QAPI Tools – Part 1

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Enhancing Quality Assessment and Performance Improvement Programs in Transplant Programs and Hospitals

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CMS Webinar Series
Transplant Centers

1. Introduction to the Transplant QAPI: Regulatory Overview

2. Worksheet Overview

3. Comprehensive Program and 5 Key Aspects of QAPI

4. Objective Measures

5. Performance Improvement Tools and Methods

6. Adverse Events

7. Transplant Adverse Event "Thorough Analysis"

8. <u>QAPI Tools (part 1)</u>

9. QAPI Tools (part 2)

10. Data display

11. Writing an effective Plan of Correction and Other QAPI Resources

12. Interpretive Guidelines

Disclaimer

- This training series will contain concepts, foundational Quality practices and historical perspectives of Quality Assessment and Performance Improvement methodologies (as they were originally developed) and guidance to help transplant programs meet compliance with the Conditions of Participation.

- CMS understands that: 1) Healthcare has various definitions of what Quality is, 2) There are many methods that can be employed, and 3) There are many tools that can be utilized within quality assessment and process improvement activities.

- CMS also understands that some organizations blend several quality concepts and tools together to provide for a more nimble and individualized QAPI program.

- This training series does not support or advocate any particular QAPI method or tool. This training fully supports that QAPI activities include **data driven decisions** that lead to sustained improved performance and ultimately improved patient outcomes.

Purpose and Objectives

- The purpose of this training series is to enhance Quality Assessment and Performance Improvement activities within Transplant Programs.

- Upon completion of this session, the participant will be able to:
  - Recognize Quality Assessment and Performance Improvement tools that could be utilized for QAPI activities.
  - Understand how structured systems help evaluate a program services and take action on identified opportunities for improvement.
  - Specify critical elements required from a data driven comprehensive QAPI program.

The 5 Key Aspects of Transplant Quality
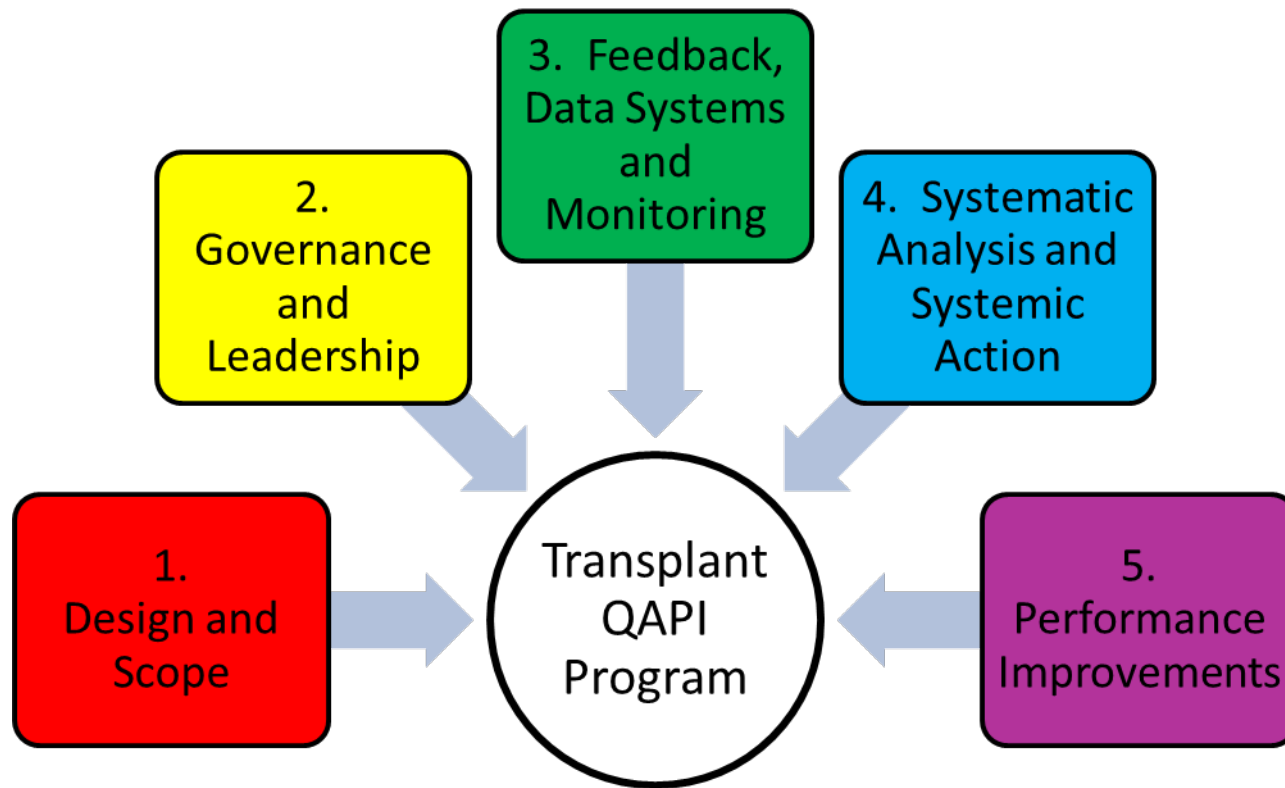
5 Key Aspects of QAPI

QAPI Tools are involved in:

- **Aspect 1** – Design-The program is **data-driven**, **reflects** the **complexity** of transplant services, and **addresses all systems of care and management** practices relevant to transplantation.

- **Aspect 2** – Governance - The **governing body ensures** that the QAPI program is implemented, ongoing, comprehensive, effective, and that adequate resources are applied to conduct QAPI efforts and operate in a **continuous** manner. The governing body **sets clear expectations for quality and safety**.

- **Aspect 3** – Feedback Systems - **Process and outcome indicators** reflecting the complexity of services within the program are defined, measured, analyzed and tracked.

- **Aspect 4** – Analysis - The transplant QAPI program must **analyze** collected **data**.

- **Aspect 5** – Improvements - Performance improvements are concentrated efforts that involve **systematic gathering of information** to identify issues or problems, and **subsequent** development of **interventions** to prevent recurrences.

Improving Outcomes

Quality Assessment

Quality Assessment or Quality Assurance programs include systematic monitoring and evaluation of a program's services based on established criteria and standards for quality care.

Performance Improvement

Performance Improvement and Process Improvement are structured approaches to taking actions to improve outcomes based on the results of QA monitoring and the evaluation of a program's services.

Monitoring/Evaluation ➡ Actions Taken Based on Monitoring/Evaluation

QAPI

QAPI is a data-driven, proactive approach to improving the quality of care, and services. The activities of QAPI involve members at all levels of the program/organization to: identify opportunities for improvement; address gaps in systems or processes; develop and implement improvements; and continuously monitor the interventions to ensure they are sustained.

Evaluation of Program Services and Outcomes

- A structured, systematic program will provide the needed approach, focus, and methodology to continuously improve services and the health outcomes of the population being served.

- QA contains many concepts, methods, and tools that are needed to identify the opportunities for improvement.

- QA is a structured system of identifying, collecting, analyzing, and using data to evaluate a program's services and outcomes.

Approaches to Quality Improvement (Some Examples)

- Total Quality Management (TQM)
- Continuous Quality Improvement (CQI)
- Quality Improvement Process/Program (QIP)
- Six Sigma
- Toyota Production System (TPS) aka (LEAN)
- Model for Improvement (MFI)
- Kaizen
- Capability Maturity Model Integration (CMM)
- Human Performance System Models

Total Quality Management

The American Society for Quality states:

- "Total Quality Management (TQM) can be summarized as a structured system for a customer-focused organization that involves all employees in continual improvement."

- "TQM uses strategy, data, and effective communications to integrate the quality discipline into the culture and activities of the organization."

- "The customer ultimately determines the level of quality. No matter what an organization does to foster quality improvement—integrating quality into the design process, upgrading computers, or buying new measuring tools—the customer determines what safe quality care is."

http://asq.org/learn-about-quality/total-quality-management/overview/overview.html

Six Sigma

"Six Sigma can be summarized as a structured system for a customer-focused organization that focuses on the elimination of defects and waste from systems and processes".

Six Sigma revolves around:

Critical to Quality

Zero Defects

Process Capability

Variation Control

Stable Operations

https://en.wikipedia.org/wiki/Six_Sigma

Toyota Production System (aka – Lean Manufacturing)

- Lean can be summarized as a structured system for a customer-focused organization that focuses on the elimination of waste and improving process efficiency.

- Lean revolves around:

  Specifying Value

  Understanding Demand

  Creating Efficient Flow

  Eliminating Waste

  Pursuit of Perfection

Other Approaches

- **Continuous Quality Improvement** (CQI): Consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.

- **Human Performance / Behavioral Models**: This involves the systematic and strategic use of performance standards, measures, progress reports, and ongoing quality improvement efforts to ensure an organization achieves desired results.

Comparing Approaches

All Approaches Presented:

- Have the same goal – improving the patient's health outcome – but differ in the processes and tools used to identify and act on opportunities for improvement.

- Focus on <u>continuous activities</u> to improve processes, systems and health outcomes.

- Have tools, templates and processes for identifying opportunities for improvement, developing actions toward improvement, monitoring implemented actions and determining if the actions resulted in sustained improvements over time.

Transplant QAPI Program

Consider

- Using the resources and the structured system already in place at your hospital / organization.

- An important factor for compliance is to identify in the written QAPI plan what approach and tools will be utilized; implement them; and then ensure that evidence supports that the QAPI plan has been followed when conducting QAPI activities.

Section Summary

- Effective QAPI programs operate from structured systems that seek to continuously identify and act upon opportunities that improve processes and health outcomes of their patient population.

- Effective QAPI programs have leadership support, adequate resources, and inclusion of all team members involved in the services being evaluated / improved.

- Effective QAPI programs utilize and complete the entire cycle of improvement no matter the approach, method or tool selected.

Sustain Action or Take New Action

Understand Current Performance

Measure Current Performance

Analyze and Take Action
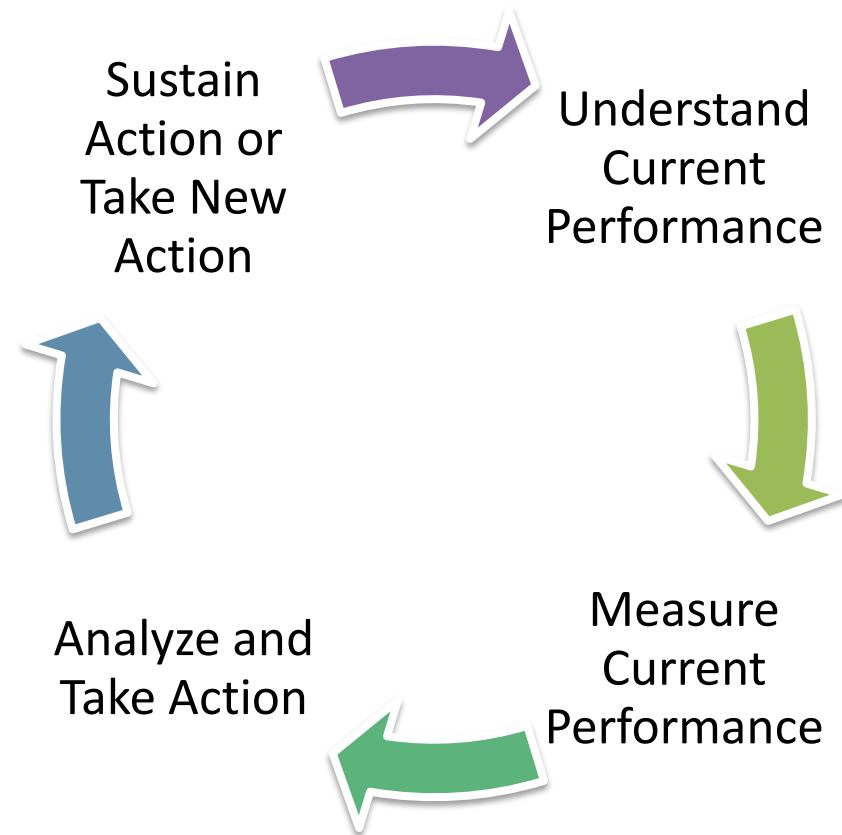
What is your approach to QAPI?

Questions to Consider

Is your approach clearly identified in the written QAPI program – and implemented?

Do you identify the tools you use in the written QAPI program?

QAPI Tools & Templates

Techniques used with various approaches

- Plan-Do-Study-Act (PDSA/PDCA)
- Model for Improvement (MFI)
- Focus, Analyze, Develop and Execute (FADE)
- Define, Measure, Analyze, Improve, Control (DMAIC)
- Identify, Measure, Prioritize, Research, Outline, Validate, Execute (IMPROVE)
- Assess, Plan, Implement, Evaluate (APIE)
- Identify, Determine, Establish, Act (IDEA)
- Failure Mode and Effect Analysis (FMEA)
- Robust Process Improvement (RPI)
- Rapid Cycle Techniques

Tools

- Statistical Process Control chart
- Run chart / Histogram
- Pie / Bar chart
- Venn diagram
- Check sheet
- Scatter diagram
- Frequency table
- Pareto chart
- Ishikawa diagram (Cause and Effect Analysis)
- Flowchart / Process Maps
- Spreadsheets / Dashboards / Scorecards
- A-3 Report
- Affinity Diagram
- Priority Matrix

Scientific Methods
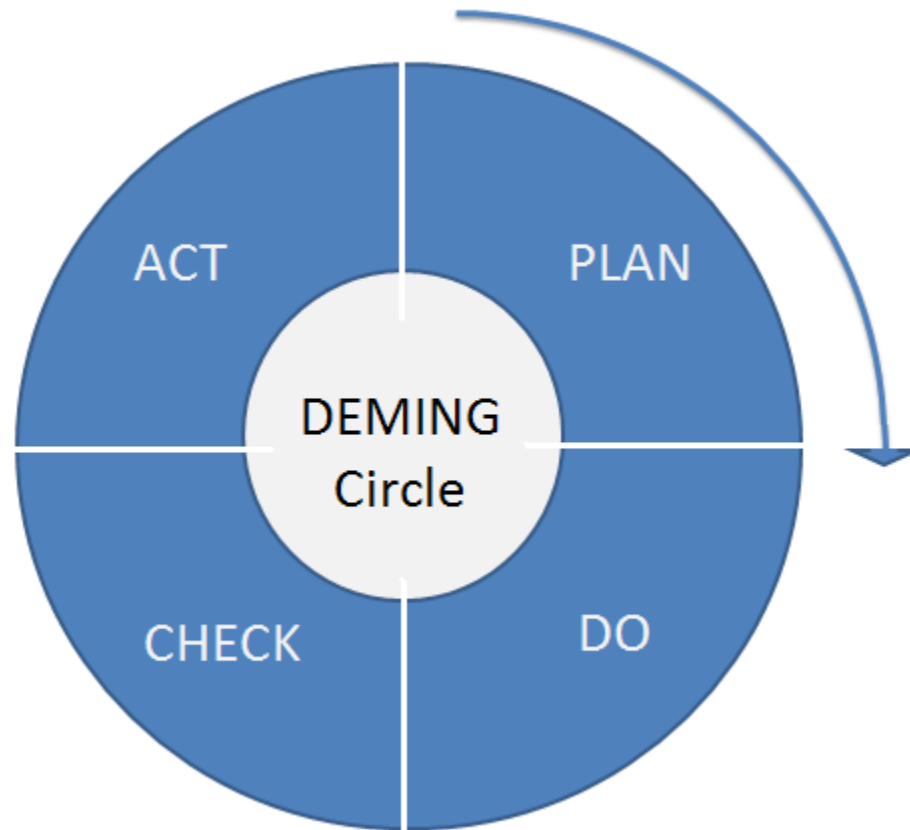
PDCA / PDSA

PLAN
Establish the objectives and processes necessary to deliver results in accordance with the expected output (the target or goals).

DO
Implement the plan, execute the process, and make the product. Collect data for charting and analysis in the following "CHECK" and "ACT" steps.

ACT

CHECK

DO

PLAN

ACT
Request corrective actions on significant differences between actual and planned results. Analyze the differences to determine their root causes. Determine where to apply changes that will include improvement of the process or product.

CHECK / STUDY
Study the actual results (measured and collected in "DO" above) and compare against the expected results (targets or goals from the "PLAN") to ascertain any differences. Look for deviation in implementation from the plan and also look for the appropriateness and completeness of the plan to enable the execution, i.e., "Do".

PDSA Cycle Template

PDSA Cycle Template

Directions: Use this Plan-Do-Study-Act (PDSA) tool to plan and document your progress with tests of change conducted as part of chartered performance improvement projects (PIPs). While the charter will have clearly established the goals, scope, timing, milestones, and team roles and responsibilities for a project, the PIP team asked to carry out the project will need to determine how to complete the work. This tool should be completed by the project leader/manager/coordinator with review and input by the project team. Answer the first two questions below for your PIP. Then as you plan to test changes to meet your aim, answer question 3 below and plan, conduct, and document your PDSA cycles. Remember that a PIP will usually involve multiple PDSA cycles in order to achieve your aim. Use as many forms as you need to track your PDSA cycles.

Model for Improvement: Three questions for improvement

1. What are we trying to accomplish (aim)?
State your aim (review your PIP charter – and include your bold aim that will improve resident health outcomes and quality of care)

2. How will we know that change is an improvement (measures)?
Describe the measureable outcome(s) you want to see

3. What change can we make that will result in an improvement?

Define the processes currently in place; use process mapping or flow charting

Identify opportunities for improvement that exist (look for causes of problems that have occurred – see Guidance for Performing Root Cause Analysis with Performance Improvement Projects; or identify potential problems before they occur – see Guidance for Performing Failure Mode Effects Analysis with Performance Improvement Projects) (see root cause analysis tool):
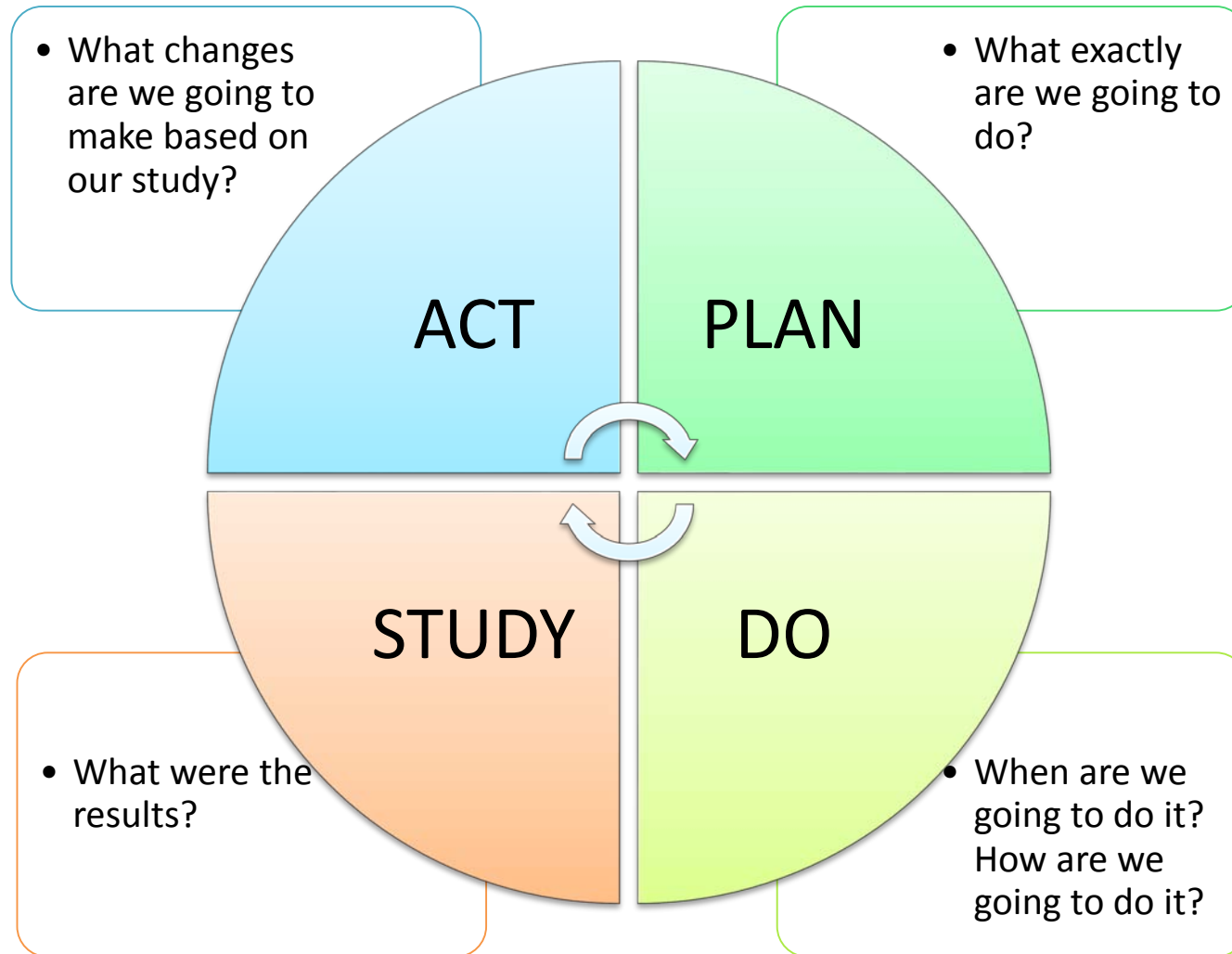- Points where breakdowns occur
- "Work-a-rounds" that have been developed
- Variation that occurs
- Duplicate or unnecessary steps

Decide what you will change in the process; determine your intervention based on your analysis
- Identify better ways to do things that address the root causes of the problem
- Learn what has worked at other organizations (copy)
- Review the best available evidence for what works (literature, studies, experts, guidelines)
- Remember that solution doesn't have to be perfect the first time

http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/PDSACycledebedits.pdf

PDSA Cycle

- What changes are we going to make based on our study?

- What exactly are we going to do?

- What were the results?

- When are we going to do it? How are we going to do it?

ACT — PLAN — STUDY — DO

http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/PDSACycledebedits.pdf

PDSA Documentation

Plan •What change are you testing with the PDSA cycle(s)? •What do you predict will happen and why? •Who will be involved in this PDSA? (e.g., one staff member or resident, one shift?). Whenever feasible, it will be helpful to involve direct care staff. •Plan a small test of change. •How long will the change take to implement? •What resources will they need? •What data need to be collected?	**List your action steps along with person(s) responsible and time line.**
Do •Carry out the test on a small scale. •Document observations, including any problems and unexpected findings. •Collect data you identified as needed during the "plan" stage.	**Describe what actually happened when you ran the test.**
Study •Study and analyze the data. •Determine if the change resulted in the expected outcome. •Were there implementation lessons? •Summarize what was learned. Look for: unintended consequences, surprises, successes, failures.	**Describe the measured results and how they compared to the predictions.**
Act •Based on what was learned from the test: •Adapt – modify the changes and repeat PDSA cycle. •Adopt – consider expanding the changes in your organization to additional residents, staff, and units. •Abandon – change your approach and repeat PDSA cycle.	**Describe what modifications to the plan will be made for the next cycle from what you learned.**

http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/PDSACycledebedits.pdf

PDCA/PDSA Tools

7 Basic Statistical Tools

RUN CHART

HISTOGRAM
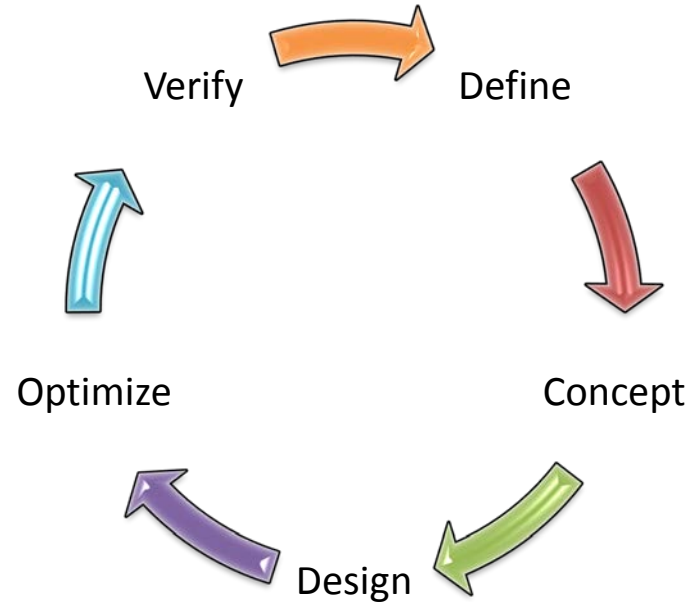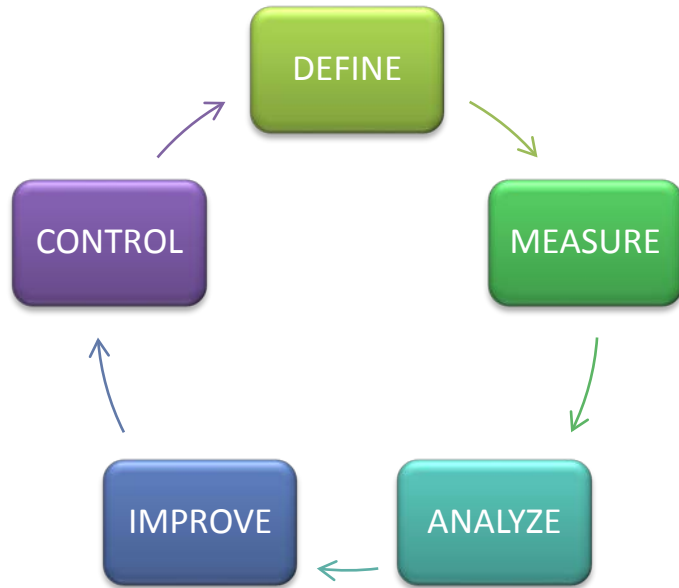
PARETO CHART

SCATTER DIAGRAM

CONTROL CHART

CHECKSHEETS

Process Variation Technique

DMAIC

Define the problem, the voice of the customer, and the project goals, specifically.

Measure key aspects of the current process and collect relevant data.

Analyze the data to investigate and verify cause-and-effect relationships. Determine what the relationships are, and attempt to ensure that all factors have been considered. Seek out root cause of the defect under investigation.

Improve or optimize the current process based upon data analysis using techniques such as design of experiments, poka yoke or mistake proofing, and standard work to create a new, future state process. Set up pilot runs to establish process capability.

Control the future state process to ensure that any deviations from target are corrected before they result in defects. Implement control systems such as statistical process control, production boards, visual workplaces, and continuously monitor the process.

"Critical To" (CT)

- In Six Sigma, you **ALWAYS** look for the **cause(*s*)**.

- "Critical to " references are made to the many variables that influence a desired outcome

CTS – Critical to Satisfaction: What contributes to customer success?

CTQ – Critical to Quality: What contributes to process or product quality?

CTC – Critical to Cost: What contributes to the cost or final price?

CTD – Critical to Delivery: What contributes to the cycle time to deliver?

Define Customers

Determine what is Critical to Quality from the customer perspective.

- CTQs are the key measurable characteristics of a process whose performance standards or specification limits must be met in order to satisfy the customer. They align improvement or design efforts with customer requirements.

- CTQs represent the service characteristics that are defined by the customer (internal or external). They may include the upper and lower specification limits or any other factors related to the product or service.

- A CTQ usually must be interpreted from a qualitative customer statement to an actionable, quantitative specification.

CTQ
Y 1
X 1,1
X 1,2
Y 2
X 2,1
X 2,2
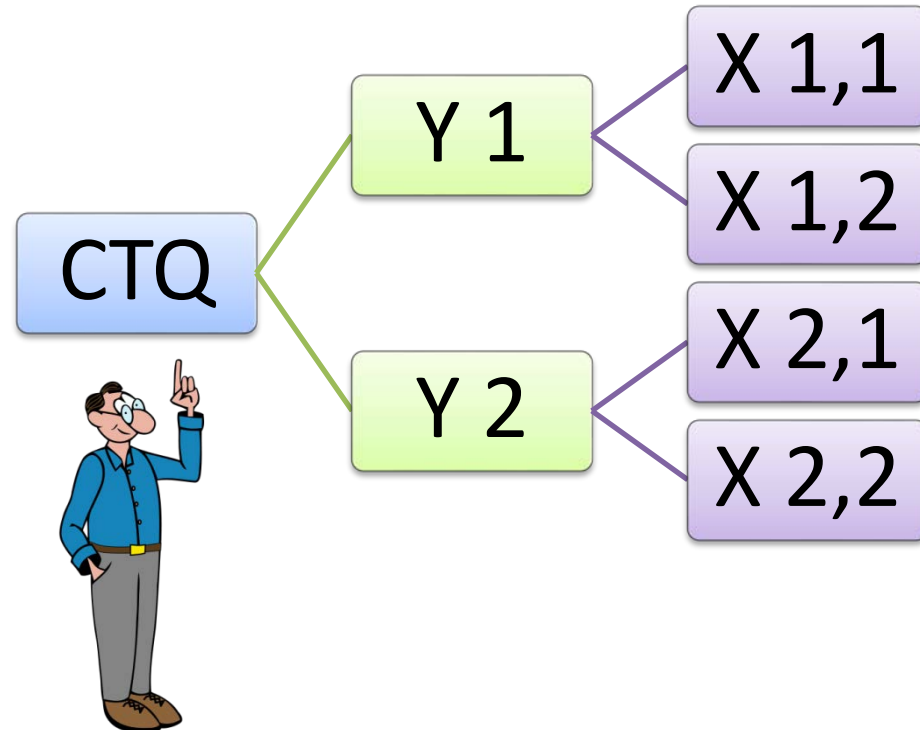
Voice of the Customer

Work Breakdown Structure

- A work breakdown structure (WBS), is a deliverable-oriented decomposition of a project into smaller components.

- A work breakdown structure element may be a product, data, service, or any combination thereof. A WBS also provides the necessary framework for detailed cost estimating and control along with providing guidance for schedule development and control.
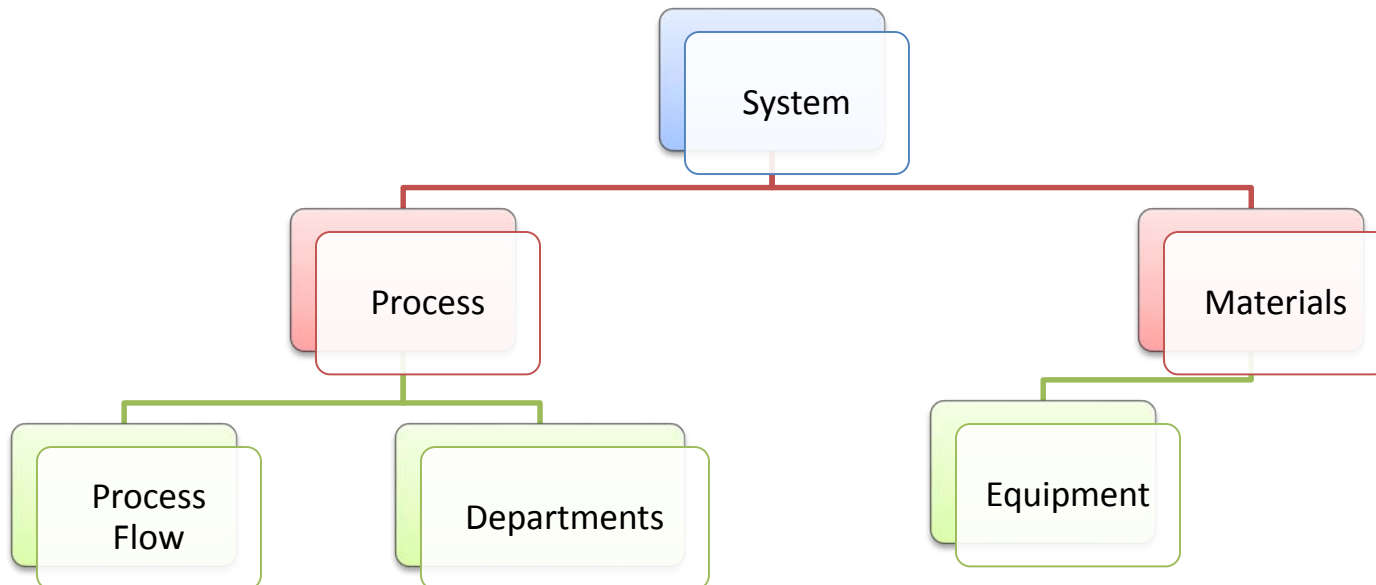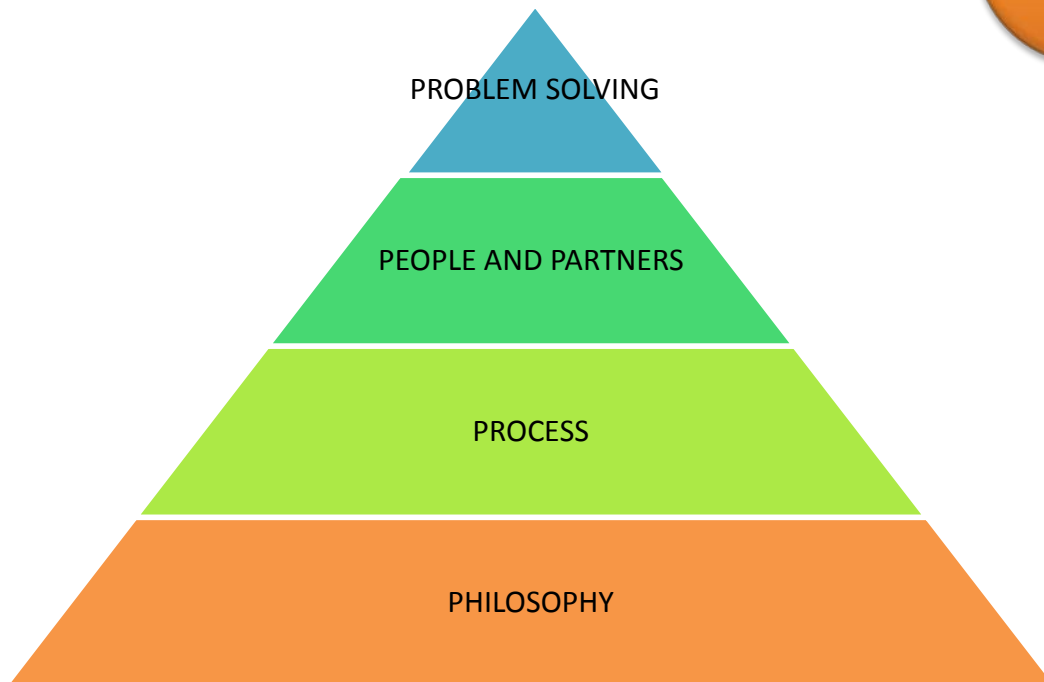
SIPOC

SUPPLIES	INPUTS	PROCESS	OUTPUTS	CUSTOMERS
Anyone outside or within your organization responsible to supply the inputs for the process	Anything that triggers the process and is required for the process output to be generated	This is the activity that uses the inputs to generate the required output	The service or care that is produced by the process	For whom the process is for (patient, family, staff, department)

Production Systems

PROBLEM SOLVING

PEOPLE AND PARTNERS

PROCESS

PHILOSOPHY

VALUE

VALUE STREAM

FLOW

PULL

PERFECTION
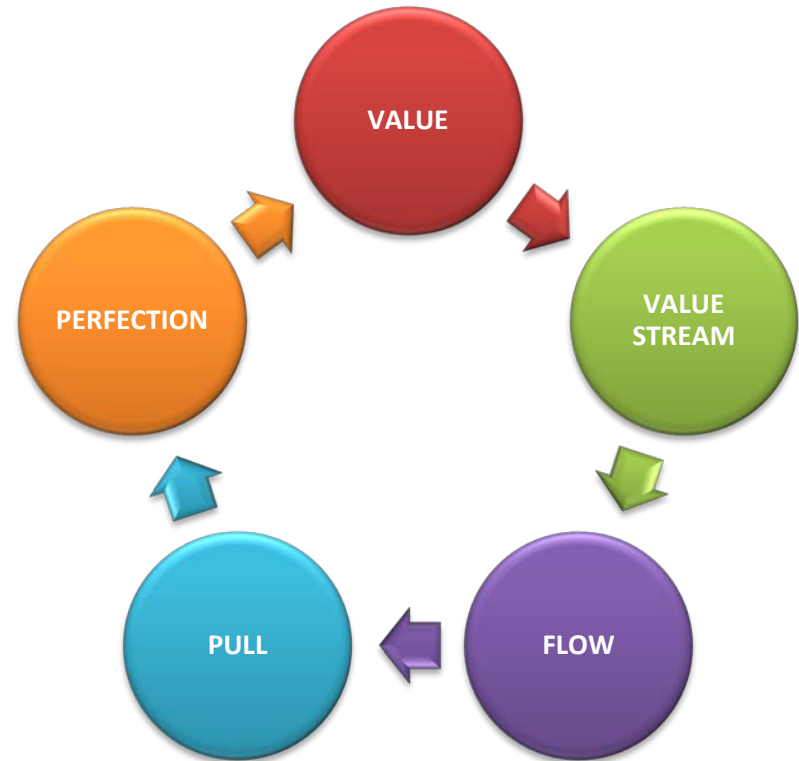
LEAN

Based on a customer view, these steps can provide a strong foundation for any organization. Lean focuses on eliminating waste and improving efficiency in processes.

LEAN Steps:
1) Identify Value of a given process;
2) Map the Value Stream of the process;
3) Create the Flow that is most efficient;
4) Establish Pull – items are allowed to be pulled to next steps in the process only when needed;
5) Pursue Perfection, eliminate non-value added steps.

Steps in LEAN Thinking

1) Value: From the customer's perspective. The service/product must be "right" every time.

2) Value stream: A process that only adds value to the service/product.

3) Flow: The specific process waste is identified at each stage of process flow and gets eliminated.

4) Pull: Identify the seven deadly wastes (defects, over-production, transportation, waiting, inventory, motion and processing). A pull system is flowing resources into a process by replacing only what has been used.

5) Perfection: Always try to achieve what is the perfect system for the kind of service and aim at continuously improving the present system.

6) Replication: A confirmation of sustained improved processes/systems that have been implemented. Determine that these same processes, procedures, tools or techniques can be deployed anywhere in the organization.

Most Effective Tools in LEAN

- **5 'S'**:   An organizational method that uses: sort, straighten, shine, standardize, and sustain. The list describes how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. The decision-making process usually comes from a dialogue about standardization, which builds understanding among staff and departments of how they should do work.

- **Spaghetti Diagram**: The visual creation of <u>actual</u> flow.

- **Kaizen**: simply means "good change", the purpose of which "goes beyond simple productivity improvement. It is also a process that, when done correctly, humanizes the workplace, eliminates overly hard work ("muri"), and teaches people how to perform experiments on their work using the scientific method and how to learn to spot and eliminate waste in business processes.."
    Source : https://en.wikipedia.org/wiki/Kaizen

- **Error Proofing**: Its purpose is to eliminate product defects by preventing, correcting, or drawing attention to human errors as they occur

5 S

- **Sort**: Means sorting or segregating contents of the workplace and removing all unnecessary items.

- **Straighten**: Means arranging the necessary items in their place and providing easy access by clear identification.

- **Shine**: Means cleaning everything, keeping it clean and using cleaning to inspect the workplace and equipment for defects.

- **Standardize**: Means creating visual controls and guidelines for keeping the workplace organized, orderly and clean, in other words, maintaining the shine.

- **Sustain**: Means instituting training and discipline to ensure that everyone follows the 5S standards.

Example of '5 S' Tool

- Supply Closet is organized by high use items on middle shelves and low use items on upper or back shelves.

- Implementing barriers/identifiers to selected workspaces or workstations.

- Organizing patient records by tabs or screens to be user friendly.

- Emergency "Crash" Carts organized with equipment holders and medication trays.

Spaghetti Diagram

- Creating a spaghetti diagram is the visual creation of actual flow. The keyword is ACTUAL, not what it should be or perceived to be. It is a snapshot in time so it may not include all what-if and special scenarios, but these do warrant discussion as the team progresses.

- Creating a Spaghetti Diagram should be done with or by the operators or those that use the process. Record the path with a pencil and use a measuring wheel or tape measure to document distances. You are looking for "cooked spaghetti", not spaghetti directly from the box, things rarely move in straight lines.

Example of a Spaghetti Diagram
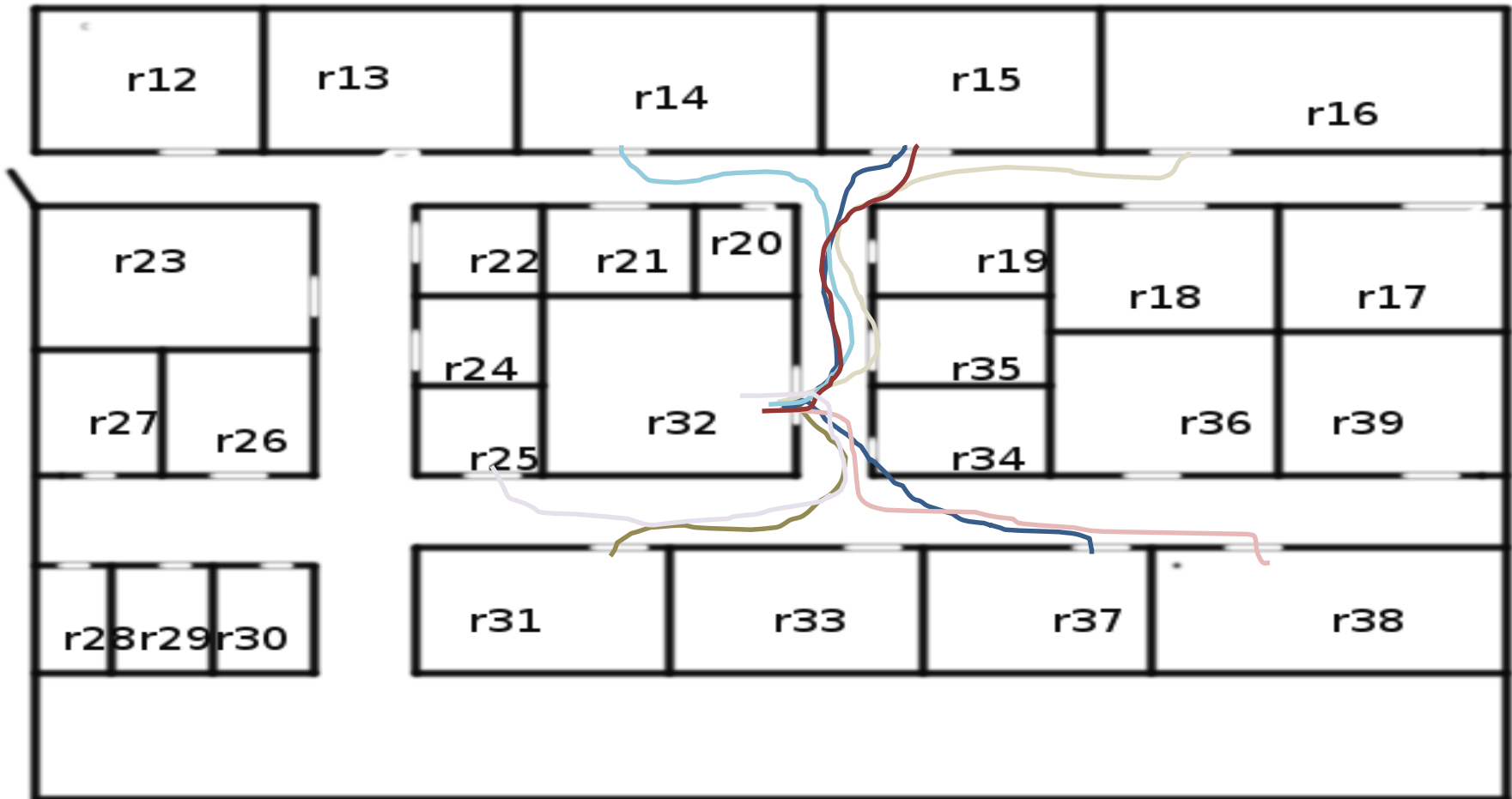
Kaizen

- Kaizen as a tool means that improvement activity should include everyone within a given location. One of the most notable features of kaizen is that big results come from many small changes accumulated over time. While the majority of changes may be small, the greatest impact may be kaizens that are led by senior management as transformational projects, or by cross-functional teams as kaizen events.

- The foundation of Kaizen consists of 5 founding elements:

  - Teamwork

  - Personal Discipline

  - Improved Morale

  - Quality Orders, and

  - Suggestions for Improvement.

- Out of this foundation, three factors arise:

  - Elimination of Waste

  - Good Housekeeping (the 5 S's)

  - Standardization

Example of Kaizen Process

About 4 weeks prior to event	Day 1 - 2	Day 2 - 3	Day 3 - 5	After Event

Plan and Create charted

Train and Walk the Process

Root Cause Analysis and Future State Plan

Improve Process

Sustain Process, Report Out and Follow up
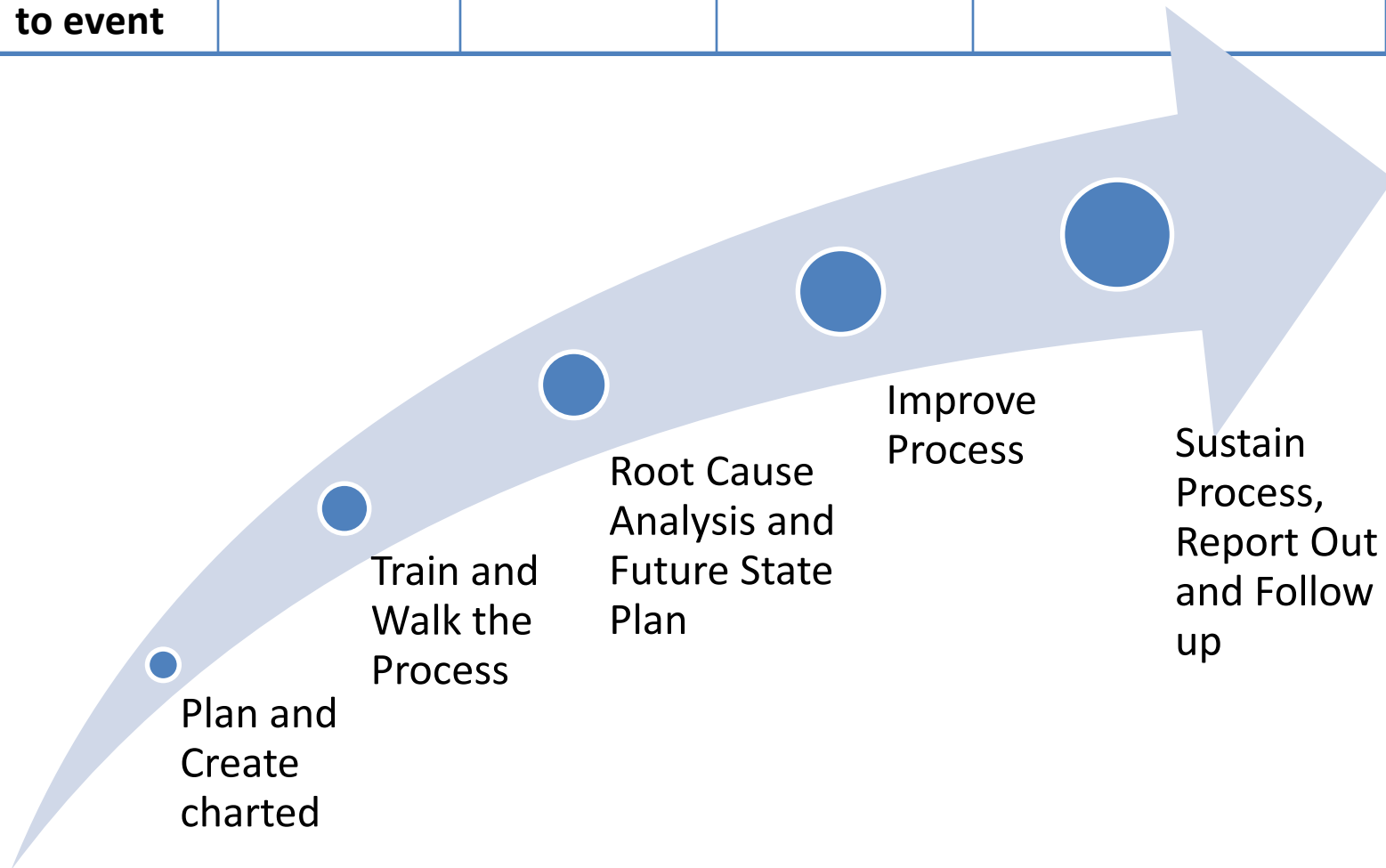
ERROR PROOFING
(*aka Poka-Yoke*)

- Is an action taken to remove or significantly lower the opportunity for an error or to make the error so obvious that allowing it to reach the customer is almost impossible.

- It involves the creation of actions that are designed to eliminate errors, mistakes or defects in everyday activities and processes

Examples of Error Proofing

- Electrical Plugs

- Gas pumps and Vehicle tank opening

- Medical Gas plugs differentiated

- Single Dose Medications

- Hot / Cold water identifiers

- Supply storage by bin size or color coded

- Standardized IV tubing or access lines

- Standardized syringe tips

Tools that fit any QAPI activity
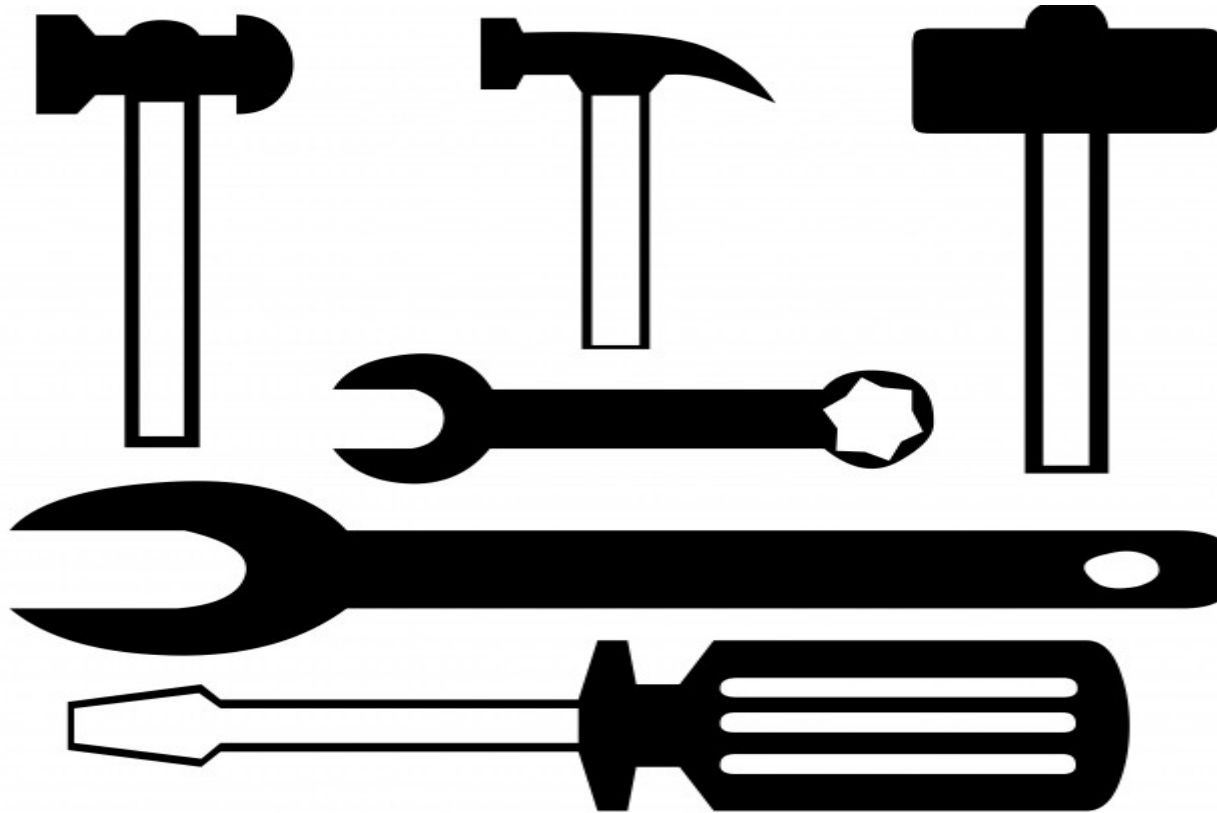
Gap Analysis

CMS Regulation	Status	Assessment/Actions or Rationale for N/A	Comments/Whom, When, etc.	Follow up/ Evaluation
ABO Policy "CMS Tag X071: Transplant centers must have written protocols for validation of donor-beneficiary blood type and other vital data for the deceased organ recovery, organ receipt, and living donor organ transplantation processes. The transplanting surgeon at the transplant center is responsible for ensuring the medical suitability of donor organs for transplantation into the intended recipient. The surveyors will review these policies to verify they are being followed"	□ **Met** □ **Not Met** □ **Pending** □ **Evaluated for application & N/A**			
Informed Consent: National and Transplant Center-Specific Outcomes CMS Tag X155: Surveyors will review medical records and interview a sample of pre- and post-transplant patients to verify that the transplant program obtained fully-informed consent about national and transplant center-specific outcomes.	□ **Met** □ **Not Met** □ **Pending** □ **Evaluated for application & N/A**			

EXAMPLE ONLY

Data Collection Plan

DATA COLLECTION PLAN	
PROJECT	**What Question is to be Answered?**
Data	**Operational Definition and Procedures**
What is to be collected?	How is the data to be measured?
Data Type	Other Condition to record?
Measurement System	Who / Where / When

Data Collection Process:

Value Stream Analysis

For analyzing the current state and designing a future state for a series of events that take a service from its beginning through to the customer. The analysis is focused on identifying value and non-value added steps throughout a process.

Control Plan

The ultimate goal of any project is to improve processes for a better patient outcome. In order to realize improvement – the improvement must be controlled in order to be sustained.

PROJECT CONTROL PLAN										
PROJECT NUMBER / LOCATION					DATE STARTED:					
					PROJECTED COMPLETION DATE:					
CRITICAL TO QUALITY CHARACTERISTIC	ITEM NUMBER	DESCRIPTION	TYPE	CHAMPION	MEASUREMENT METHOD	STUDY	REACTION PLAN	PROCESS STABILITY	FOLLOW UP	

A-3 Report

A3 refers to a European paper size that is roughly equivalent to an American 11-inch by 17-inch tabloid-sized paper.

There is no "magic" in the steps through which the structured A3 Problem Solving template takes a team.

The A-3 steps include:

- Identify the problem or need
- Understand the current situation/state
- Develop the goal statement – develop the target state
- Perform root cause analysis
- Brainstorm/determine countermeasures
- Create a countermeasures implementation plan
- Check results – confirm the effect
- Update standard work

Example A-3 Report

PROJECT REPORT

AIM STATEMENT

blank

To

By   Date

BACKGROUND

Describe background of the problem.
Importance of the problem

TARGET CONDITION

Diagram the proposed new process.
Are there measureable targets (define quantity and time)

CURRENT CONDITION

Diagram the Current situation (or process).
Highlight problem.
What about the system is not IDEAL.
Extent of the problem.
Insert current data / graphics

IMPLEMENTATION PLAN

Identify (What, Who, When and Where) Actions.
Identify cost associated to action plan items.
Insert data / graphics that show action items.

CAUSE ANALYSIS

List the problem(s).
Most likely direct cause or contributing factors.
Utilize analysis tools like 5 whys or fishbone (insert data).

FOLLOW UP

Define plan on how you will check the effects of the actions taken, when you will check them and how you will determine if actions led to sustained improvements.

Affinity Diagram

The affinity diagram organizes a large number of ideas into their natural relationships. This method taps a team's creativity and intuition.

When to Use an Affinity Diagram

- When you are confronted with many facts or ideas in apparent chaos
- When issues seem too large and complex to grasp
- When group consensus is necessary

Typical situations are:

- After a brainstorming exercise
- When analyzing verbal data, such as survey results

Group Ideas from Brainstorming into categories.

Examples of Affinity Diagrams
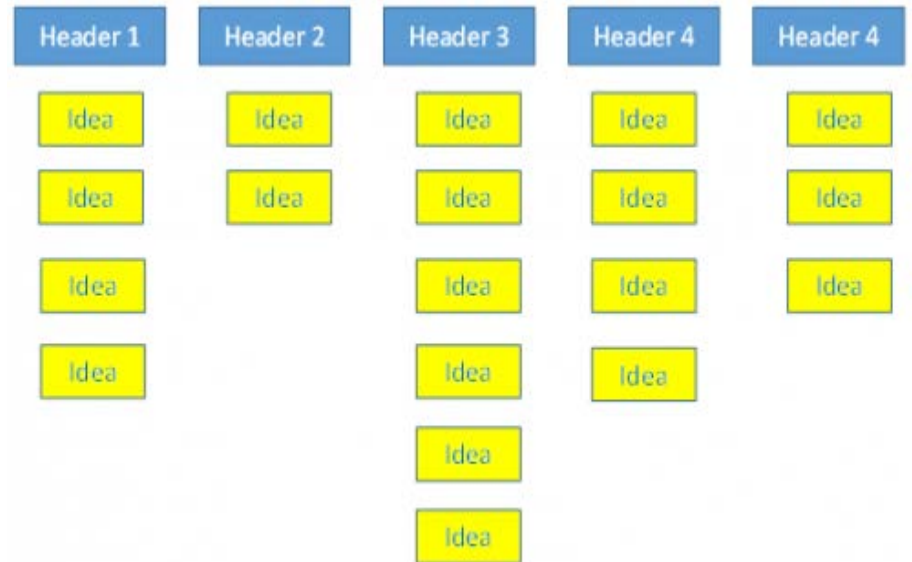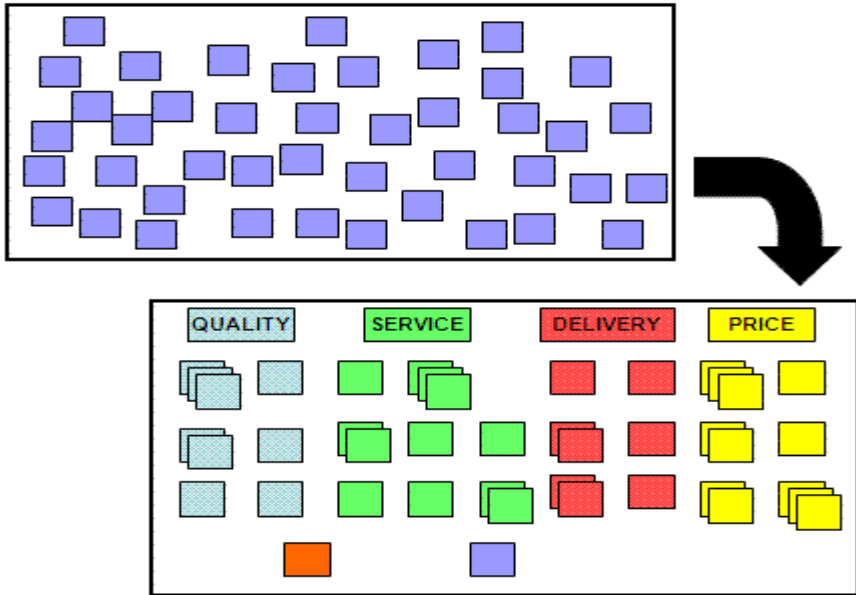
Multi-voting

- Multi-voting narrows a large list of possibilities to a smaller list of the top priorities or to a final selection.

- Multi-voting is preferable to straight voting because it allows an item that is favored by all, but not the top choice of any, to rise to the top.

When to Use Multi-voting

After brainstorming or some other expansion tool has been used to generate a long list of possibilities.

When the list must be narrowed down, and,

When the decision must be made by group judgment.

Tools and Counting
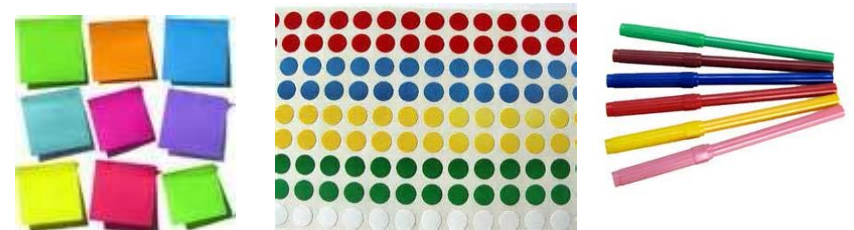
PRIORITY MATRIX

High / Low	High / High
Low / Low	Low / High

RISK (vertical axis)

FREQUENCY (horizontal axis)

Opportunity Matrix

The basic premise of the concept is that every improvement idea under consideration has an inherent level of value and an associated level of effort to accomplish. The final priority given to any improvement idea is thus a composite score of the value assigned to complexity/cost side and that assigned to the value side.

OPPORTUNITY MATRIX

HIGH / LOW   HIGH / HIGH

PROP 2   PROP 1

P A Y O F F

LOW / LOW   LOW / HIGH

PROP 3

CHANCE OF SUCCESS

BUBBLE SIZE CAN REFLECT THE LEVEL OF RESOURCES NEEDED
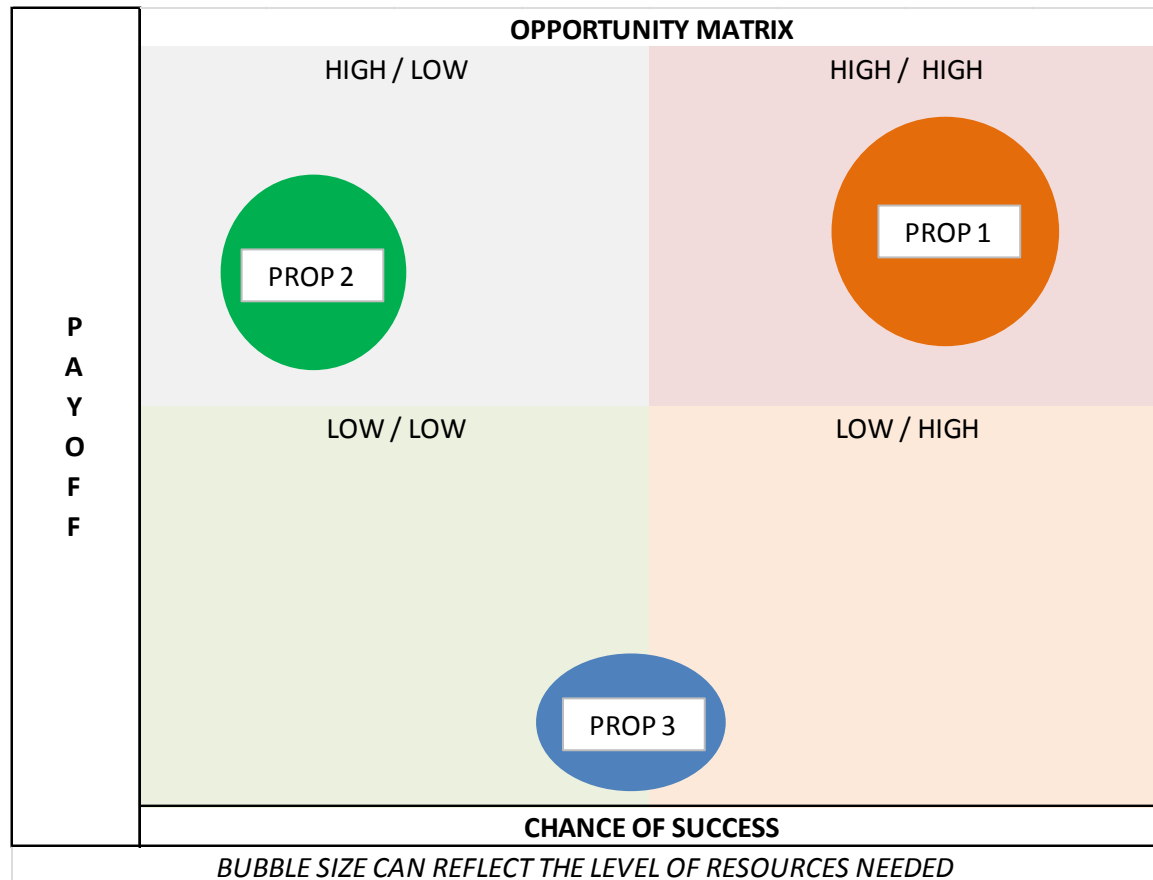
Example of Opportunity Matrix

At the end of constructing an opportunity matrix, all improvement ideas are sorted into one of four categories.

These categories become the basis for decisions about priority, sequence of attack and allocating resources to the job on what to improve:

low effort and high value,

low effort and low value,

high effort and high value,
high effort and low value.

Rapid Cycle Improvements

Rapid Cycle Process

The first 30 days

The following team timetable is an example of a project to be completed in 90 days:
I. First team meeting (4–6 hours)
- Team orientation
- Complete team road map
- Identify issues (process mapping, brainstorming, etc.)
- Identify population and data needs
- Identify data sources
- Assign tasks (data collection, etc.)

II. Team leader/facilitator design data collection tool
III. Baseline data collection (small-scale test group)

Days 31-60

IV. Second team meeting (2–4 hours)
- Review and understand the data
- Select improvement strategies
- Identify measures of success (MOS)

V. Do the pilot
VI. Data collection for MOS (small-scale test)

Days 61-90

VII. Third meeting (2–4 hours)
- Study results of the data (MOS)
- Plan next steps and follow-up monitoring
- Assign follow-up tasks

VIII. Complete project report

Rapid Cycle Template

Characterize	Issue# / Issue Title:
	Date: / Description:
	Champion:
Contain	AIM statement:
	Problem:
Cause	Root or Apparent Cause:
	Contributing Factor:s
Corrective Action	Correction Actions proposed:
	Preventive Actions proposed:
	Barriers to implementing Actions:
Closure	Verification:
	Reviewer:
	Review Results:

Scorecards & Dashboards

Interchangeable?

Dashboards and Scorecards are different tools to present and compare data with established benchmarks, targets or goals. Each has a purpose and should be utilized appropriately within QAPI activities.   Use what your hospital has already developed.

Tabular Format, compares to target/benchmark, often color coded to "stoplight" format (Green=target met; Yellow=caution; Red=Target not met)

Snapshot of "data over time" associated analysis, often with action/evaluation noted

SCORECARD EXAMPLE

DASHBOARD EXAMPLE

Pursuit of Excellence

Benchmarking is the process of comparing one's business processes and performance metrics to industry **bests or best practices** from other industries. Used to establish indicator goals or targets

Benchmarking can be internal or external. Within these broader categories, there are three specific types of benchmarking:

1) Process benchmarking,

2) Performance benchmarking

3) Strategic benchmarking

Dashboards are an easy to read, often single page, real-time user interface, showing a graphical presentation of the current status (*snapshot*) and historical trends of an organization's key performance indicators to enable instantaneous and informed decisions to be made at a glance.

Scorecards are a presentation of measures each compared to a 'target' value within a single concise report.

Summary

THE "CYCLE OF IMPROVEMENT" IS THE KEY TO ANY QAPI APPROACH!

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR CLINICAL STANDARDS & QUALITY

CYCLE OF IMPROVEMENT				
PDCA / PDSA	DMAIC	DADV	FADE	APIE
	DEFINE	DEFINE	FOCUS	
	MEASURE/ ANALYZE	MEASURE / ANALYZE	ANALYZE	ASSESS
PLAN		DESIGN	DEVELOP	PLAN
DO	IMPROVE		EXECUTE	IMPLEMENT ACTION
CHECK/STUDY	CONTROL	VERIFY	EVALUATE	EVALUATE
ACT				

The cycle of improvement is key to any QAPI approach. Different approaches achieve different results in different timeframes. Not all approaches can be combined. This chart provides a quick comparison of where each approach aligns with another to help determine the best approach for your program / organization.

Closing Summary

- There are many approaches, methods, and tools that can be utilized to conduct QA PI activities.

- Transplant programs must have a written comprehensive data-driven QAPI program. This written program should identify the methods and tools that will be utilized to conduct QA PI activities.

- Effective QAPI programs utilize a structured system to evaluate services and to act upon opportunities for improvement.

- Evidence of QAPI activities should be maintained within the transplant program as well as reported throughout the organization as required by the organization's governing body.

Questions
&
Answers

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