What is QAPI and why do I need to know anything about it?

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Quality Assurance in Industry

- Systematic approach to QA began in US manufacturing in 1930s
- Goal to eliminate waste and mistakes
- Planned activities to assure that quality requirements for products or services (customer satisfaction) are fulfilled

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Quality Assurance in Industry cont.

- Systematic measurement, comparison with a standard and feedback loops
- Dependent on inspection
- Statistical Quality Control involves sampling and control charts
- Six Sigma: defects < 6 SD (4/million) variation in process – developed by Motorola

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Total Quality Management

- Management philosophy to continuously improve quality of products and services
- Based on premise that quality is responsibility of all involved in creation or consumption of products and services - management, workforce, suppliers and customers

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Total Quality Management cont.

- All members of an organization participate in improving products, services and culture
- Applies to other industries beyond manufacturing

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Continuous Quality Improvement

- Ongoing efforts to improve products and services
- Improvements can be incremental or breakthrough
- Includes appreciation for systems, data collection and analysis, ongoing refinement of systems

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Kaizen

- Japanese term meaning improvement
- Core principle is self-reflection of processes
- Incremental improvements over time through multiple small changes suggested by workers
- Encourages worker ownership of products and teamwork

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Heroes and Martyrs of Quality Improvement

- Florence Nightingale (1820-1910)
- Ernest Codman (1869-1940)
- Walter Shewhart (1891-1967)
- W. Edwards Deming (1890-1993)
- Joseph Juran (1904-2008)
- Avedis Donabedian (1919-2000)
- John E. “Jack” Wennberg (1934-)
- Donald Berwick (1946-)

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Quality Health Care

… the degree to which health services increase the likelihood of desired health outcomes and are consistent with current professional knowledge

Institute of Medicine

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Quality Health Care

… doing the right thing at the right time for the right individual to get the best possible results

Agency for Healthcare Research and Quality

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Triple Aim for Improving Health Care

- Improve Care
- Improve Health of Populations
- Reduce Per Capita Costs

Institute for Healthcare Improvement

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Quality Improvement

QAPI

Contentious QI

Quality Improvement 101: Knowing the Difference

Quality Assurance

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What's in a name…

- How we refer to quality improvement efforts can be important
- It sets the tone and mission of work
  - QI = Quality Improvement
  - QA = Quality Assurance
  - CQI = Continuous Quality Improvement
  - QAPI = Quality Assurance and Performance Improvement

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Comparison of QA, QI & QAPI

	QA	QI	QAPI
Focus	Catch "Bad Apples" or Detect Serious Problems	Improve Processes – Not Fault Finding	What Happens to Residents (Outcomes)
Goal	Meet Minimal Standards	On-going Process Improvement	Continuous Improvement of Care
Who Is Involved	Usually 1-2 individuals in SNF	Teams	Entire Organization
Driven By	Regulation Accreditation	Organization	Organization
When Occurs	Monthly or Quarterly	Continuous	On-going for Target Outcomes

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Source: OB/QI Manual

Why Quality?

- Improved resident outcomes
- Lower operational cost/enhanced profitability
- Become the nursing facility of choice
- Higher census
- Regulatory compliance/accreditation
- Improved employee satisfaction
- ***Way of doing business!***

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The Cost of Poor Quality

- Low census
- Cost of marketing an empty bed
- Cost of replacing employees
- Cost of survey deficiencies (fines/consumer perception)

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The Cost of Poor Quality cont.

- Cost of dissatisfied customers = loss of business, reputation
- Increased liability and worker's compensation
- Cost of waste (duplication, rework, systems failure)

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Points to Ponder

1. Would you say your facility delivers quality care?
2. Would you say your facility is a quality facility?

Identify how **you** are currently assuring quality in your homes.

What is the role of infection control in quality?

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Key Concepts of Quality Improvement

- Meeting and exceeding customer needs/expectations.
- Improving work processes.
- Quality is everyone's job: All One Team.
- Quality improvement is continuous - *it is not a program!*
- People who do the job, know the best.

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Assess Performance
Prioritize Improvement
Improve Processes
Education and Training
Involve Employees
Evaluate for Improvement
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How is Quality Assurance Performance Improvement (QAPI) different from Quality Assessment and Assurance (QAA)?

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QAPI adds to QAA

- Comprehensive
- Emphasis on data
- Proactive identification of opportunities
- Addresses gaps in systems and processes

Improvement of overall quality of care and services

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QAPI is more than a program – it is an integral part of how work is done in an organization

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Background

- QAPI program in Nursing Homes was required in Affordable Care Act, enacted March 2010
- Legislation requires CMS to establish QAPI program standards and provide technical assistance to nursing homes
  - Opportunity for CMS to develop and test QAPI technical assistance tools and resources program before rule promulgation

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Context

- QAPI is required in other federally certified health care programs
  - hospitals, transplant programs, dialysis centers, ambulatory care, hospice
- NH QAPI is to be consistent with other settings at a high level, but also take into account issues unique to NH setting

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Five Elements of QAPI

- Design & Scope
- Governance & Leadership
- Feedback, Data Systems & Monitoring
- Performance Improvement Projects (PIPs)
- Systematic Analysis & Systemic Action

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Prerequisites to QAPI

Systems Thinking

- Belief that the parts of a system can be best understood through understanding their relationship with each other, rather than in isolation

Critical Thinking

- The process we use to conceptualize, analyze, synthesize and evaluate information in order to come up with an answer or a conclusion

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Design and Scope

Characteristics of how QAPI is designed and the scope of what it includes:

- Ongoing and comprehensive program across the full range of services and departments
- Addresses all systems of care and management practices, clinical care, quality of life, resident choice

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Design and Scope Characteristics cont.

- Aims for safety and high quality clinical interventions while emphasizing choice
- Utilizes best available evidence
- Written plan

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Design and Scope

- Assess current QAPI readiness
- Define the goals for QAPI
- Articulate the scope
- Define role of leadership
- Create a structure for supporting QAPI

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Governance and Leadership

Leadership actively engaged with setting expectations and priorities, including:

- Systematic approach to gather input from staff, residents, families, stakeholders
- Adequate resources – time, money, other
- Ongoing and consistent staff training
- Accountability for process and results
- Balance culture of safety and rights
- Non-punitive culture

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Governance and Leadership

- Know your current culture
  - How do you balance accountability and expectations while creating a fair and non-punitive environment?
- Assess your individual skills, practice and attitudes
  - Do you gather and use data (input) for decision making?
  - Do you model a proactive approach to improving performance?

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Feedback, Data Systems, and Monitoring

Systems to monitor a wide range of care and service, drawing from multiple sources:

- Data from staff, residents, stakeholders, others
- Use of goals and benchmarks
- Ability to analyze, interpret, and translate data into meaningful and actionable information
- Using data to systematically prioritize and select performance improvement projects (PIPs) appropriate for the nursing home

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Feedback, Data Systems, and Monitoring

- Differentiate the following:
  - Data are just numbers or symbols
  - Information is data that has been processed in order to answer the who? what? where? when?
  - Knowledge is being able to apply data and information to answer, how?
  - Understanding is when we can appreciate "why"
  - Wisdom is evaluation of our understanding

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Feedback, Data Systems, and Monitoring

- Data reflects your organization
- Comparing current level of performance to the desired level of performance
  - ❑Goal/Target
  - ❑Benchmark
  - ❑Threshold
- Data display
- Data integrity

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Performance Improvement Projects

Conduct Performance Improvement Projects (PIPs) to improve care or services in areas relevant for your residents:

- Gather information systematically to clarify issues and identify opportunities
- Test and implement changes
- Use data to determine whether goals were accomplished

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Performance Improvement Projects

- Topics should be meaningful and address the unique needs of residents, staff and others who care about the performance of the nursing home
- Topic selection should be based on data

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Performance Improvement Projects

- Prevalence
- Risk
- Cost
- Relevance
- Responsiveness
- Feasibility
- Continuity

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Performance Improvement Projects

- Project Charter
  - Goals, scope, timing, and milestones
  - Tells the team what is expected
- Tools for effective team work
  - Generating ideas (brainstorming)
  - Building consensus
  - Documenting plans and progress

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Systematic Analysis and Systemic Action

Create real impact and long-lasting improvement as the result of QAPI through:

- Take into consideration all aspects of the organization when making changes
- Address variation in practice and causes of error at the system level instead of at the individual level
- Link outcomes of QAPI efforts to policies and procedures, staff orientation and ongoing education, performance expectations, strategic planning

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Systematic Analysis and Systemic Action

- System - a group of interdependent and interacting processes and people that work together toward a common mission. The system includes supporting components of all functions and activities of an organization.
- Systems thinking – is understanding the importance of each individual piece within a system, AND the importance of how these pieces work--or don't work—together.

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Systematic Analysis and Systemic Action

- Human factors - involves the study of all aspects of the way humans relate to the world around them, with the aim of improving operational performance and safety.
- All care practice, work practices and the work environment must be designed with an understanding of the “human factors” of the people who work in your nursing home

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Summary - Tips To Prepare for QAPI

- Leadership engagement
- Identification of data sources
- Data analyses
- PI methodology
- Learn the process of root cause analysis
- Build your organizational culture for improvement

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Exercise

How do you define quality in your organization?

How do you ensure quality?

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QI Tools

- Brainstorming
- Affinity mapping
- Process Mapping
- Root Cause Analysis
- PDSA

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Brainstorming - Defined

Produce an idea or way of solving a problem by holding a spontaneous group discussion: "a brainstorming session".

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Brainstorming Sessions

- Use a team approach
  - All disciplines, all levels of staff, includes residents/families
- All ideas are welcome!
  - Don’t ask the “how”
  - Don’t dismiss ideas based off “it will never work” or “we tried that before”
- Time the session

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Brainstorming Activity

- Select a topic at your table to brainstorm
  - Labs the whole process from order to you getting results.
  - Placing someone on precautions
  - other

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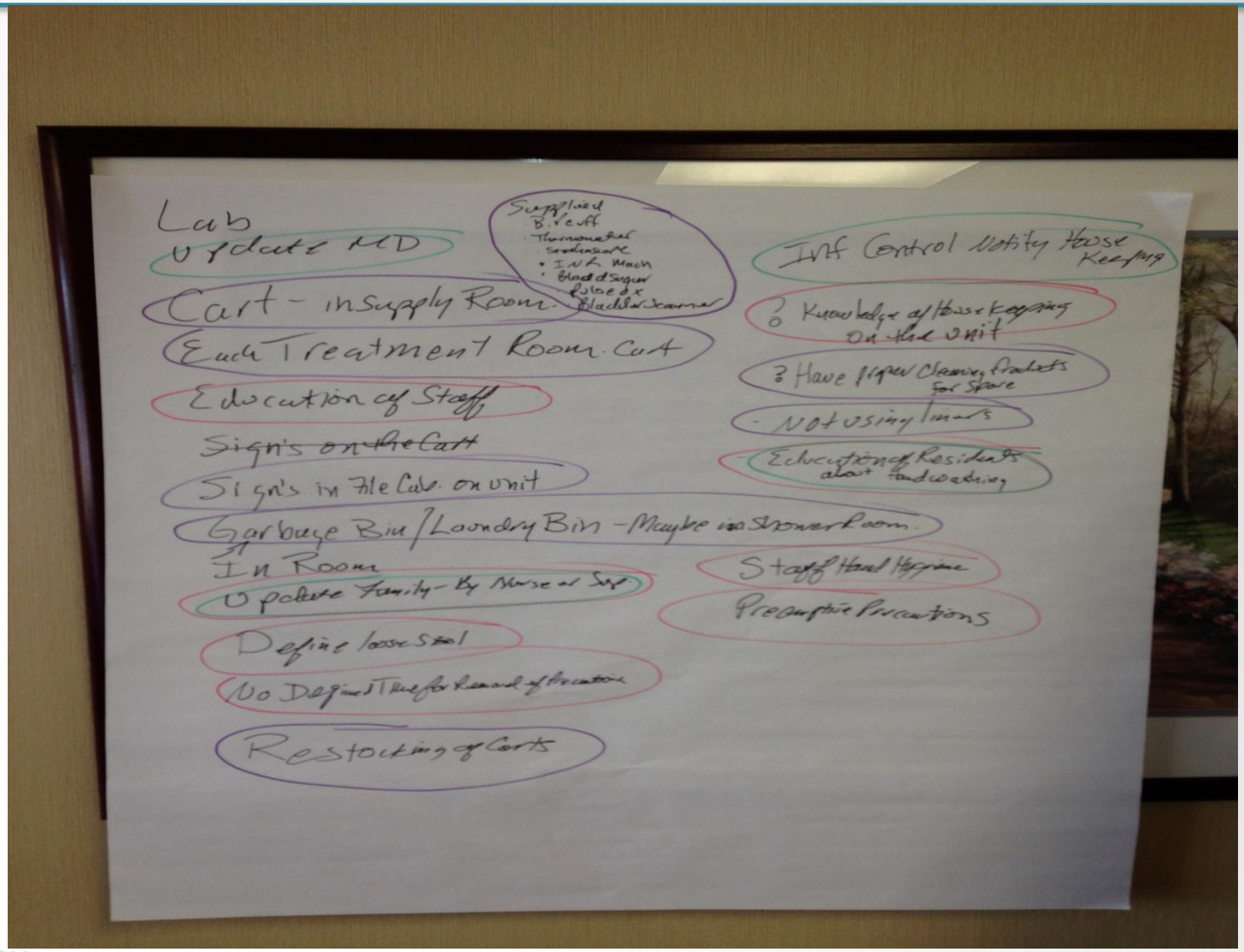
Affinity Mapping



Process Mapping

- Process mapping is a technique where an organization process or workflow is converted into a visual, step-by-step diagram.
- Process mapping is used to better understand an existing process and to help develop a more effective one.
- The goal of process mapping is to improve organization results by becoming more efficient.

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Process Mapping

- Tells us
  - who is responsible
  - What should be completed
  - how the process can be determined

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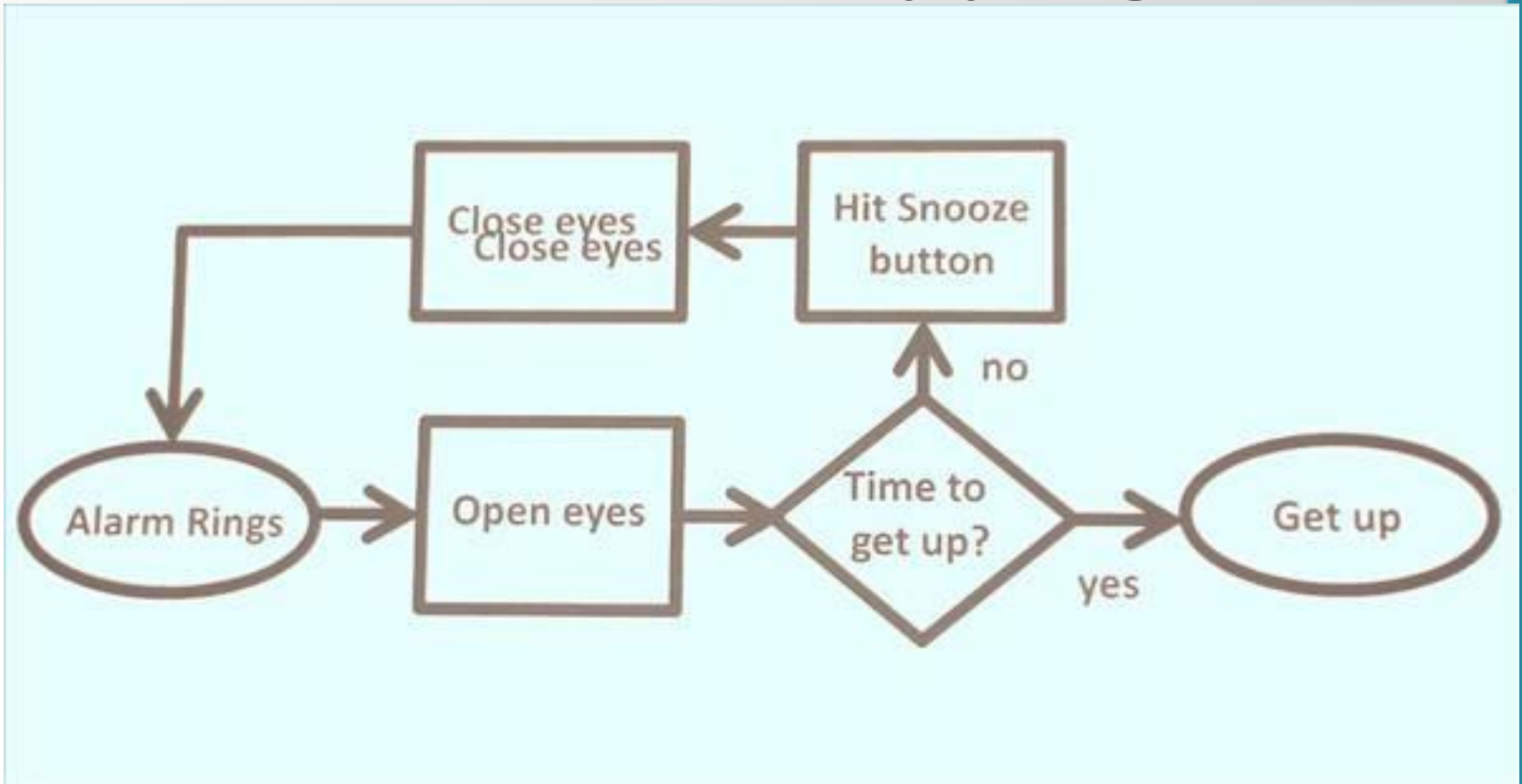
Process Mapping



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Activity

- Process map how you make a peanut butter and jelly sandwich.

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Debrief on Process Mapping

- What was this activity like for you.
- Did you learn anything
- How complex was your process map?
- Did you notice any weakness in your systems?
- Would you change anything?
- How do you think you could use this process in your facility?

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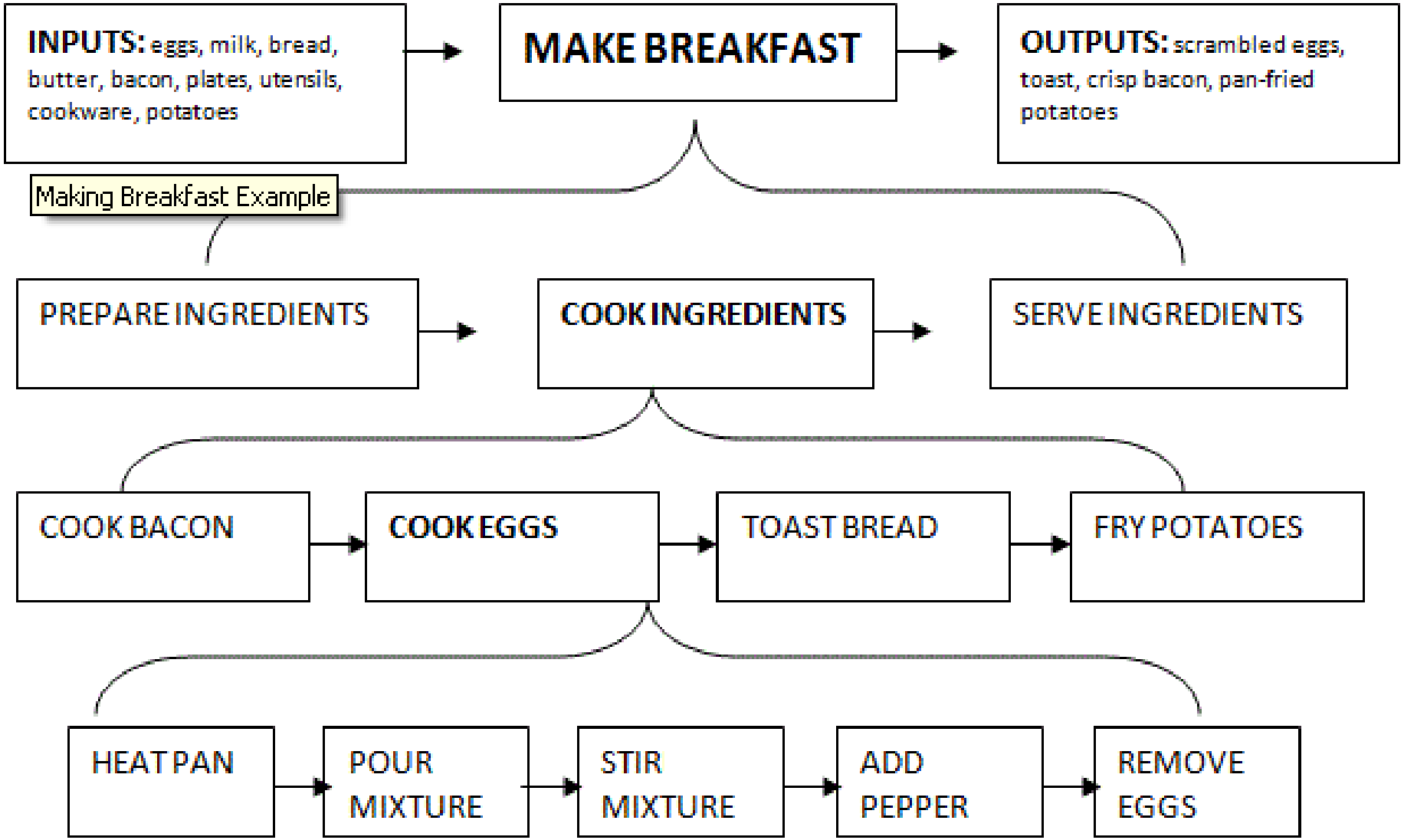
Example

An easy example to follow is making breakfast



Root Cause Analysis

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Root Cause Analysis (RCA) - Defined

- A method used to understand all the underlying causes of undesirable events, so effective, corrective, and preventive actions may be developed.
- RCA practice tries to solve problems by attempting to identify and correct the root causes of events, as opposed to simply addressing their symptoms.
- RCA is typically used as a reactive method of identifying event(s) causes, revealing problems and solving them. Analysis is done *after* an event has occurred.

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Root Cause Analysis

- A problem solving process aimed at identifying the basic or causal factors for an event.
- Used to understand the how and why of an event.
- Used to prevent the same/similar events from occurring again.
- The analysis should be done by a multi-disciplinary team.

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Root Cause Analysis - *Re-Defined*

Asking the question *why* until you can't anymore, and then asking it one more time.

Also remember to get answers to the 3 questions: **What** happened, **why** did it happen, **what** are you going to do about it?

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Effective Root Cause Analyses

- RCA facilitates:
  - “blameless” investigation when accidents or never-events occur.
  - learning.
  - systems-level corrections.
- An effective RCA can help improve the <u>safety culture</u>.

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Basic Concepts of a RCA

- Health care is inherently risky.
- The goal of an event investigation is to gain understanding of an event so that solutions can be implemented.
- Effective investigations are systematic rather than common sense.
- Natural barriers to effective investigations must be overcome.

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When do you use Root Cause Analysis?

- A negative event occurs
- Regulators require it
- QAPI
- Facility determines need for it
  - Management or staff perceived issue/problem
- To improve QI process
- Identified trends/patterns

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Systematic Analysis and Systemic Action

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The QI Journey of Cold Food

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Root Cause Analysis - Key Point!

RCA is not just an analytical tool but, also, a mindset or approach to understanding systems and how we can improve them.

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Scenario

- 150 bed skilled nursing facility
- 18 cases of C-diff over 3 months normal quarterly average is 6-8 cases.

Is this an issue?

What are your concerns?

What would you do?

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Raw Data

C-Diff	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
Unit 1	2	1	1	0	1	1	3	3	4			
Unit 2A	1	0	0	1	1	0	1	1	2			
Unit 2B	0	0	1	0	0	0	0	1	2			
Unit 3A	0	1	0	0	0	1	1	0	0			
Unit 3B	1	0	0	0	0	0	0	0	0			
Total	4	2	2	1	2	2	5	5	8	0	0	0

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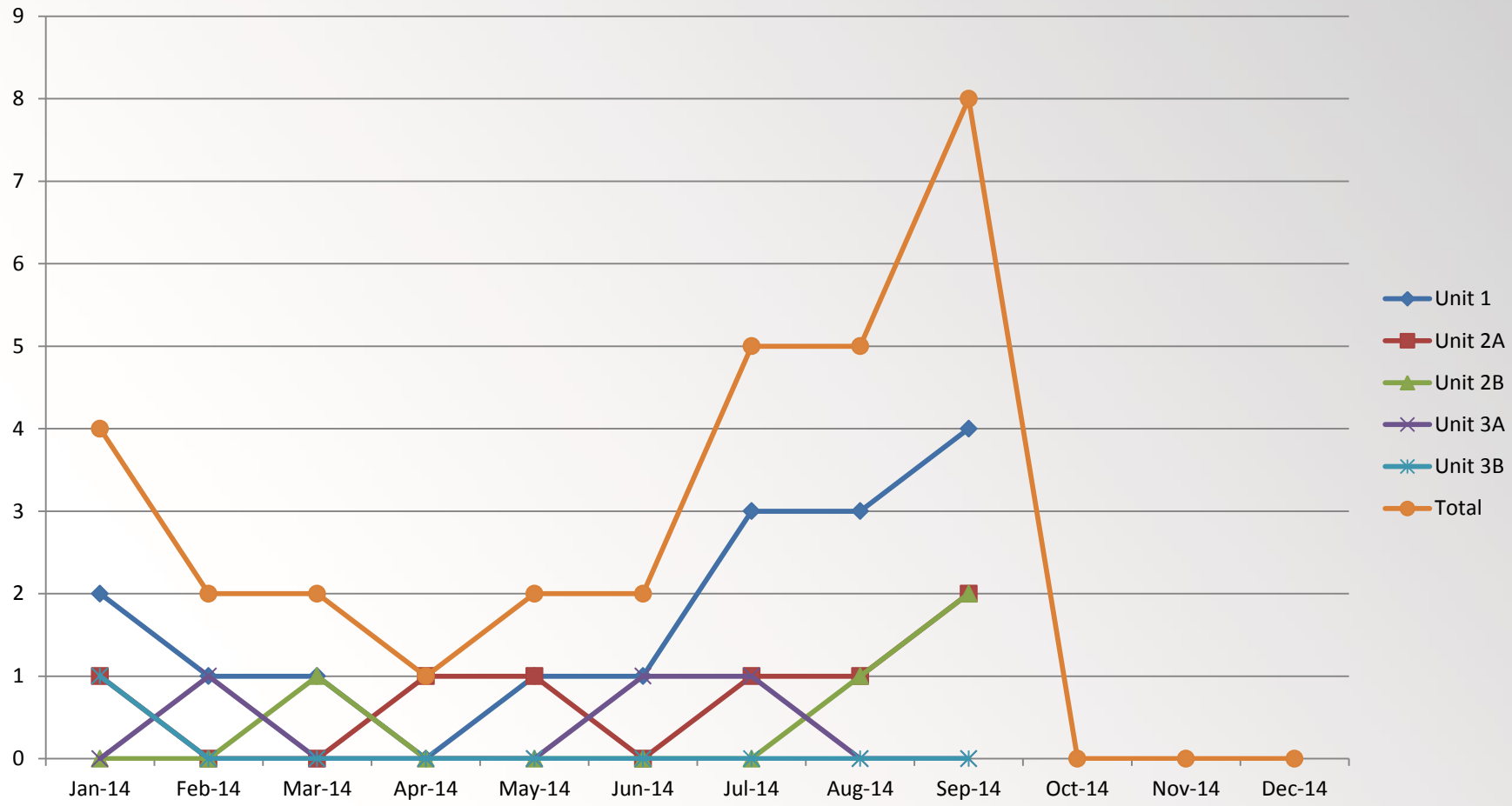
Displaying data can tell the story



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Debrief

- Have you ever dealt with this type of issue?
  - What information would you need?
  - How would you gather this information?

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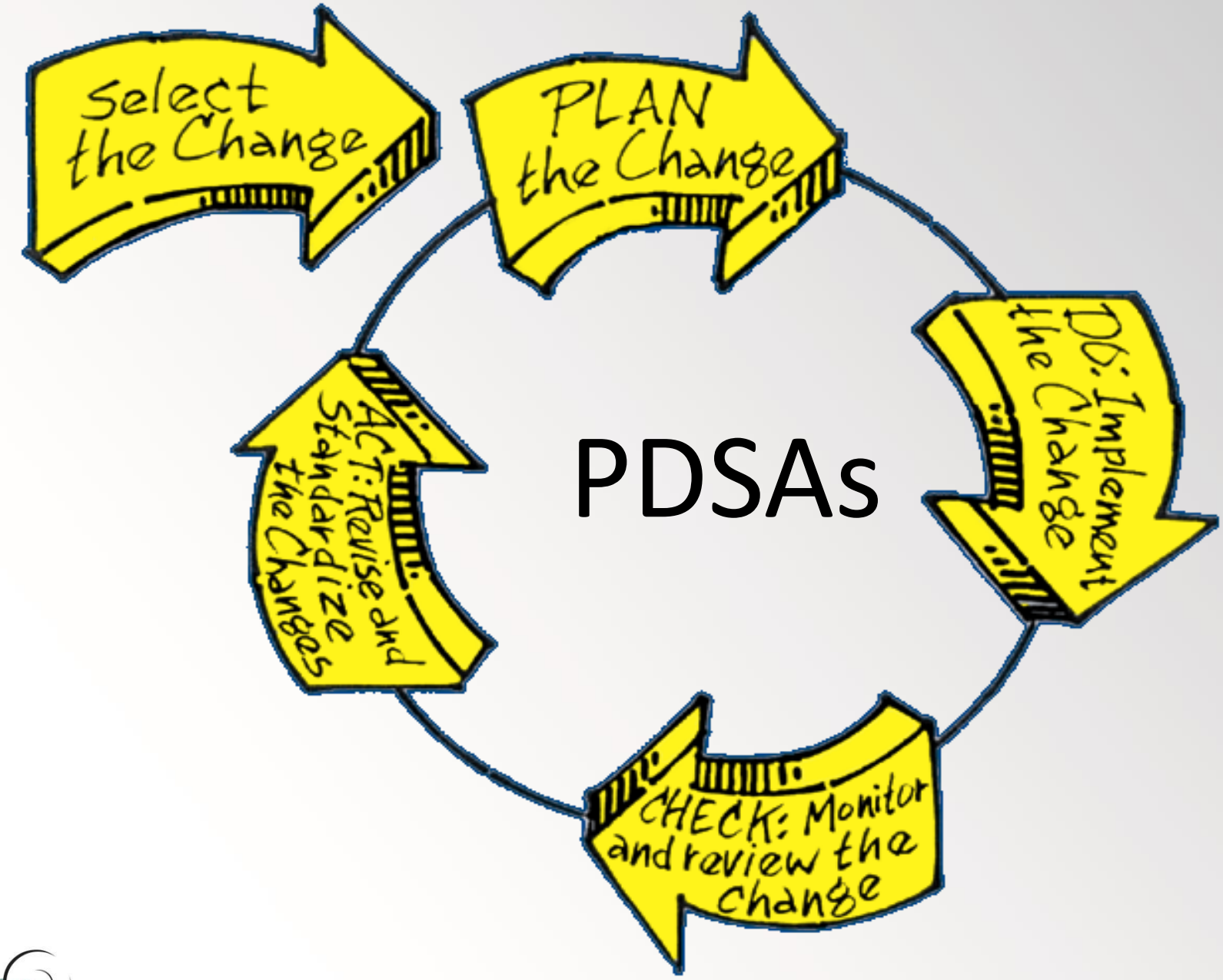
PDSAs



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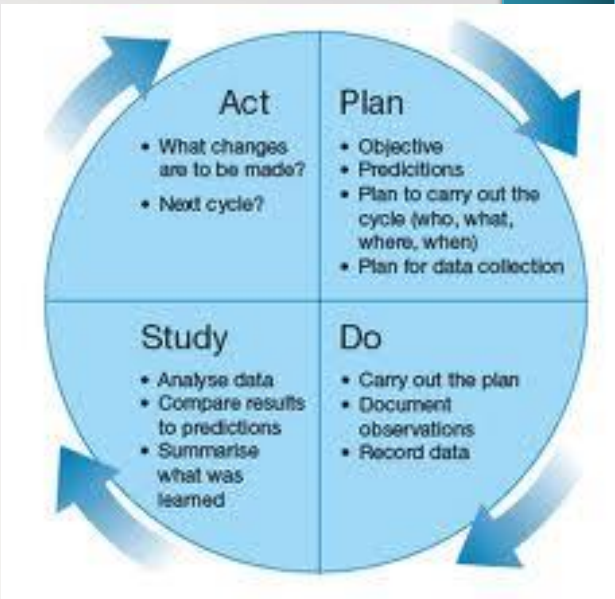
What is PDSA?

- PDSA = Plan – Do- Study- Act
- PDCA = Plan-Do-Check-Act/Adjustment
- An iterative four-step management method used for the control and continuous improvement of processes



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PSDA defined

The Plan-Do-Study-Act method is a way to test a change that is implemented.

By going through the four steps, it guides the thinking process into breaking down the task into steps and then evaluating the outcome, improving on it, and testing again.

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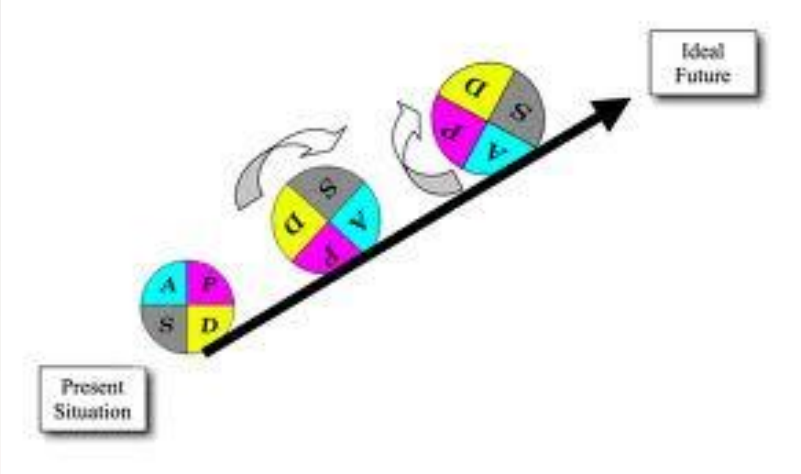
Using PDSA Cycles

- **Step 1: Identify an opportunity, and plan for improvement.**
- **Step 2: Start carrying out your plan.**
- **Step 3: Examine your results.**
- **Step 4: Tweak your plan if necessary. Start with the next set of changes.**



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PDSA Cycles

Step 1: Identify an opportunity, and plan for improvement.

A) Assemble the Team

- You want to choose people who have knowledge about the problem or opportunity for improvement

B) Create an Aim Statement

– An aim statement should describe what you want to accomplish, and can change as the process proceeds; the focus of the aim statement can become more specific and will be modified as you learn. An aim statement isn't set in stone.

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PDSA Cycles

C) Examine the Current Approach

- Examine your current process or process flow.

D) Identify Potential Solutions

- Be creative and innovative! If appropriate, spend some time reviewing models or best practices to help identify potential solutions.
- Use the “brainstorming” technique here.
- This is the area where using your internal and external customers and stakeholders becomes important. The team might have innovative ways to solve the problem. This process really is all about the discussion, so encourage all ideas.

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PDSA Cycles

E) Develop an Improvement Theory

- Try brainstorming with the statement: "If we do _____, then _____ will happen."
- Develop an approach to test the theory.
- The approach you choose should specify what will be tested and how. Ask yourself when the test will occur, and who needs to be involved.

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PDSA Cycles

Step 2: Start carrying out your plan.

- Implement the changes you want to see in your system
- Start small – one resident, a few residents, one unit, etc.

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PDSA Cycles

Step 3: Examine your results.

- You might want to test the improvement under other conditions.
- You can use visual aids to interpret and understand the data you've collected.

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PDSA Cycles

Step 4: Tweak your plan if necessary. Start again.

- Continue to examine and re-examine your process using the PDSA cycle, by standardizing the improvement or developing a new theory, and establishing future plans.
- If your improvement was successful on a small scale, test it on a wider scale.
- Establish Future Plans
- Celebrate your success!

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Taking Action

- Identify two action steps that you can take back to your nursing home to prepare for QAPI

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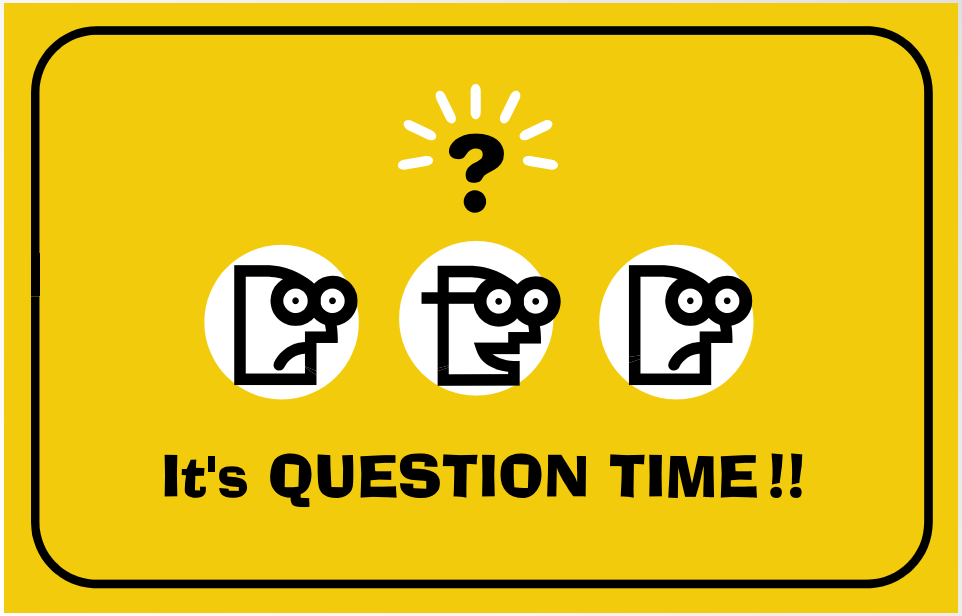
Questions



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Thank You!

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