they have to convince you to come along and implement their ideas/plans.”

“Buy-in” versus ownership. By Henri Lipmanowicz.* [*This essay was… | by K. P. Greiner | Differences that make a difference | Medium

Shotgun Approach to QI

A3

RCA

Driver Diagram

FMEA

Rapid Cycle Redesign

Fishbone Diagram

Process Flow Maps

Comparison of Common Methodologies

Method	Use/Philosophie
Six Sigma	Goal is to eliminate defects and waste by streamlining business processes. An example is designing a new surgical unit so that its layout is optimized for specific procedures. (3.4 defects/million opportunities)
Lean	A set of operating philosophies and methods that help create maximum value for patients by reducing waste and waits. It emphasizes consideration of customer needs, employee involvement and continuous improvement. It is especially useful when organizing workspaces and optimizing supply flow
The Model for Improvement	A simple, yet powerful approach for accelerating learning by introducing iterative, small-scale experiments into an existing process. It involves asking three questions (What are we trying to improve? How do we know a change is an improvement? What changes can we make that will result in improvement?), followed by a cycle. The cycle is where change ideas are tested and is known as the Plan-Do-Study-Act cycle. This approach can be especially valuable when looking to optimize clinic workflows. (IHI Method)
Clinical Microsystems Improvement	Includes concepts from different methodologies, including The Model for Improvement and adds an initial step of understanding the context in which the problem occurred, before defining the problem, setting global and specific aims, determining change ideas, designing PDSA cycles, and then adds a plan to sustain called SDSA in a Team based setting.
DMAIC	DMAIC or define, measure, analyze, improve and control refers to a data-driven improvement cycle used for optimizing and stabilizing business processes and designs. The DMAIC improvement cycle is the core tool used to drive Six Sigma projects. However, DMAIC is not exclusive to Six Sigma and can be used as the framework for other improvements

QI Methodologies - Institute for Healthcare Quality Improvement Modified

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The Problem with PDSA Cycles in Healthcare

The problem with Plan-Do-Study-Act cycles

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INTRODUCTION

Quality improvement (QI) methods have been introduced to healthcare to support the delivery of care that is safe, timely, effective, efficient, equitable and cost effective. Of the many QI tools and methods, the Plan-Do-Study-Act (PDSA) cycle is one of the few that focuses on the crux of change, the translation of ideas and intentions into action. As such, the PDSA cycle and the concept of iterative tests of change are central to many QI approaches, including the model for improvement,[1] lean,[2] six sigma[3] and total quality management.[4]

PDSA provides a structured experimental learning approach to testing changes. Previously, concerns have been raised regarding the fidelity of application of PDSA method, which may undermine learning efforts,[5] the complexity of its use in practice[5 6] and as to the appropriateness of the PDSA method to address the significant challenges of healthcare improvement.[7]

This article presents our reflections on the full potential of using PDSA in healthcare, but in doing so we explore the inherent complexity and multiple challenges of executing PDSA well. Ultimately, we argue that the problem with PDSA is the oversimplification of the method as it has been translated into healthcare and the failure to invest in a rigorous and tailored application of the approach.

THE VALUE OF PDSA IN HEALTHCARE IMPROVEMENT

The purpose of the PDSA method lies in learning as quickly as possible whether an intervention works in a particular setting and to making adjustments accordingly to increase the chances of delivering and sustaining the desired improvement. In contrast to controlled trials, PDSAs allow new learning to be built in to this experimental process. If problems are identified with the original plan, then the theory can be revised to build on this learning and a subsequent experiment conducted to see if it has resolved the problem, and to identify if any further problems also need to be addressed. In the complex social systems of healthcare, this flexibility and adaptability of PDSA are important features that support the adaption of interventions to work in local settings.

A successful PDSA process does not equal a successful QI project or programme. The intended output of PDSA is learning and informed action. Successful application of the PDSA methodology may enable users to achieve their QI goals more efficiently or to reach QI goals they would otherwise not have achieved. But it is *also* successful if it saves wasted effort by revealing QI goals that *cannot* be achieved under realistic constraints or if it identifies new problems to tackle instead of the originally identified issue. A well-conducted PDSA promises learning. But it does not, and cannot, promise that users will achieve their desired outcomes.

As PDSA has been translated into healthcare from industrial settings, an emphasis has been placed on rapid small-scale tests of change, often on one, three and then five patients in 'ramps' of increasing scale, and responsibility delegated to frontline staff and improvement or quality managers. This pragmatic approach has been embraced and has been seen as providing a new freedom for healthcare staff to lead change and improvement in local care settings.

However, the process of change rarely progresses in simple linear ramps.[6 8] The conduct of PDSAs can reveal other related issues that need to be addressed in order to achieve the improvement goal. Such issues may relate to minor changes to current practices or processes of care, but can often reveal larger cultural or organisational issues that need to be addressed and overcome.

- Translation of ideas and intentions into actions.(Operationalize your intent. Inertia)
- Leadership focus on time limited improvements
- Iterative tests of changes using scientific methodology
- Structured experiential learning at the front lines of care.
- The "problem" is oversimplification and failure to follow the rigor of planning and evaluating iterative cycles at the front lines.
- Not having a defined measurement plan as part of the PDSA cycle

The problem with Plan-Do-Study-Act cycles | BMJ Quality & Safety

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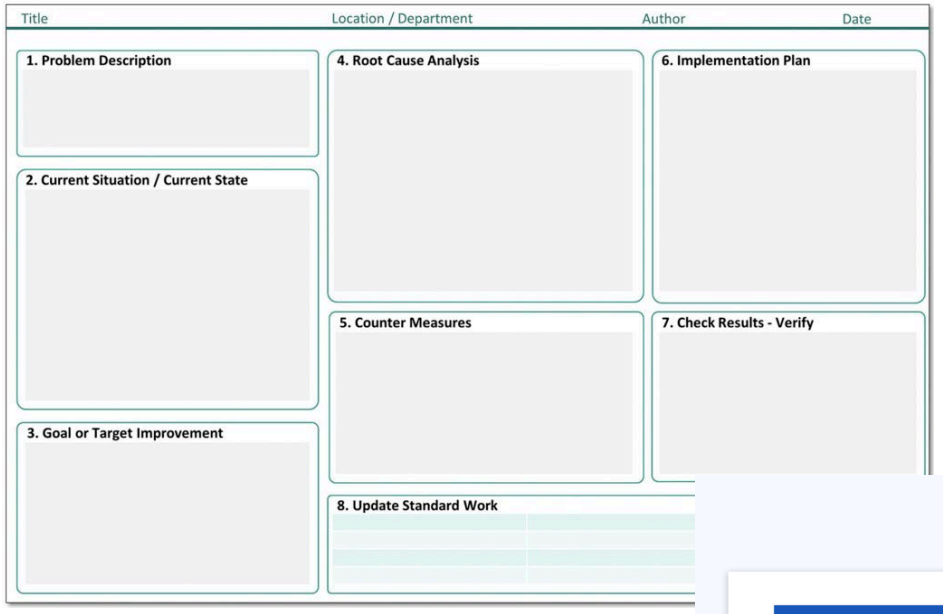
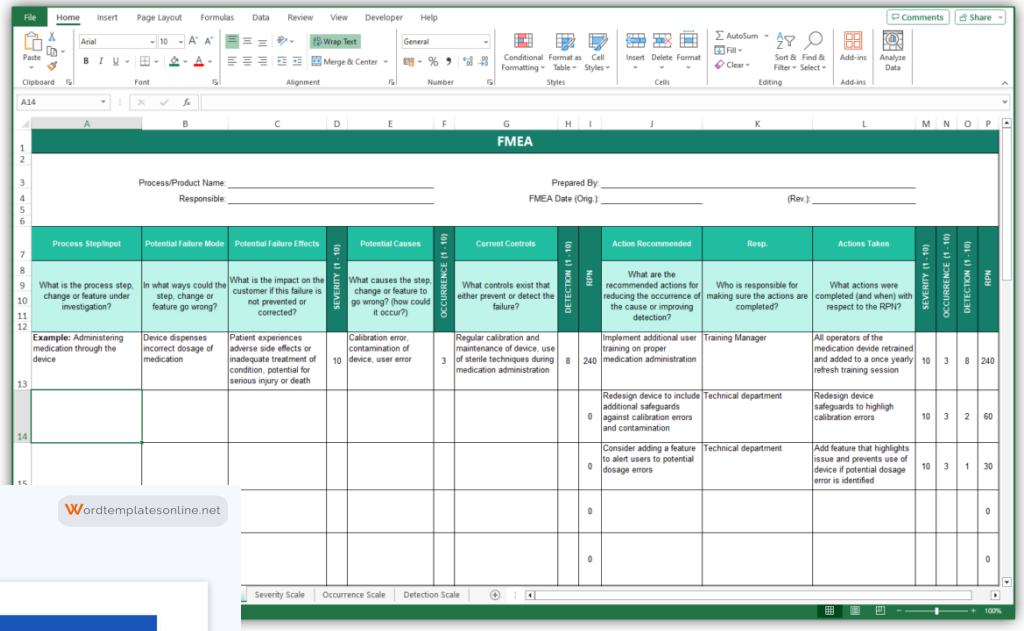
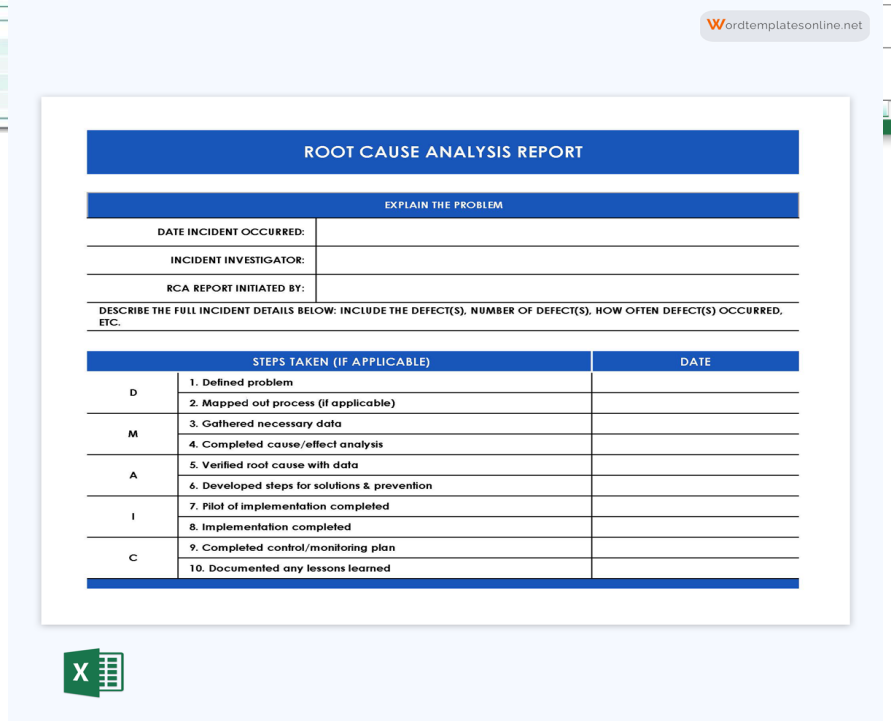
Selected Improvement Tools and Their Usage

Category	Tool	Typical Use of Tool
Understanding Problem/Context	Root Cause Analysis(RCA)	Understand potential causal factors of incident/problem and the context it occurred
	Process Flow Mapping	Document the "current" process flow that the identified problem or desired improvement is needed.
	5Ps- Understanding the Purpose, Patients, Professionals, Processes, Patterns	Getting a greater detailed understanding of the context in which the system improvement is taking place and or issue occurred.
Establishing Goals and Aims	Improvement Theme, Global and Specific Aim templates	Focusing improvement efforts and determining what you are expecting to occur and or accomplish by doing this improvement.
Determining Change ideas	Cause and Effect/Fishbone Diagram (Driver diagrams simpler cousin)	Identify potential causes/contributors to current system outcome to generate change ideas
	Driver Diagram	Identify key contributors to achieving improvement aim and or overall project aim.
Documenting Change Process	Plan-Do-Study-Act Worksheet	Document the plan on how the "test of change" will be trialed, evaluated, updated, and measured.
	Measurement Worksheet	Detailed plan on how the "test of change" will be measured. Includes where, when, who, how, and time period
Viewing of System and Potential for error.	Failure Mode and Effects Analysis- FMEA	Systematic and proactive analysis of where harm "may" occur in a process and devising improvements to prevent the harm.
Standardization	Standardize-Do-Study-Act Worksheet	Document how the improvement will become "the new way" and who, how and the frequency it will be evaluated and reported.

Examples of A3, RCA and FMEA







Session 1 Summary

- QI is a team sport, involving those directly in care who understand what works and what doesn't.
- If you feel like a used car salesman in your work, reassess your approach.
- QA and QI are essential parts of a cohesive system.
- Addressing "Big Hairy Problems" requires more than just a broad, unrefined approach.
- "Thought Tools" help identify the root cause of a problem, not just its symptoms, and guide potential improvements.
- PDSA is part of the larger QI process and critical for testing and refining change ideas.
- Most QI methods are based on Donabedian’s Structure, Process, and Outcome framework.
- Ensure QI methods are supported by a clear structure, a repeatable QA and QI process, and measurable outcomes.

Next Session

Session 2 will be February 18th at Noon

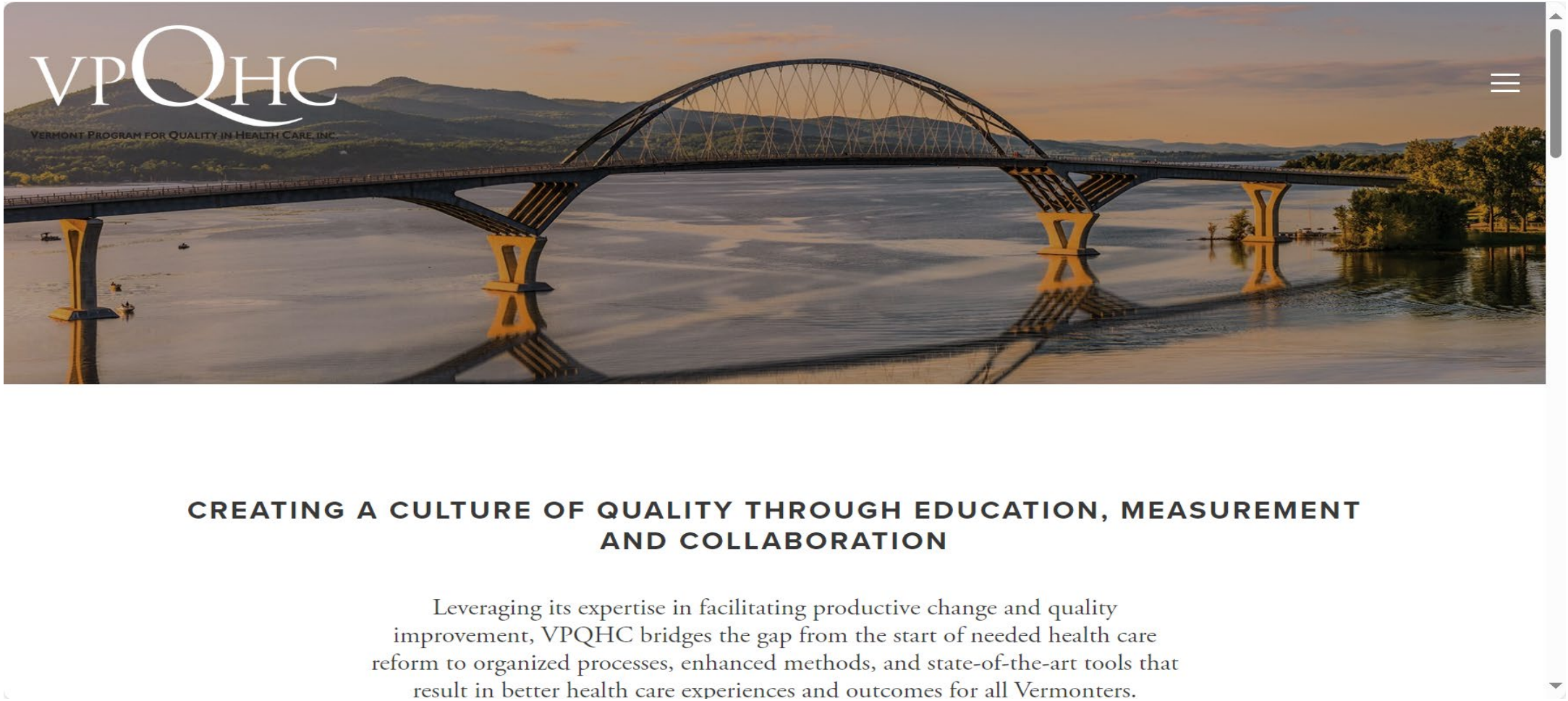
Session 2 Learning Objectives- Where to Start

1. Understand Team-Based QI: Explain the importance of team-based QI, identify key team members, and distinguish between buy-in and ownership.

2. Facilitate Effective Team Meetings: Demonstrate how to structure team meetings using an agenda template, define roles, and manage time effectively.

3. Define and Assess the Problem: Differentiate between symptoms and problems, identify current state, and baseline data, and evaluate data within context.

4. Assess the Current State: Apply tools such as RCA and Process Flow Maps to identify where in the process the problem occurred.



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Session Satisfaction Survey
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