DBHDS
Virginia Department of Behavioral Health and Developmental Services

Quality Manual 2025

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1. Introduction

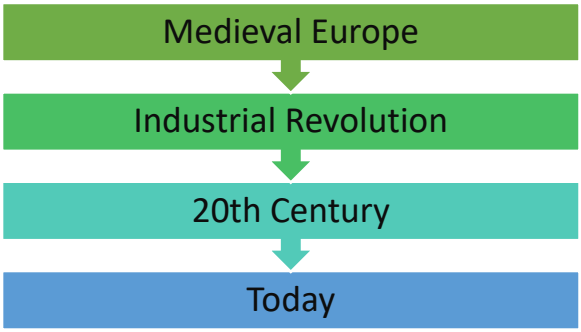
The purpose of this manual is to provide the reader with a foundational knowledge of Quality Management which includes Quality Assurance, Risk Management, and Quality Improvement, including definitions, purposes, and core strategies. It is a desk reference guide that can help your organization achieve success with quality management functions and outcomes. Hopefully it will help you feel less overwhelmed and more prepared to plan and implement a quality management program for your organization.

Please note that throughout the manual, there are tips about how this information can help you understand and meet licensing regulations, which are denoted with this symbol. 
In addition, there are a number of resources (templates, tools, etc.) included in the manual that are adaptable for your organization. All the resources in this manual are also available as separate downloads on the DBHDS website. Use of these optional resources is not required and using them does not guarantee passing any related licensing inspections.

2. What is Quality Management?

A. A Brief History of Quality Management

Let's briefly talk about history. The following time periods in history have directly influenced modern thinking about quality: Medieval Europe, the Industrial Revolution, and the 20th Century.



Medieval times saw the creation of guilds, which established strict rules for producing goods and monitoring quality. During the Industrial Revolution, people began to produce things on a larger scale, and factories were developed which produced more and more goods, with the focus on the product and its quality. During the 20th Century, there were significant events, like WWII, and significant people who helped expand quality management principles from the manufacturing realm into other sectors of work including healthcare.

Today, quality is found in all sectors – industry, education, healthcare, services, and government. Quality is multifaceted and the emphasis on quality is not a fad. It is here to stay. You can do it!

The following table describes key people who helped advance quality.

Frederick Winslow Taylor (1856-1915)

- American Mechanical Engineer

Focus:

- Methods of efficiency and productivity in manufacturing

Contributions:

- Scientific Management (Taylorism) – Analysis of and synthesis of workflows
  - Training employees rather than them training themselves
  - Stringent documentation and protocols
  - Distributing work equally among workers and managers
- Goal: Improve economic efficiency in labor productivity through developing a "Plan of Attack"
- Product design, specifications, manufacturing processes and details that go into producing a product

Walter Shewhart (1891-1967)

- American physicist, engineer and statistician
- Worked with Bell Labs

Focus:

- Statistical Quality Control

Contributions:

- Plan-Do-Study-Act (PDSA) Model of Quality-Cycles for increasing quality
- Control charts – a graph used to study how a process changes over time

W. Edwards Deming (1900-1993)

- Known as the "Father of Quality Management"
- Statistician with the U.S. Department of Agriculture
- Influenced by Shewhart

Focus:

- Total Quality Management (TQM)

Contribution(s):

- Shifted the PDSA Model from focusing on total cost to product quality
- Helped Japan to recover after WW II
- Quality Circles
- TQM

Joseph Juran (1904-2008)

- Known as the "Architect of Quality"
- Electrical Engineer worked with AT&T
- Influenced by Deming and Vilfredo Pareto

Focus:

- The Quality Trilogy
  - *Quality Planning*
  - *Quality Control*
  - *Quality Improvement*

Contributions:

- Applied Pareto Principle to QI
- Predicted that Japan, in its recovery from WW II, would overtake goods produced in the US by the mid-70s because of Japan's focus on QI
- Japan produced higher-quality products and lower prices
- Eventually, US industry got the message

Kaoru Ishikawa (1915-1989)

- Japanese organizational theorist
- Professor of Engineering – University of Tokyo
- Influenced by Juran and Deming

Focus:

- Quality Control

Contributions:

- Ishikawa Diagram (Fishbone Diagram)
- Used to identify and analyze the root causes of problems
- Formalized Quality Circles
- Kaizen

Quality Pioneers in Healthcare

Ignaz Semmelweis, MD - Hungarian Physician (1818-1865)

Contributions:

- Antiseptic Procedures
- Became known as the "savior of mothers"
- Introduced the importance of *handwashing*

Florence Nightingale - English Nurse (1820-1910)

Contributions:

- Identified the connection between poor living conditions and high death rates among soldiers treated in army hospitals

Earnest Codman, MD - American Surgeon (1869-1940)

Contributions:

- Pioneered the creation of hospital standards and strategies to assess healthcare outcomes

B. Defining Quality and Three Key Components of Quality Management

It's always good to start with a definition so we are all on the same page. What is quality? The Oxford English dictionary defines quality as:

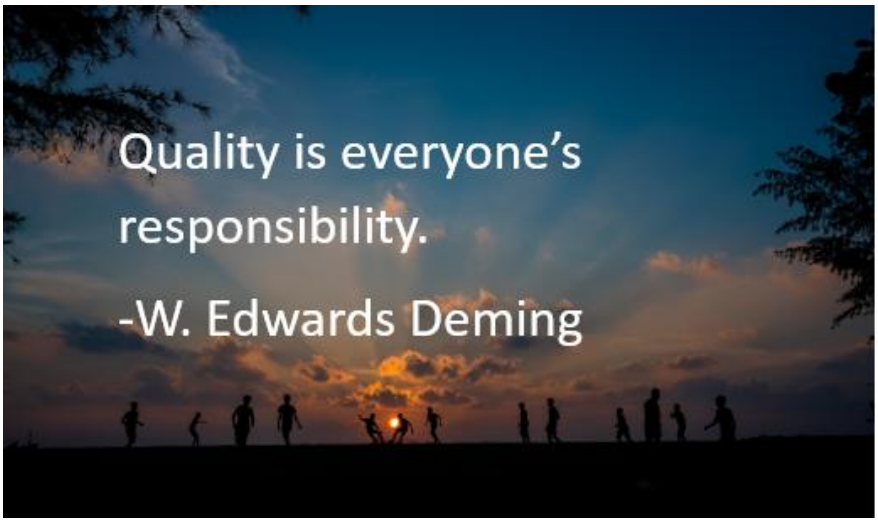
Noun:

1) The standard of something as measured against other things of a similar kind; the degree of excellence of something. *"An improvement in product quality."*
2) A distinctive attribute or characteristic possessed by someone or something. *"She shows strong leadership qualities."*

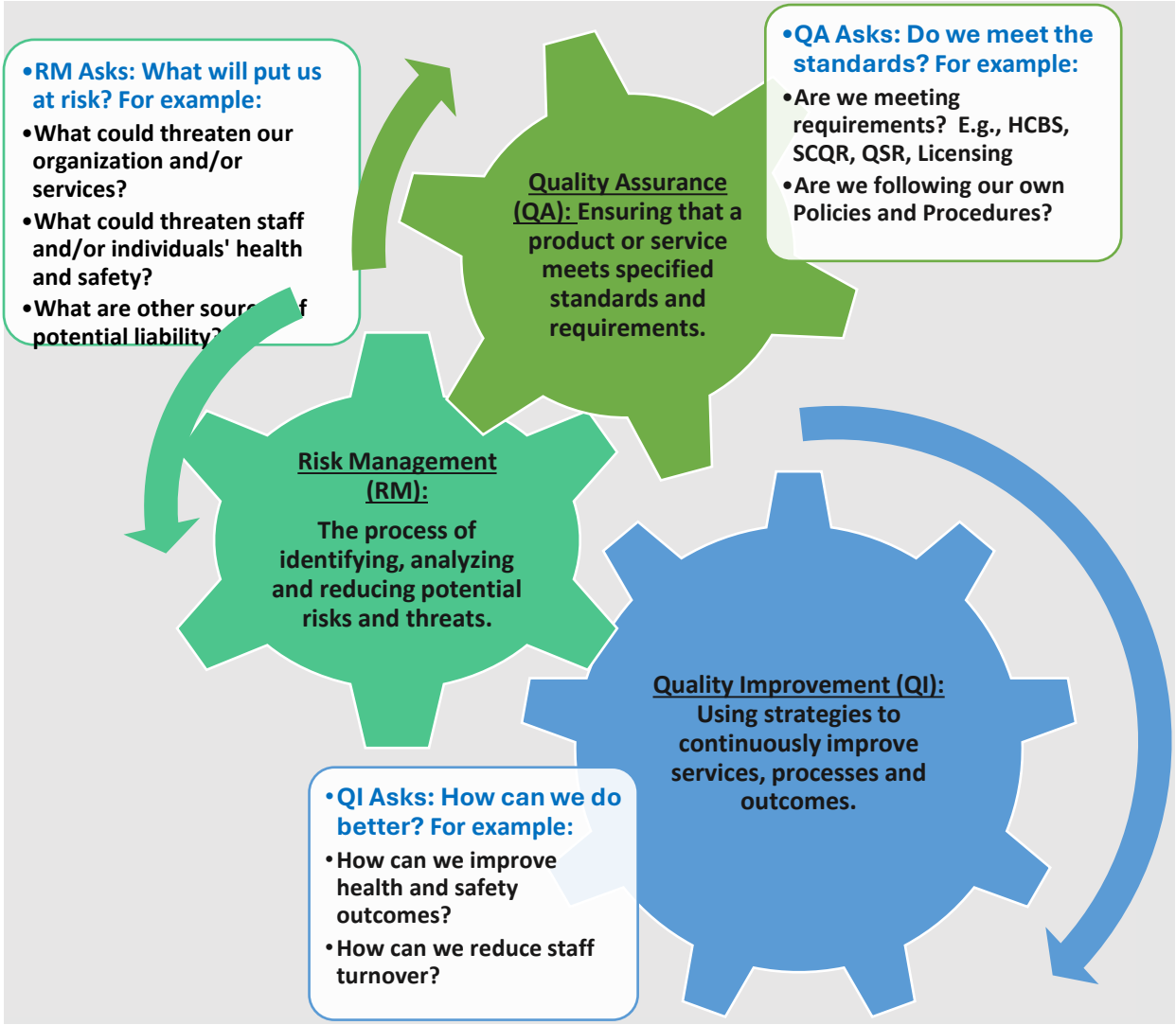
Quality management is the act of overseeing all activities and tasks that must be accomplished to maintain the desired level of excellence. At DBHDS, there is a Quality Management System as well as a number of policies, procedures, committees, and activities that are designed to measure, improve and achieve quality.

Quality is managed at all levels, not just at the top level of management. It is important to remember that "quality" is everyone's job! The accompanying diagram demonstrates how quality is managed, with all individuals from direct line staff to business owners and upper management being responsible for the provision of quality goods and services within the scope of their position.

Figure 1 Hierarchy of Quality Management



There are three key aspects of quality that are important to any healthcare or social service delivery system: Quality Assurance, Risk Management, and Quality Improvement. They are often grouped together as if they are the same thing. They, in fact, have different purposes and processes but are interrelated. Each is a set of tasks and processes designed to achieve a goal. This graphic helps explain each term. (Source: *NEJM Catalyst.)*



The chart below lists more important components and concepts for each of these quality processes. It outlines what your organization needs to have and know, for each key area.

NOTE: The components marked with an * are required by Virginia code and inspected for compliance by the Office of Licensing.

Quality Assurance (QA)
Know the standards and regulations

- Understand the standards and regulations
- Receive training on the standards

Project Management:
- Have checklists of the standards
- Make plans to meet and/or maintain compliance
- Enlist the help of a team

Self-assessment
- Evaluate your organization against the standards
- Make improvements as needed

Participate in external reviews
- QSR, SCQR, HCBS, Licensing, etc.
- Make any suggested improvements

Risk Management (RM)

Have a Risk Management Policy / Procedure
A policy which outlines the overall principles and guidelines an organization will follow to identify, assess, and manage risks.

Have a Risk Management plan*
- Detailed document that specifies the exact steps and procedures to be taken to implement the risk management policy, including how to identify, analyze, and respond to specific potential risks within a project or operation.
- The written risk management plan should be reviewed and updated at least annually, or at any time that the provider identifies a need to review and update the plan based on ongoing quality review and risk management activities, such as during its quarterly reviews of all serious incidents or after completing their systemic risk assessment (SRA).
- Develop processes
- Identify risk triggers and thresholds

Understand risk
- Collect and review risk data, including trends over time (e.g., serious incidents, medication errors, adverse events) *
- Conduct Safety Inspections*
- Identify risks to the organization (e.g., financial, staffing)

Analyze risk
- Conduct Root Cause Analysis*
- Use a Risk Matrix
- Complete a Systemic Risk Assessment (SRA)*
- Consider tools such as Failure Mode Effect Analysis (FMEA)

Minimize / reduce risk
- Set measurable goals and objectives and track progress over time*
- Develop an Improvement Plan

Quality Improvement (QI)

Have a Quality Improvement Policy / Procedure*
A policy which outlines the overall principles and guidelines an organization will follow to conduct quality improvement.

Have a Quality Improvement Plan (annual)*

- A work plan which describes how the organization reviews the quality of services it provides and manages initiatives to improve quality.
- Review and update annually.
- Includes measurable goals and objectives.
- Monitors and evaluates effectiveness of CAPs and progress towards goals and objectives.

Quality Strategies – Targeted activities to improve a known problem

Incorporate Continuous Quality Improvement (CQI)

- A process for identifying and improving services, processes, outcomes, etc. in an ongoing fashion.

Prepare for a QI Project - FOCUS:

- Find an opportunity to improve ("the problem")
- Organize a team familiar with the problem
- Clarify understanding of the problem
- Understand root causes
- Select a change to address the problem

Use a QI model, e.g., Model for Improvement, to:

- Develop an Aim (SMART Goal)
- Determine a Measure
- Identify a Change
- Do Plan-Do-Study-Act (PDSA) Cycles

Track progress. Once the QI project is complete, continue to monitor the data.

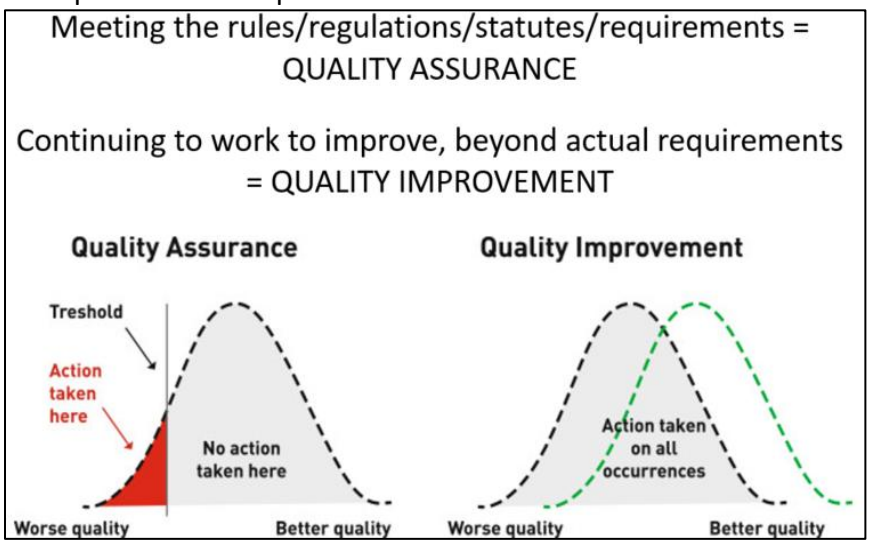
NOTE: The components marked with a * are required by Virginia code and inspected for compliance by the Office of Licensing.

It is important to distinguish between quality assurance (QA) and quality improvement (QI), as this is a common area of confusion. Both concepts center on quality and providing safe, effective processes, services, and outcomes. QA asks, do we provide good services? To understand this, we look to things like

Quality Assurance vs.	Quality Improvement
Guarantees quality	Raises quality
Relies on inspection	Emphasizes prevention
Uses a reactive approach	Uses a proactive approach
Looks at compliance with standards	Improves the processes to meet standards
Requires a specific fix	Requires continuous efforts
Relies on individuals	Relies on teamwork
Examines criteria or requirements	Examines processes or outcomes
Asks "Do we provide good services?"	Asks, "How can we provide better services?"

compliance with standards. QI asks, how can we provide better services? To do this, we look at how we can improve our processes or outcomes. This table provides an explanation of the differences. *(Source: Michigan OPHI)*

Here is a visual interpretation to help illustrate the differences.



Here are some examples to help us think about the differences in a work setting.

Quality Assurance	Quality Improvement
Are we achieving performance measures at 86%?	How can we achieve performance at greater than 86%?
Are we completing risk tools for individuals per best practice guidelines?	How can we reduce adverse outcomes for individuals?
Are we meeting employee training requirements?	How can we improve the percent of employees completing training orientation within 15 business days?

C. Elements of a Culture of Quality

It is important to think about how to foster a culture of quality. An organization with a culture of quality promotes an environment that avoids blame, focuses on learning from mistakes, encourages open communication, and strives for data-driven problem-solving, rather than assigning fault. Here's a breakdown of how to achieve this:

1. Shift the focus to learning and improvement:

- Embrace a "just culture": This means creating a workplace where people feel safe to report errors and near misses without fear of punishment.
- Focus on systems, not individuals: Instead of blaming individuals for errors, analyze the processes and systems that led to the problem.

- Encourage open communication: Create a culture where people feel comfortable sharing information and asking questions.
- Use data to drive improvement: Collect and analyze data to identify areas for improvement and track progress.

2. Implement effective quality practices:

- Define quality: Clearly define what constitutes quality in your specific context and ensure everyone understands the standards.
- Use a structured approach: Employ frameworks like PDSA (Plan-Do-Study-Act) cycles to systematically address problems.
- Measure for improvement: Use metrics to track progress and identify areas for improvement, not to assign blame.
- Use a team-based approach: Encourage teams to participate in improvement projects to foster ownership and engagement.
- Learn from variation in data: Analyze data to understand why things are different and identify opportunities for improvement.

3. Address Potential Barriers:

- Adequate resources: Ensure that teams have the necessary resources and support to implement quality improvement initiatives.
- Change resistance: Address resistance to change by communicating the benefits of improvement and involving staff in the process.
- Political and administrative challenges: Work with leadership to overcome political and administrative barriers that may hinder quality improvement efforts.

Instituting a culture of quality may require an organizational shift and this is not always easy to do. It may take time. In the end, your organization will benefit by having an organization that is continuously engaging staff and getting better. *Sources: Provost, L.; AHRQ; NACCHO.*

D. Staffing Plan for Quality Management

It is important to have a staffing plan designed to manage RM and QI responsibilities. This means you need to make sure that the required tasks are a routine part of somebody's job. When more than one person shares the duties, it needs to be clear which person is responsible for which tasks. This will include incorporating responsibilities in the job descriptions and ensuring the staff receive proper training. It is strongly encouraged that at least two people on staff are aware of all the responsibilities and can carry them out, in the event of somebody's absence. It is recommended that information about staff roles and responsibilities for QI and RM be included in the policies, procedures and plans as appropriate.

Important components of a job description for the role of Quality/Risk Manager may include:

- Description of the organization and setting.
- Job duties which may include:
  - Plan, manage, and implement Risk Management and Quality Improvement programs.
  - Address risk identification, reporting, analysis, investigation and reduction.
  - Conduct incident investigations and submit written summary reports as required.
  - Develop and implement quality improvement initiatives and/or quality enhancement plans.
  - Assist with achieving compliance with DBHDS, CMS and DMAS standards.
- Knowledge, Skills and Abilities which may include:
  - Ability to conduct thorough investigations, analyze problems, conduct root cause analysis, and recommend solutions.
  - Ability to establish effective working relationships with managers; design and deliver training programs; and maintain accurate records.
  - Knowledge of clinical quality, individual safety, patient experience and/or patient satisfaction performance measures and indicators.
  - Experience in human rights advocacy or a related occupation, which includes conflict resolution, crisis intervention and case investigation.
  - Ability to interpret data, identify trends and draw conclusions.
  - Ability to communicate clearly findings and recommendations to different audiences.
  - Knowledge of quality improvement methodologies such as Plan Do Study Act.
  - Experience in monitoring and tracking implemented changes to determine the effectiveness of the planned change and making adjustments as needed.
  - Knowledge of the rules and regulations governing the administration of Risk Management and/or Quality Improvement programs and state and federal requirements.
- Other considerations which may include:
  - Certification as a Risk Management Professional or similar credentials are preferred.
  - Experience or coursework in healthcare administration, social services, business, or a related field, and experience in Quality and Risk Management, including models of root cause analysis (RCA), failure mode effect analysis (FMEA), performance improvement, quality improvement, malpractice and liability prevention and intervention, preferred.

- Experience in a healthcare setting and/or risk/patient safety and investigations, preferred.

Licensing Tips:

All providers are required to designate a qualified person with responsibility for the risk management function. This person may delegate tasks but must serve as the primary person who is responsible for the risk management function.

Virginia licensing regulation 520.A specifies that: *"The provider shall designate a person responsible for the risk management function who has completed department approved training, which shall include training related to risk management, understanding of individual risk screening, conducting investigations, root cause analysis, and the use of data to identify risk patterns and trends."* Source: https://law.lis.virginia.gov/admincode/title12/agency35/chapter105/section520/.

The Office of Licensing has developed the "Risk Management Attestation Form" which outlines the minimum training requirements. The person responsible for the risk management functions needs to complete, at minimum, the training(s) for each topic area, documenting completion on the form appropriately, and signing and dating the form. That form can be found on the Office of Licensing website: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/

E. Succession Planning

Succession planning is a process that involves identifying and developing employees to fill important roles when they become vacant. It's also known as replacement planning. Succession planning can help ensure that an organization has the right people in the right roles, even when there are changes in leadership, or if a staff member leaves the organization. Succession planning can also help with business continuity and performance and can reduce risk and disruption. In essence, it is a form of risk management.

An organization may want to start the process of succession planning by identifying critical roles and determining which positions are most important to the sustainability of the business. Potential next steps may be considering the organization's short-term and long-term goals, and whether the culture should be preserved or changed. Then, develop a timeline to create the succession plan and consider the development of the plan and maintain a sense of urgency in formulating the plan. Select the employees that suit the roles you have identified, create specific work experiences to prepare the employees to fill these positions and evaluate the effectiveness of the succession plan. If adjustments need to be made, revisions can occur during this active process.

F. Team Structure and Meetings

Quality is a Team Sport. It is highly recommended to use a team-based approach to drive your quality efforts. Why use a team-based approach? A team brings a variety of perspectives, knowledge, opinions, and skills. The success of any quality program will come down to the dedication and skills of the team. Having a diverse team will help ensure that those implementing the actions will have buy-in and shared commitment to goals and plans. Having a team strengthens your ability to effectively solve problems.

REFLECTION TIME

- Do you have an experience where you worked on a project
    - …without a team?
    - …with an ineffective team?
    - …with an effective team?
- How did it impact the improvement work?
- What are the implications if you do not have a team?
- Does this help you better understand the importance of having a team?

Here are some steps to assemble a team:

1. Designate a team leader. Skills in a good team leader include:
    a) Good listening and communication skills.
    b) Strong planning and organizational skills.
    c) Good facilitation skills.
    d) Ensures timely follow through on tasks.
    e) Maintains the focus on the goal and outcome.
2. Designate team members. It is important to choose a diverse team.
    a) Include people with different roles, job levels, and perspectives.
    b) Include people on the team who have direct knowledge about that topic area and are affected by it on a regular basis.
    c) Include people, if possible, who can approve or make necessary improvements related to the topic area.
3. Provide necessary training and information to the team. Training may include providing information about the quality improvement framework and strategies; training about the improvement topic; and training about their role and responsibilities.
4. Develop a team charter, which serves to provide focus and clarity regarding the team's work.

An important aspect of having a team is having effective meetings and communication. Here are some strategies to have an effective meeting and include everybody's perspectives.

- Be clear about the purpose(s) of the meeting.
- Consider assigning roles such as facilitator, note taker, and timekeeper.
- Have an agenda that aligns with the purpose.
- Start and end on time.

- Stay on topic.
- Take notes about key discussion points.
- List tasks, who will do them, and a deadline for each task.
- At the end, summarize the next steps.
- Distribute notes/minutes afterwards to all members and invite corrections.

Here are some strategies to help make sure everybody's perspective is heard.

- **During a meeting:**
  - If somebody isn't talking very much, solicit their opinion.
  - In virtual meetings, invite members to use the 'chat' feature to participate.
  - Welcome suggestions and ideas from everybody, even if you disagree.
  - Avoid criticizing others' suggestions.
  - Avoid talking over and interrupting others.
- **Outside of the meeting:**
  - Invite input or feedback prior to or between meetings.
  - Hold one-on-one conversations to get input and ideas.
- **What other ideas do you have?**
  - Does the team need to set rules; for example, be respectful, use "I" statements, and stay focused on the topic at hand.
  - Make accommodations to offer other options.
- **What are the implications of NOT including everybody, or the right people?**
  - You could miss out on good ideas and possible solutions.
  - It could limit your chances for success down the road.

It is also important to consider Tuckman's Model of Team Development. This model provides a helpful framework for understanding how a team behaves and changes as it works together through time. Here is a summary of what may happen at each stage.

Forming	Storming	Norming	Performing	Adjourning
•The team comes together. •Setting objectives. •Seek safety and approval. •Conflict is avoided.	•Begin to organize tasks and make decisions. •Seek role clarity. •Disagreement may happen.	•Create ways of being and doing work together. •Develop cohesion. •Shared leadership. •Trust.	•Flexibility. •Cooperation. •Highly productive. •Fun and exciting. •Function well.	•Disbanding. •Change and transition. •Grief and loss. •Evaluation. •Tie up loose ends. •Recognize efforts.

For more information about Tuckman's model of team development, visit this resource: https://www.wcupa.edu/coral/tuckmanStagesGroupDelvelopment.aspx

Here is a sample agenda for a quality management meeting. This can give you an idea of headings and sub-headings you may include in an agenda of your own.

SAMPLE QUALITY COMMITTEE MEETING AGENDA

1. **Call to Order, Introductions**
2. **Purpose of the meeting:** To conduct quality improvement and risk management activities. (*520/620)
3. **Monthly Items**
    a) Level II and III Serious Incident Review and Root Cause Analysis (within 30 days)
    b) Use of the DBHDS Individual Risk Tracking Tool
4. **Quarterly Items**
    a) Review and document Medication Errors and data (i.e. Medication Error Check sheets, MARs, bubble packs) (*780.5)
    b) Review and Documentation for all Level I, II, and III Serious Incidents and data (i.e. trends from risk tracking tool, Care Concerns/Thresholds met for more-detailed RCA) (*160.C)
    c) Monitor progress towards QI Plan measurable goals/objectives (*620.C.5)
        a) For example- Quarterly Data on Meaningful Community Inclusion
        b) For example- Complete PDSA Cycle worksheet for this month
        c) For example- personnel chart audit tools, individual record audit tools
        d) Review and document CAP implementation, progress and results
    d) Review of Individual/AR Satisfaction surveys (if done quarterly, but at least annually and apply to QI initiatives) (*620.E)
        a) For example- If all survey results are positive, acknowledge this in the quarterly meeting. Are any actions needed based on results?
    e) Review other quarterly data
5. **Annual Items**
    a) Systemic Risk Assessment: i.e. Review deadline, use DBHDS template. (*520.C-1-5; 520D)
    b) Safety Inspection for licensed locations (may need more often) (*520.E)
    c) Review/Update QI Plan, RM Plan (*620.C and 520.B)
    d) Evaluation of injuries to employees, contractors, students, volunteers, and visitors (*520.F)
6. **QI / RM Reviews**
    a) For example- who is backup to RM, CHRIS reporting, tracking data trends.
7. **Other discussion**
8. **Adjourn**

*Indicates the associated licensing regulation.

Here are some additional resources to learn more about QI Teams:

- Selecting Quality Improvement Team Members - Compare skills and characteristics of potential quality improvement team members to select the most successful team. (Public Health Foundation (PHF))
- Taking the Pulse of Your Team - Lists essential items for launching a team. (PHF)
- Team Charter - Create the initial direction to be successful and have clarity. (PHF)
- How to Avoid the Most Common Pitfalls in Planning PDSA Cycles (NICHQ)
- DBHDS YouTube 'Setting up for Success' series.

G. Employee Training and Development

Proper training and professional development help ensure that staff have the knowledge and skills needed to perform their jobs, and to be capable of providing high quality services.

 **Licensing Tip:** DBHDS licensed providers must have a policy that describes how their organization addresses employee training and development. Per regulation 12VAC35-105-450 this policy needs to at least address the following:

- the frequency of retraining on serious incident reporting
- medication administration
- behavior intervention
- emergency preparedness
- and infection control, to include flu epidemics.

Standard first aid and cardiopulmonary resuscitation (CPR) – Consider including this, as it is part of regulation 12VAC35-105-460. Regulation 12VAC35-105-450 also requires that providers document employee and contractor participation in training and development opportunities in a way that is accessible to the department.
Please review this licensing memo for additional information about this regulation.

While these are the minimum requirements per regulation, your policy could also include how your organization addresses other training and professional development requirements related to all knowledge and skill areas such as HIPAA, information and data security, other state regulations, Home and Community Based Service (HCBS) requirements, and more.

It helps to have tracking tools that you consistently use to document employee training and professional development. The following templates are presented below as options to record employee and contractor training.

1. Two examples of employee training records / logs.
2. One example of a group training log.

 **Licensing Tip:** The DBHDS Office of Licensing has also developed the following optional templates to help providers document and monitor employee training.

- Employee Orientation, Training and Development Policy Template 12VAC35-105
- Orientation Form Template 12VAC35-105-440
- Training and Development Form Template 12VAC35-105-450, 460

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SAMPLE Employee Training Record

Employee Name:		**Date of Hire:**	
Training	**Date Completed**	**Expiration Date**	**Re-Certification Date**
TOVA			
CPR/First Aid			
Emergency Preparedness			
Infection Control- Flu			
DSP Competency Training			
DSP Supervisor Training			
Medication Management			
Serious Incident Reporting			
Documentation			
Employee Handbook			
Person Centered Training			
Human Rights			
HCBS			

Performance Evaluations		
90- Day Evaluation	**Annual Evaluation**	**Semi-Annual Observation**

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SAMPLE Individual Training Log

Employee Name	Date of Hire	Service/Department
John Blank	*1/24/2007*	*Residential Group Home*

Year: 2024

Training	Date	Training Completed		Quiz/Competency		Certificate	
Example:		yes (x)	no (x)	yes (x)	no (x)	yes (x)	no (x)
CPR Training	*2/4/2024*	*x*		*x*		*x*	

Employee Name	Date of Hire	Service/Department

Year: 2024

Training	Date	Training Completed		Quiz/ Competency		Certificate	
		yes (y)	no (n)	yes (y)	no (n)	yes (y)	no (n)

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SAMPLE GROUP TRAINING LOG

Title of Training	Date	Facilitator	Type (Virtual or In Person)

Employee Name	Start Time	End Time	Employee Signature

H. Documentation Strategies

To ensure accessibility for key staff and to help promote the importance of quality documents, it is best practice to organize your risk management and quality improvement materials in one place and/or ensure they are easily accessible These documents and resources include:

- Quality staffing plan
- Risk Management training attestation
- Policies and procedures
- Quality Improvement Plan
- Risk Management Plan
- Quality Committee/Team Roster and Materials
- Meeting minutes
- Data results and tracking tools

Licensing Tip: Be mindful of regulation 12VAC35-105-470. Notification of policy changes. All employees or contractors shall be kept informed of policy changes that affect performance of duties. The provider shall have written documentation of the process used to advise employees or contractors of policy changes.

Another good practice is to develop and maintain a list of RM and QI tasks that must be done monthly, quarterly, annually, and as needed. The list can be referenced throughout the year to ensure these items are on meeting agendas and are accomplished.

Note: This is a review schedule at minimum! They can be reviewed more frequently.

A sample of this type of list is provided on the following page.

SAMPLE Schedule for QI and RM Tasks

Editable for your agency.

MONTHLY & QUARTERLY	ANNUALLY	AS NEEDED / AS OCCURS
MONTHLY: Fire and Evacuation Drills, Tornado Drills, Earthquake Drills, etc. (530.A.9)	Additional Employee Training and Development Opportunities to support individuals** (450, 460) **	CPR/First Aid Training, Medication Training, Serious Incident Report Training, Behavior Intervention Training, Emergency Preparedness Training, Infection Control (include Flu epidemic) Training (450, 460)** (per training requirement)
AT LEAST QUARTERLY: Collect, maintain, and review all Level I, II, and III serious incidents. (160.C)	Performance Evaluations (480)	Proof of employee notice when there are policy updates as needed (470)
QI Plan Community Inclusion Monitoring/ Data Collection (620.C.3.)*	Conduct Systemic Risk Assessment (520.C.1-5 + 520.D)	Individual Satisfaction Surveys (620.E.)* (**recommend quarterly/annually**)
Monitor/Document Implementation and effectiveness of approved CAPs (620.C.4)*	Conduct Safety Inspection at service location(s) (520.E.)*	Report Allegations of Abuse or Neglect via OHR CHRIS System (115-230.A.)*
QI Plan Goals Reviewed/ Documented (620.C.5)*	Evaluate for serious injuries (employees, contractors, students, volunteers, visitors) **at least annually** (520.F)	**Document** serious injuries to employees, contractors, students, volunteers, and visitors during provision of service or on provider property (520.F.)
Review medication errors (780.5)	Review the emergency preparedness plan (make necessary revisions) (530.D)	Report Level II and III serious incidents to the department (160.D.2) + conduct Root Cause Analysis. Enter Level I, II, and III serious incidents into Risk Tracking Tool and Graph Data (possibly immediately/ at time of CHRIS entry)
^Audit tools for Individual Records	Review and update the Quality Improvement Plan (620.C.)*	+As needed, conduct more in-depth RCA per policy (Care Concerns, Met Thresholds). (160.E.)
^Audit tools for Personnel Records	Instances of Seclusion or Restraint (115-230.A)	Confirm the designated Risk Manager has 1) job description with RM duties and 2) completed DBHDS approved training for RM duties (520.A.)
*Additional Agency-Specific items		Review the Risk Management Plan (recommend annual based on information obtained from the Systematic Risk Assessment)^^
		Notify Office of Licensing when there are updates/modifications/ changes with agency/ services.

Risk Management tasks required by Regulations are highlighted in green.

Quality Improvement tasks required by Regulations are highlighted in blue.

*620.C.4: Monitoring implementation and effectiveness of approved CAPs to be determined by the provider but required by 620.C.4.

*620.C.5: Ongoing monitoring and evaluation of progress toward meeting QI Plan established goals and objectives to be determined by the provider but required by 620.C.5.

*620.E.: Satisfaction Surveys/input from individuals (how often and how often improvements made based on them) to be determined by the provider but required by 620.E.

^Recommend at least a quarterly internal audit/review tool protocol for at least a percentage of individual and personnel charts.

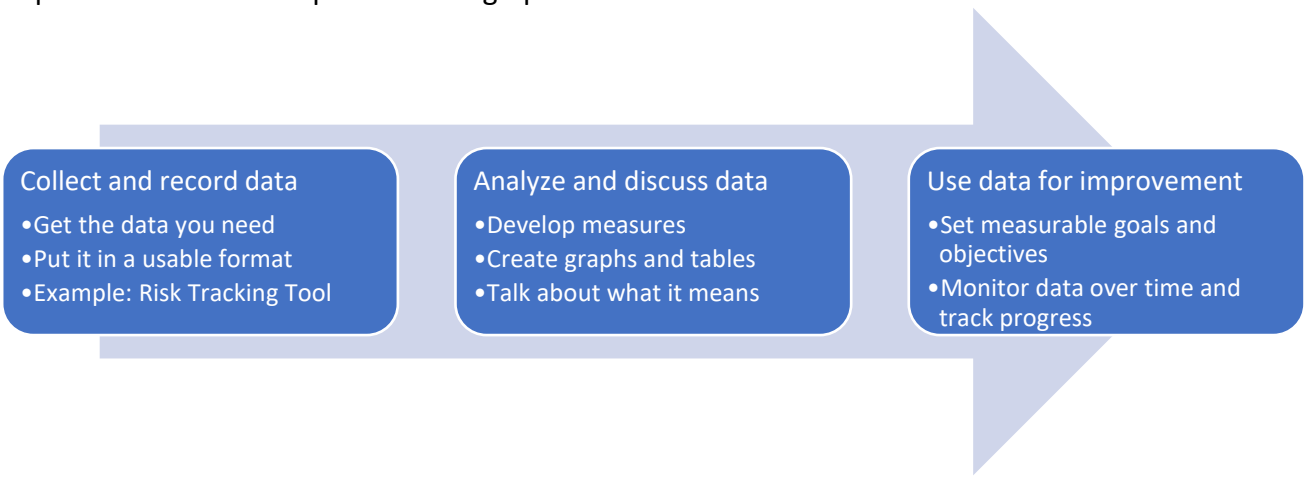
^^Recommend an annual review of the Risk Management Plan but be as needed when risks identified/to be addressed. It must be reviewed annually if embedded in the QI Plan.

**Additional Employee Training and Development Opportunities to support individuals (450) to include SIR, Med Administration, Behavior Intervention, Emergency Preparedness, Infection control (include flu epidemic)- some of this training may not be required annually (i.e. behavior intervention certification for 2 years)

3. Using Data: Data Literacy and Quality Management

A. What is a Data Driven Approach?

Being a data driven organization means that you use data to understand how your organization and programs are functioning, and you use data to determine what to keep doing, what to discontinue and what to improve. Three key functions that an organization must perform to be 'data driven' are: collect and record data, analyze and discuss data, and use data for improvement. This is depicted in the graphic below.



A key part of being 'data driven' is asking the right questions and answering them using sound methodologies. Here is a list of key questions that a data driven organization needs to be able to ask and answer on an ongoing basis. We will explore the steps above, and these questions, in this section of the manual.

Key Questions to Help Use Data for Improvement

What does success look like? What are you trying to achieve? Set goals and objectives.
What data do you have? How is it being collected?
What data do you not have that you need?
Who is responsible for collecting and tracking the data and improvements?
Do people have adequate training and resources re: data collection, analysis, etc.?
How frequently can you review the data? Do you need to be able to review it more often?
What is your analysis of the data telling you? What's going well? What could be better?
How can your data be made transparent to internal and external stakeholders?

B. Key Data Terminology

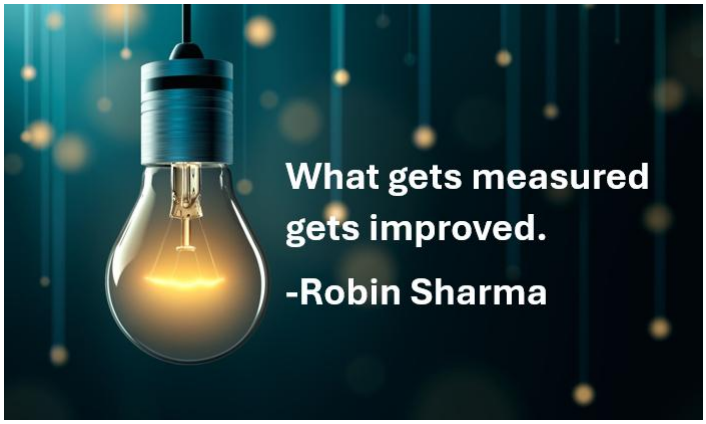
It's important to have a foundational understanding of terminology related to data. Here is a list of key data terms and their definitions.

- **Baseline data -** Numerical data over a set time that a team will use as a starting point. Multiple data points are preferable – e.g., multiple weeks, months. At least a year of data is ideal.

- **Calculation** - the process of using information and adding, taking away, multiplying, or dividing numbers to judge the number or amount of something. *Source: Cambridge Dictionary*
- **Count** – determine the total number of things.
- **Data** – numbers that represent information.
- **Measurement** - the process of associating numbers with physical quantities and phenomena. *Source: Britannica*
- **Patterns** - repeatable cycles within the data. For example, if the data always increases at a certain time of year, that is a pattern.
- **Percent** – a calculation of a part per one hundred. **Numerator** = the part; **Denominator** = the whole; multiplied by 100.
    - Example: 10% of individuals had a fall last year.

$$\frac{\text{Numerator = top number}}{\text{Denominator = bottom number}}$$

- **Performance data** - numerical information that tells you how well your programs and services are doing. For example, 'Percent of individuals who had a fall/trip each quarter" is performance data.
- **Quantitative data** – uses numbers to convey information – such as percents, rates, etc.
- **Qualitative data** – uses words to convey information – such as quotes and themes from interviews and focus groups
- **Rate** - a quantity, amount, or degree of something measured per unit of something else. *Source: Merriam Webster*
    - Example: The rate of falls is 68 per 1,000 individuals.
- **Run Chart or Trend line** - a line graph of data points over time.
- **Trends** – describing how data points move over time. For example, it may go up, down or not change.



C. Ways to Collect and Track Data

To be a data driven organization, you must collect data! There are a number of ways to collect data. Here are some common strategies.

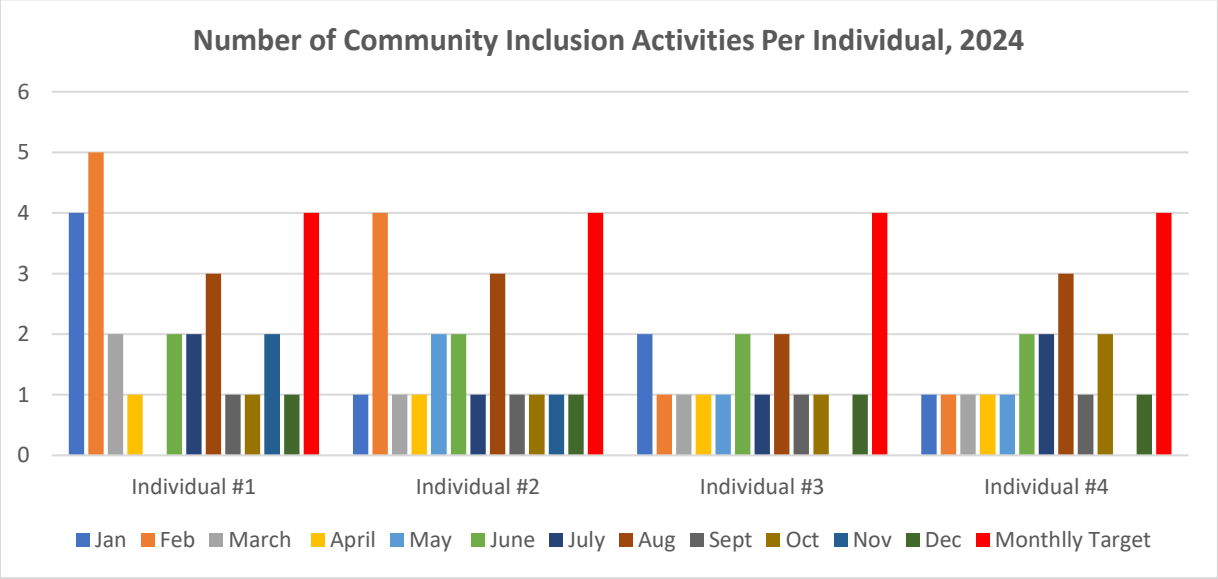
- **Spreadsheets:** Microsoft Excel is a spreadsheet program that allows users to organize, calculate, and format data. It is a popular program for providers to use to collect and track data for quality management purposes. One free alternative is Google Sheets. If you are new to Excel, need a refresher, or need to learn a new skill, Microsoft has educational information on their website. Microsoft offers some resources on how to use Excel: https://support.microsoft.com/en-us/office/basic-tasks-in-excel-dc775dd1-fa52-430f-9c3c-d998d1735fca.
  You can also find helpful videos on YouTube and/or find a course in your community, often at a community college.

Here is an example of what an Excel spreadsheet may look like:

Title: Number of Community Inclusion Activities Per Individual, 2024

Individual	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Individual #1	4	5	2	1	0	2	2	3	1	1	2	1
Individual #2	1	4	1	1	2	2	1	3	1	1	1	1
Individual #3	2	1	1	1	1	2	1	2	1	1	0	1
Individual #4	1	1	1	1	1	2	2	3	1	2	0	1
Monthly Target	4	4	4	4	4	4	4	4	4	4	4	4

Here is an example of a graph of this data created using Excel:

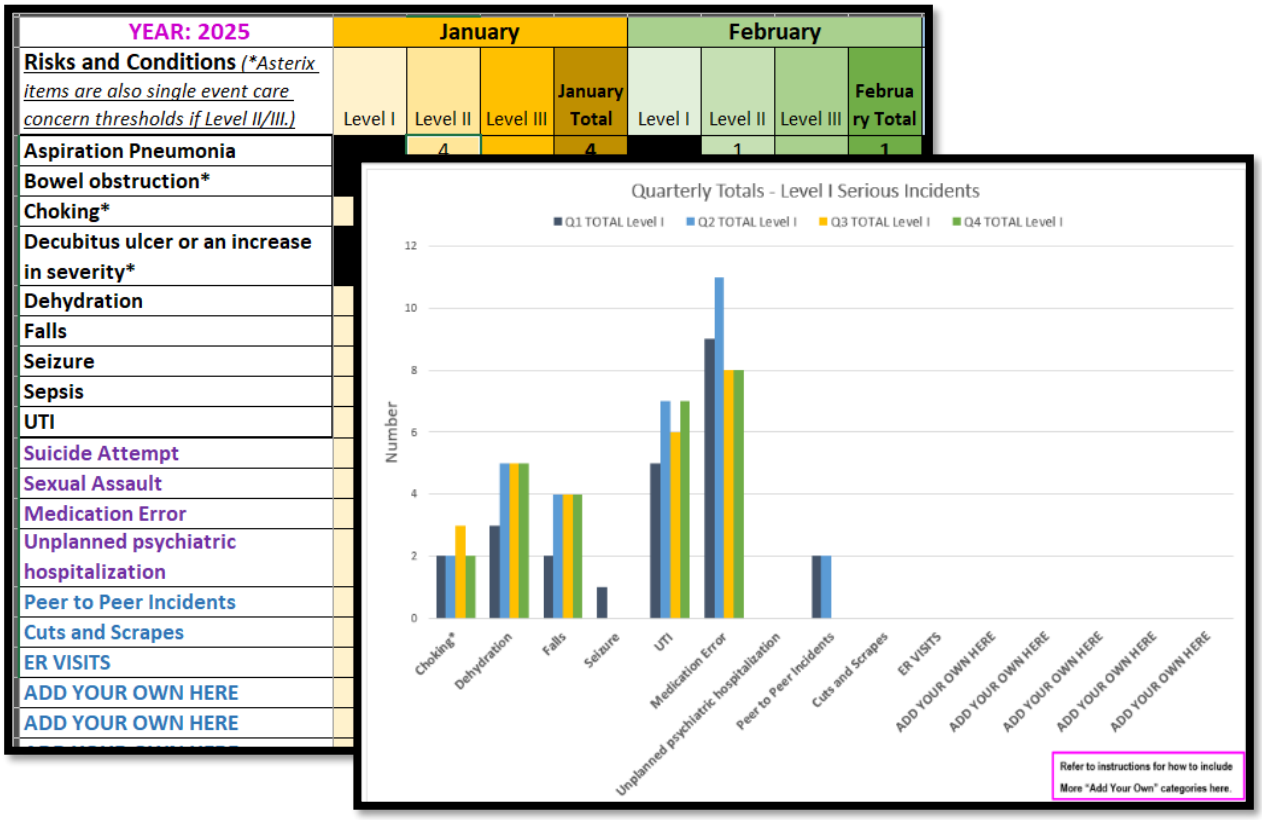


- **DBHDS Excel Risk Tracking Tool.** DBHDS highly recommends that providers use the DBHDS Excel Risk Tracking Tool, if they don't already have something that meets all the functions. This tool gives providers a place to track Level 1, Level 2, and Level 3 serious incidents, Care

Concerns/Risk Triggers and Thresholds all in one place. It is customizable to what incidents the provider wants to track and automatically creates graphs of incidents over time. It also includes a template for holding quarterly and annual discussions about the data, and a template for the Systemic Risk Assessment.

- Two options: Individual version, or Monthly version
- Includes Level I, Level II, Level III serious incidents and Care Concerns
- Includes a template for holding quarterly and annual discussions
- Includes Systemic Risk Assessment template
- List of tracked metrics is customizable
- Helps providers meet multiple licensing requirements
- Located on Office of Licensing Website: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/

This is an example of what the Risk Tracking Tool looks like.



YEAR: 2025	January				February			
Risks and Conditions *(*Asterix items are also single event care concern thresholds if Level II/III.)*	Level I	Level II	Level III	January Total	Level I	Level II	Level III	February Total
Aspiration Pneumonia		4		4		1		1
Bowel obstruction*								
Choking*								
Decubitus ulcer or an increase in severity*								
Dehydration								
Falls								
Seizure								
Sepsis								
UTI								
Suicide Attempt								
Sexual Assault								
Medication Error								
Unplanned psychiatric hospitalization								
Peer to Peer Incidents								
Cuts and Scrapes								
ER VISITS								
ADD YOUR OWN HERE								
ADD YOUR OWN HERE								

- **Tally sheets:** A Tally sheet (also called a Check Sheet) is a very simple way to record data about how often something happens. Data from a tally sheet can be tabulated and turned into summary data, ultimately creating graphs and charts. Here is a blank template you can download and use, from the Clinical Excellence Commission.
  - Template available at: https://www.cec.health.nsw.gov.au/CEC-Academy/quality-improvement-tools/tally-sheets

- **Log sheets:** A log sheet is a tool to document events that occur in an organized fashion, which includes important details like the day and time of the event, observations, barriers, etc. Data from a log sheet can be tabulated and turned into summary data, ultimately creating graphs and charts. Below is an example of a log sheet for monthly fire and evacuation drills.

Monthly Fire & Evacuation Drills Log						
Month	**Date Completed**	**Time of Day/Night Completed**	**Total Evacuation Time**	**Responsible Staff**	**Number of People Evacuated**	**Comments / Concerns**
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

- **Electronic Health Record:** An electronic health record (EHR) is a digital version of a patient's medical history. It's a real-time record of a patient's care that can be shared across multiple healthcare providers. EHR systems collect data about patients that can be turned into reports, graphs and tables.

D. Counts, Percents and Rates

Often in the work of quality management, we use counts, percentages and rates. In this section we will review the definitions for these terms.

Let's begin by discussin when you would use a Count, a Percent or a Rate.

- **When would you use a count?** Counts can be sufficient….
    - When the thing you are counting is less than ten.
    - When dealing with a small number of total items.
    - When comparing simple things between similar sized groups.
    - When you have a small, consistent number of people served over time.
    - If the number of occurrences is the primary concern.
- **When would you use a percent?**
    - When you know the actual number in the denominator, and, of those, the number with the condition you're interested in (numerator).

    - For example, you may know there are 12,500 people and 500 of those people have pink cars. In this case, 4% of the people have pink cars.
  - When you need to make comparisons between larger groups, and/or over time.
  - When it makes more sense to express it as a percent.
    - For example, saying 4% of the people have pink cars may be more understandable than saying 40 people per 1,000 have pink cars.
- **When would you use a rate?**
  - When your denominator is a different group or expression than your numerator.
    - For example, the number of miles per hour to measure rate of speed.
    - For example, the number of incident reports per 1,000 people is a rate.
  - When you need to make comparisons between larger amounts, and/or over time.
  - When a percent is a very small number. **For example**, if the percent of people with a rare disease is 0.07%, it may make more sense to express it as a rate: 0.7 per 1,000 or 7 per 10,000 people.
  - When the standard or conventional measure is a rate. **For example,** standard way to measure speed is the rate of Miles Per Hour (MPH).

Now let's look closer at the difference between a rate and a percentage.

A percentage is a part per 100.

NOTE: You don't necessarily need 100 things to do a percent calculation.

- Example: The percent of individuals experiencing falls.
- If you have 25 individuals experiencing a fall, out of 75 total individuals:
- 25/75=0.33 x 100 = 33.3% of individuals experienced a fall

A rate is the number of things per some other number, *usually* 100 or 1,000 or some other multiple of 10.

- Common example: Miles per hour.
- Example: Rate of fall incident reports per 1,000 individuals
- If you have 75 total individuals in a population, and 10 total fall incident reports:
- 10 / 75 = 0.133 x 1,000 = 133 falls incident reports per 1,000 individuals

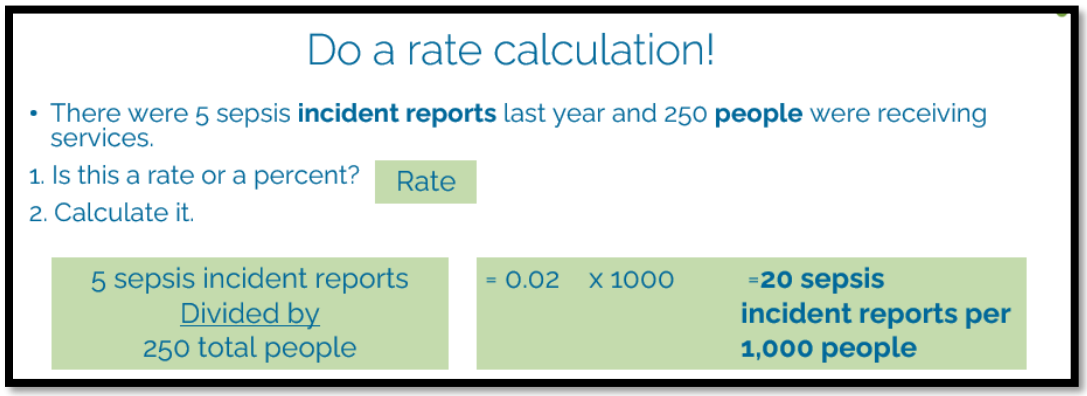
Let's practice calculating a percent.

23 people like rhubarb pie out of…
A sample of 300 people
= 23 divided by 300 = .076

"For every one person, 0.076 people like rhubarb pie."
This is an awkward way to say it so… **we make it into a percent.**

0.076 x 100 = 7.6 out of every 100 people like rhubarb pie
OR… **"7.6% of people like rhubarb pie."**

Now let's calculate a rate.



E. Know What Data You Have Available

Do you know what data you have available to you, about the performance of your organization and services? You may have more data than you realize. Here is a list of data you may have.
Note: The starred/underlined items are required by licensing regulations- you should have this!

- **CHRIS / Serious incidents**
- Level 2 and 3 Serious Incidents
- Level 1 Incidents*
- Abuse and Neglect*
- Care Concerns/Risk Triggers and Thresholds*
- **WaMS - ISP data**
- Discussions, Outcomes
- Community Inclusion*
- Meaningful Work*
- **Administrative Data**
- Training Completion
- Staff Retention / Turnover
- Staff absences / no-shows
- Hiring
- Orientation
- Background Checks, Inspector General Checks
- Performance Evaluations
- Staff vaccinations
- Denied claims
- **Tracking Logs**
- Medication Errors*
- Peer to Peer incidents*
- Staff and visitor injuries*
- Transportation problems
- Regional Support Team referrals
- **Family and Individual Survey***
- **Safety Inspection***
- **Individual Health and Safety Records**
- Primary Care visits
- Dental visits
- Missed medical appointments
- Behaviors that do not rise to the level of an incident report, but are in progress notes (e.g., PICA)
- Discharges due to the individual requiring higher level of care
- Crisis requiring REACH or law enforcement intervention
- Tracking logs: Bowel movement, voiding, nutrition, seizure, water intake

Using the list above, begin to identify what data sources you have available. Also identify – what other data do you have available? For each data source, identify what output and outcome measures you may have that tell you about the performance of your program. For example, if you have medication error data, you can track the number and/or rate of medication errors that happen monthly. This monthly tracking is a performance measure.

F. Output, Outcome and Process Measures

There are different types of measures. Let's focus on three types which may be most helpful to you in your work: Output measures, Outcome measures, and Process measures.

- ✓ Output measures focus on what a system provides, or what a system or organization does, to provide services and programs (e.g., classes taught). **"What did we do to try to make things better?"**
- ✓ Outcome measures focus on what individuals achieve because of services and supports (e.g., individuals have jobs). **"How are people better off than they were before?"**
- ✓ Process measures look at the effectiveness or efficiency of a process. "**How is this process working?"**

Let's look closer at each of these types of measures.

Outputs: **Answers the question: "What did we do to try to make things better?"**	Outcomes: **Answers the question: "How are people better off, or different, than they were before?"**	Process: **Answers the question: "Is this process working well or not?"**
✓ Outputs are the direct products of program activities/services. ✓ Number of classes taught ✓ Number of class participants ✓ Number of counseling sessions ✓ Number of people who received services ✓ Number of hours of service delivered	✓ Outcomes describe the impact of the activities/services provided. ✓ Gain in knowledge ✓ Gain in skills ✓ Change in health status ✓ Change in healthy behaviors ✓ Improved living conditions ✓ Greater satisfaction ✓ Reduction in serious incidents	✓ Processes are the series of steps taken to achieve a goal. ✓ Wait time for services ✓ Referral response time ✓ Frequency of in-home visits ✓ Rate of medication errors ✓ Percent of incidents reported on time ✓ Percent of staff who are absent or no-show

Below is a list of sample measures that you can reference when developing your own measures. Also consider what is important to and for the individuals you serve? What is important to and for your

Sample Measures

Here is a list of measures, or calculations, you could use to measure performance throughout the year.

- Serious Incidents
  - %/Rate of falls/trips (or other serious incident type), e.g., UTIs, bowel obstruction, etc.
  - %/Rate of Care Concerns or Risk Triggers and Thresholds
- Abuse/ Neglect
  - %/Rate of Allegations, by Type (e.g., neglect, peer-to-peer, etc.)
  - %/Rate of Substantiations, by Type (e.g., neglect, peer-to-peer, etc.)
- Seclusion / Restraint
  - %/Rate of Physical Restraints
  - %/Rate of Mechanical Restraints
  - %/Rate of Pharmacological Restraints
  - %/Rate of Seclusion
- Participation in community activities
  - % of individuals with Integrated Community Involvement outcome in the ISP
  - % of individuals participating in desired community activities each week/month
- Other
  - Staff retention or turnover rate
  - #/Rate of Medication errors

organization? If this is new or overwhelming to you, start small. Pick one or two measures to start with! Over time you will gain confidence and begin to add more measures.

G. Visualizing Data and Looking at Trends and Patterns

Visualizing your measures consistently over time will help you determine which issues are problems, which are going well, and what needs improvement. It also helps to track and monitor your progress towards your goals and objectives. You will want to look at your data to understand and describe any trends and/or patterns. “Trends” refer to the overall direction or movement of data over time, indicating a general increase or decrease. “Patterns" describe recurring or consistent behaviors or characteristics within the data, such as repeated sequences or seasonal changes.

There are different ways to visualize your measures over time. The three main ways are to put it in a table, a line graph, or a bar graph. You can use a tool such as Excel or Google Sheets, or even just paper and pen. Each type is demonstrated below.

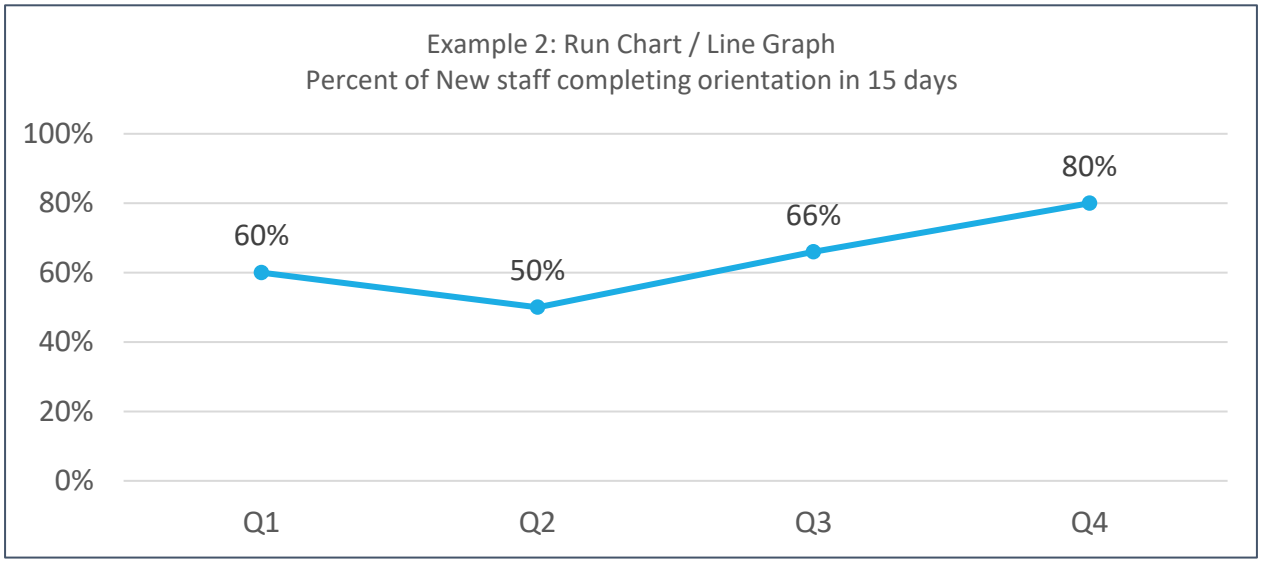
Let’s look at three examples of using data visualizations to look at ‘trends over time’.

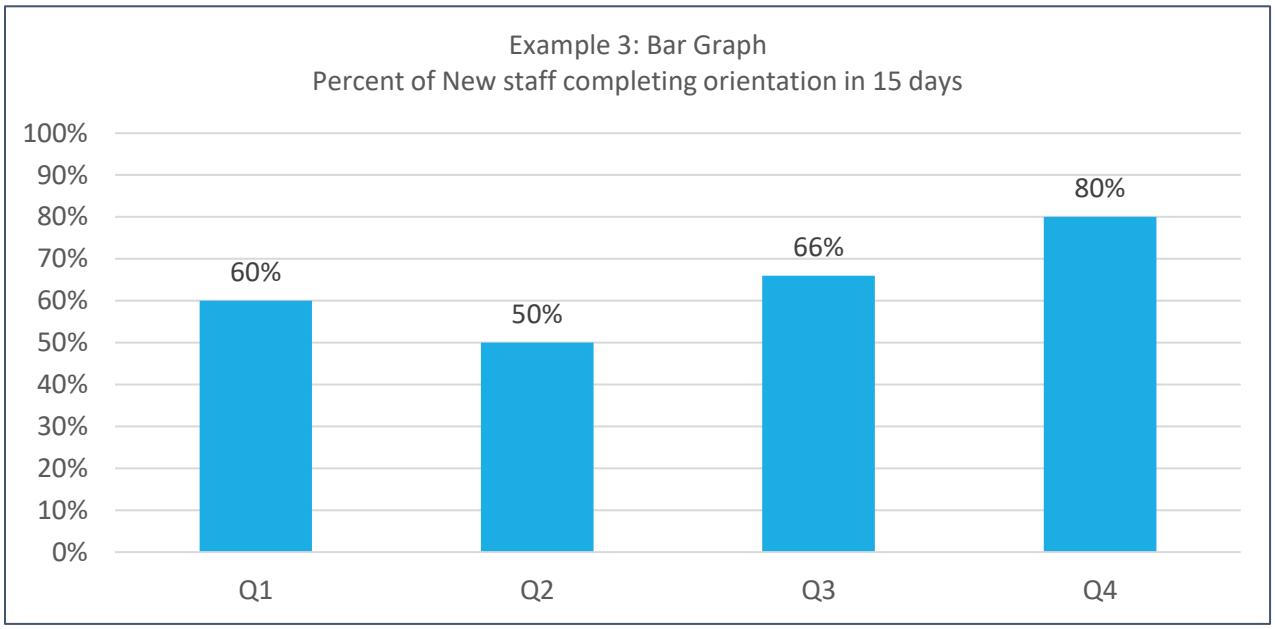
- Example 1: Table,
- Example 2: Run Chart or Line Graph
- Example 3: Bar Graph

They are all related to the same SMART Objective: By December 31, 2024, 90% of new staff will complete orientation training within 15 days.

- After you review them, consider the following questions:
- Do you prefer one graph over the others?
- If so, why?

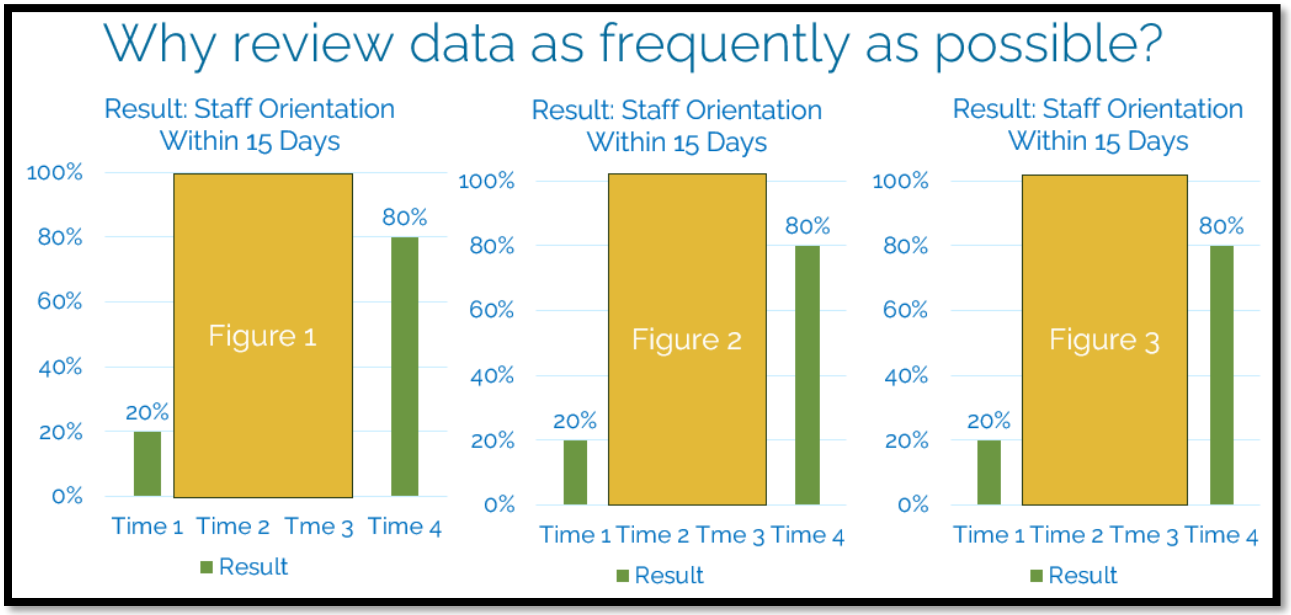
Example 1: Table					
FY2024:	Q1	Q2	Q3	Q4	FY2024
New staff completing orientation in 15 days	3/5= 60%	1/2= 50%	4/6= 66%	4/5= 80%	12/18= 66%

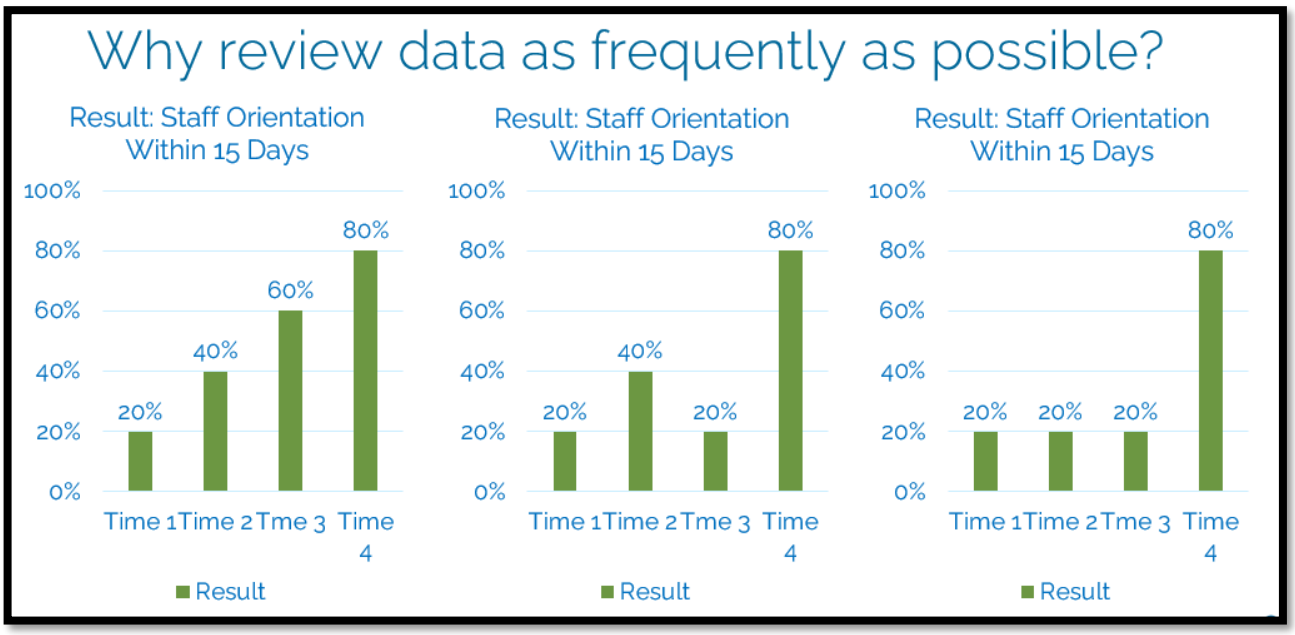




It is helpful to look at your data as frequently as possible, so that you can detect changes as close to when they happen and be able to intervene in a timelier fashion. Also, looking at data more often helps to show you accurate patterns.

Look at the graphics below. Imagine that a team was trying to improve the outcome from Time 1 to Time 4. If they only looked at the data during Time 1 and Time 4, they would probably assume they achieved success. But they would miss the patterns occurring at Time 2 and Time 3.





In Figure 1, uncovering Time 2 and 3 reveals that there was a steady increase in the outcome, likely showing that their improvement efforts were successful. In Figure 2, however, reveals an up-and-down pattern at Time 2 and Time 3, which probably means there was not actually improvement. Similarly in Figure 3, Time 2 and Time 3 show no change, followed by dramatic change at Time 4; this likely means something else happened to result in improvement at Time 4.

H. Developing SMART Goals and Objectives

It is an important skill to be able to write SMART goals and objectives. SMART is an acronym that stands for Specific, Measurable, Achievable, Relevant and Time Bound.

- ✓ Specific means it must be clear what you are trying to achieve.
- ✓ Measurable means it needs to include a description for how you will measure progress.
- ✓ Achievable means you and your team or organization have the resources to achieve the goal.
- ✓ Relevant means it fits into your organizational priorities and aligns with your mission.
- ✓ Time bound means you have a realistic time frame for completion.

It can help, at first, to use a simple fill-in-the-blank statement to develop a SMART goal/objective.

- By _____(date), the goal/objective is to improve _____ (specific problem) from _____ (baseline results) to _____ (goal/objective results).

Here is a worksheet that can also help you develop SMART goals: https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapigoalsetting.pdf.

Here is a fun exercise you can do with your team to make an objective into a SMART objective.

Make an Objective into a SMART Objective	
Objective	**SMART Objective**
All new staff will complete orientation.	By June 30, 2025, 100% of new staff will complete DBHDS required orientation within 15 business days of hire. The baseline in 2024 was 60%.
All DSPs will complete competency-based training.	By June 30, 2025, 100% of DSPs will complete DBHDS required competency-based training.
Reduce DSP turnover.	By December 31, 2024, we will reduce DSP turnover from 20% (during 2023) to 5%. ***Is this achievable?**
Reduce the rate of serious incidents.	Reduce the rate of serious incidents (Levels II) related to falls from 10 per month (during 2023) to 5 or fewer per month by December 31, 2024.
Achieve zero allegations of abuse, neglect and exploitation.	Achieve **three or fewer** allegations of abuse, neglect and exploitation due to elopement by December 31, 2024. In 2023, there were 8 allegations of this type.

Some providers may struggle with deciding what may be an achievable goal for them, or whether to use a count, percent or rate for their baseline and goal. Here are some examples below that may help you think about how to approach using baseline data and setting a goal using the data you have available.

VERY SMALL Provider: 4 individuals served.

- Baseline, FY24: Two out of four (2/4) individuals have employment outcomes.
- Goal: By 12/31/25, three out of four (3/4) individuals will have employment outcomes.

SMALL Provider: 24 individuals served.

•Baseline, FY24 OPTION 1: 8 Level II serious incident reports.
•Goal Option 1: By 12/31/25, our goal is to have 5 or fewer Level II serious incident reports.

•Baseline, FY24 OPTION 2: Rate of 3.3 serious incident reports per 10 individuals.
•Goal Option 2: Rate of 2.1 per 10 individuals.

MEDIUM/LARGE Providers: 250 individuals served

- Baseline, FY24: 20 Fall related serious incidents, for a rate of 80 per 1,000 individuals.
- Goal: By 12/31/25, our goal is to reduce fall-related SIRs to 50 per 1,000 individuals, or fewer.

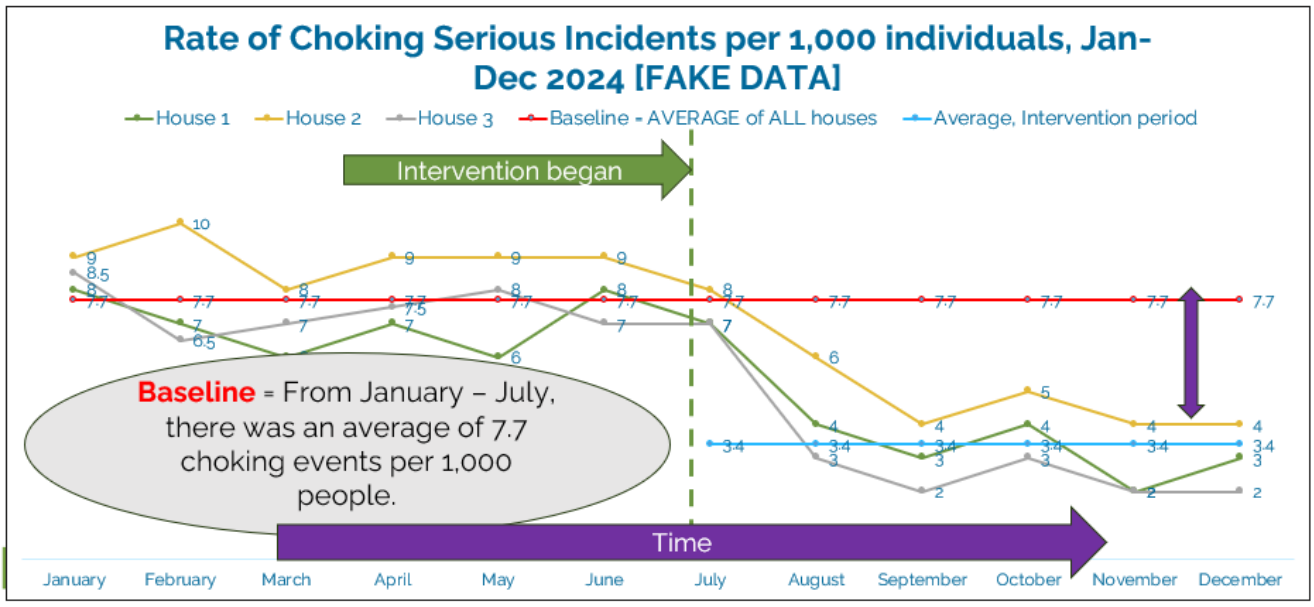
I. How to Discuss Data

In discussing data, here are some strategies to consider: summarize the findings, analyze the trends, identify causes and remediation or improvement opportunities, and make recommendations. Discussing data, drawing conclusions, and making decisions may not come naturally to everybody. The table below provides some questions you can use to drive discussion about your data for each of these steps.

Strategies for Data Discussion	Questions to Ask
Summary of Findings	What does the data tell you? What are the highest risks/incidents? What are the lowest? What do the risks/incidents in the middle tell you?
Analysis of Trends	What is happening with the data over time? Is there a pattern, or has a pattern changed? Is a particular risk getting better or worse? How do you know? What trends are concerning, or improving? Why?
Potential Systemic Issues or Causes	Why is a concerning risk or trend happening? Why is it getting better or worse? What are the potential causes? Have you done a root cause analysis (RCA)? What did it tell you?

Indicated Remediation	What needs to be done to remediate (address or improve) a problem? Why is this a good solution? What other options do you have? How did you pick this solution, instead of something else? Is a more detailed RCA needed?
Steps Taken to Mitigate Potential for Future Incidents.	What have you done, or what will you do, to address this problem? Who, what, when, where, and how did you/will you do it? What do you think will happen once these steps are taken? When do you expect to see improvement? Do you need to update your Quality Improvement and Risk Management Plans? How so?
Other Recommendations	Do you have other recommendations? Is anything working well that you think needs to spread to other locations?

Below is an example of a run chart for a quality improvement project where the goal was to reduce the rate of choking serious incidents from the baseline of 7.7 per 1,000 individuals, to 3.0 or fewer per individual by December 31, 2024. The team graphed the rate of choking each month. It was a sponsored residential program, so they tracked the rate at each house and overall. They began an intervention in July and continued to track their data. The data showed a decrease from 7.7 to 3.4 choking incidents per 1,000 individuals.



J. Good Data Quality

It is important to understand and document your data processes, and what you do to ensure good data integrity. This should include documenting

- the reason(s) you collect data,
- how you collect and store data,
- how you keep data secure and protected,
- and how you compile, analyze and report data.

You should regularly plan to review your written data processes and revise them as needed. If you're collecting data for a goal, you may want to add additional information to your written process such as definitions, how you're calculating the data for your goal, how you set your target, and how you are monitoring progress.

It is important to make sure multiple people have access to the data and know where to find and how to follow the data collection and reporting processes. This is because, in case one person leaves the organization, somebody else still knows the data processes. Important information can be lost if only one person knows how to collect, store and use the data.

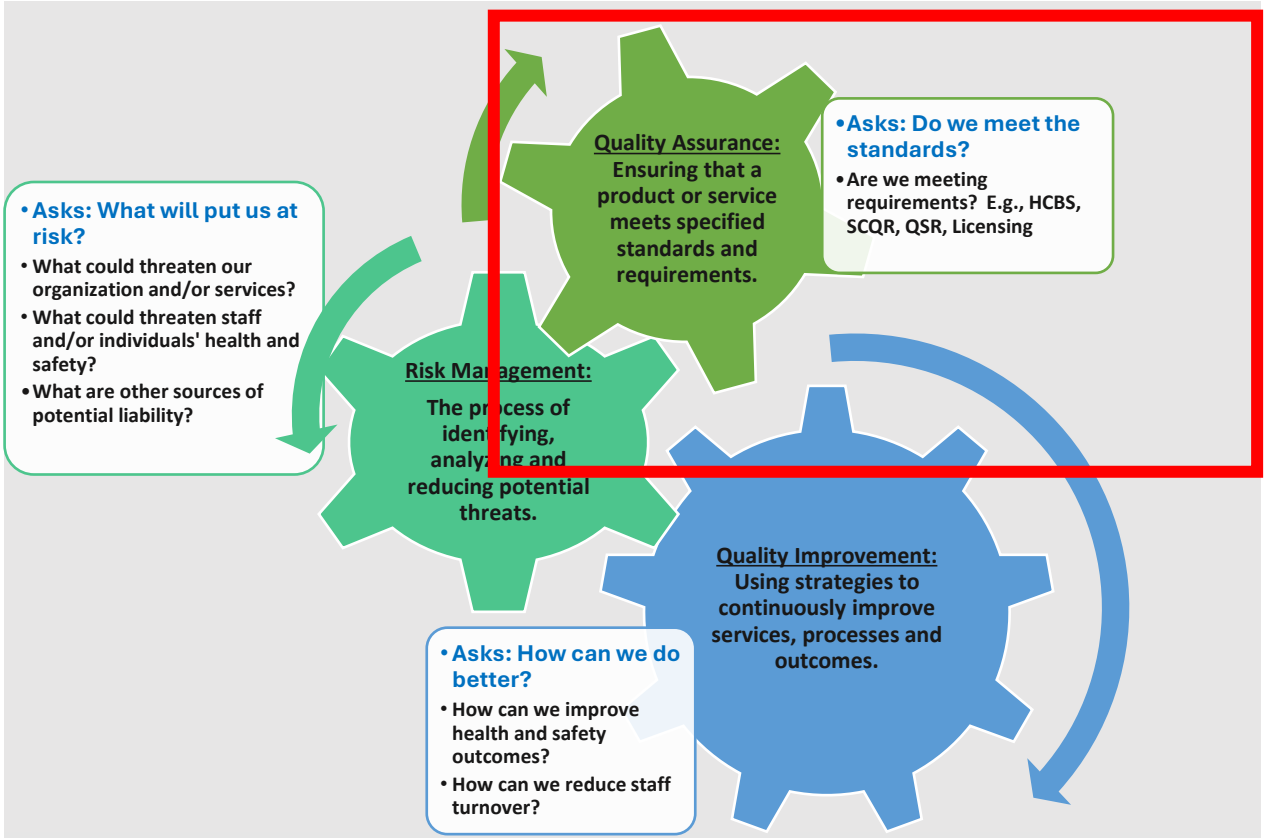
It is also important to take steps to ensure that your data is valid and reliable. Data validity means that the data is measuring what it is supposed to be measuring. A simple example is, does a data collection process about whether individuals received a certain service, give you correct results about whether those people received the service or not? Data reliability means the data gives you the same result each time. In that same example, that would mean that if you analyzed the data multiple times using the same process, you would get the same result each time about how many people received the service.

You may be familiar with the phrase, "Garbage in, Garbage out!" Keep in mind that your results are always a direct reflection of the data that is collected and recorded. Data that is not reliable, messy, or full of errors does not tell you what you want to know. It will result in reports that are also messy and unreliable. Always plan your data collection based on what you want to learn and what information will help you measure your progress. Stay away from hearsay and subjective measures whenever possible and deal only with facts and concrete information.

If the data being entered or collected is "trash", the reports created with that data will be as well!

4. Quality Assurance Principles and Strategies

A. What is Quality Assurance



DBHDS describes quality assurance (QA) as "focusing on discovery activities to evaluate compliance with standards, regulations, policies, guidance, contracts, procedures and protocols, and the remediation of individual findings of non-compliance" (*Source: DBHDS Developmental Disabilities Quality Management Plan Part 1, SFY2024*). QA, very simply put, is a check against a pre-defined standard resulting in a met/not met determination. Standards can come from a variety of sources such as:

- Laws
- Regulations
- Policies and procedures
- Contractual obligations
- Guidance
- Etc.

> "If we could first know where we are, and whither we are tending, we could then better judge what to do, and how to do it. "
> -Abraham Lincoln, 1858

QA requires knowledge of the organization's applicable standards and the ability to assess critically how one's program compares to those standards. It asks, "what are we doing?", followed by "how are we doing it?". Typically, one answers either "yes" or "no" to each standard and often identifying documentation that supports one's response (called evidence).

B. Types of QA reviews

There are two types of QA reviews: external and internal.

- External reviews are those conducted by another entity. External reviews can include inspections, certifications, audits and general reviews. Examples of external reviews include:
    - DBHDS Office of Licensing inspections
    - DBHDS Quality Service Reviews (QSR)
    - DBHDS Support Coordinator Quality Review (SCQR)
    - DMAS Home and Community Based Services (HCBS) Review
- Internal reviews are those done by you for your organization. Internal QA reviews can be tailored in preparation for a specific review, or for your own edification that services and processes are going as planned. They can also be done on a regular basis.

C. Preparing for a QA Review

Here are steps you can follow to be prepared for a QA review.

1. First, be familiar with the applicable standards being used for the specific QA review. Remember to include policies, procedures, processes and protocols and other documentation you developed to show how your organization is implementing the applicable laws and regulations.
2. Assess your organization for its readiness for the external QA review. To assess, it's recommended to complete the following:
    a. Identify the tools needed for the specific QA review. A lot of review entities share the tools they use to complete their QA review. Using the same tool helps you in assessing the same information being looked at during the external review. If you're not clear on something, reach out to that review entity for clarification proactively.
    b. Create a team; while QA can be performed by a single person, it's a good idea to have a team. It's important that the team is familiar with the applicable standards and tools being used for the review. This strategy is also good for succession planning.
    c. Review the tools ahead of your internal QA review with your team to assure that everyone has the same understanding of how to interpret each item in the tool(s) being used and how to rate that item. You can consider how to best use the team to conduct the review; and how you can divide up the tasks and responsibilities.
    d. Conduct your internal QA review. It's generally a good idea to use a similar sampling of records that the external QA review will look at, assuring that all offered services and range of individuals served have been sampled.
    e. Present your findings to all layers in your organization.
    f. After the internal reviews are done, compare results and discuss differences, and plan for how to improve. This helps increase your chances of being found in compliance once the external review is conducted. It also builds inter-rater reliability, which is important when a team is completing an assessment.

D. Importance of QA reviews

QA reviews are important as they provide crucial information to an organization regarding its performance against established standards. Externally, they serve to obtain and/or maintain positive

licensure, obtain and/or maintain certification and accreditation, and provide assurance that the program meets established standards. Internally, they serve to prepare an organization for external review; assure knowledge of the established standards and their importance; and provide accountability for and to the organization.

E. Compliance with Quality Improvement and Risk Management Licensing Regulations

Licensing Tips

In 2024, DBHDS interviewed providers from across Virginia who have met all the 520 and 620 Risk Management and Quality Improvement Regulations. **What is the secret to their success?** Here is what they said!

- Take time to read and understand the DBHDS licensing regulations. Read them closely. Be detail oriented. Make sure you cover everything that is in the regulation.
    - TIP: Reference the regulation directly in your plans, policies, and procedures. Examples: 12VAC35-105-520.B: Risk Management Plan, 12VAC35-105-620.A: QI Program
- Review all memos and guidance documents from DBHDS and DMAS.
- Make sure you have registered with the following the DBHDS listservs:
    - Provider listserv: https://lp.constantcontactpages.com/su/Z8Uy2i7/providernetwork
    - Licensing/Human Rights listserv: https://visitor.r20.constantcontact.com/manage/optin?v=001fonDe7OLpVle31MpMgDtiZ79Er3SHdqfktj0SczMP8M_F6paUn08BjGOxIAw7n9av__3xCNfme_6CxjWQuu51uWNqkQb8JgE_-mSTst0cqnVr48ZWzdgITiTl2rGmDqLTZn_-qLU_HuoAWCCrdoiZk4wPufvBXB1
- Take advantage of all DBHDS trainings, tools, and templates. Use the templates as developed, and/or use the templates to develop your own documents.
- If you have reviewed the resources on the OL website and are still unsure of the regulatory requirements, then seek clarification from your licensing specialist.
- Create a team that works on quality tasks together.
    - TIP: A team can be two or more people.
- Review your Risk Management and Quality Improvement Plans at least quarterly to ensure that they are being fully implemented.
    - TIP: Preschedule your internal reviews for the entire year and put them on the staff calendar.
- Train all staff on Risk Management and Quality Improvement requirements to ensure they understand their role as it relates to these areas. Quality is part of everybody's job!
- Communicate the plan, needs, trends and changes with all levels of staff.

Quotes from providers:

- *"The templates help clarify what is being looked for."*
- *"The **Minimizing Risk training*** was the best training for me. I found it to be very practical… It was straightforward and clear on expectations. The tools and training on the tools were provided, as well as a lot of useful examples."*

- *"The **Excel Risk Tracking Tool*** is absolutely fantastic. Our licensing specialist was instrumental in helping me navigate through it. Helped me categorize it so we can see the trends, what we need to do better."*
- *"The **Quality Improvement Plan sample**** shows all the elements needed, and we used it to develop ours."*
- *"Yes, teamwork is important. And use binders to organize. Staying organized is key."*
- *"You need more than one person paying attention/ participating in the process to make sure you are in compliance. One person can't do it all."*
- *"Work together as a team and take the trainings!"*

**To find these resources on the DBHDS Office of Licensing website, scroll down to the "Risk Management – 12VAC35-105-520" section.*
***Scroll down to the "Monitoring and Evaluating Service Quality – Quality Improvement – 12VAC35-105-620" section.*

On the following page is an example of a template you can create to help conduct an audit of personnel records related to regulatory requirements.

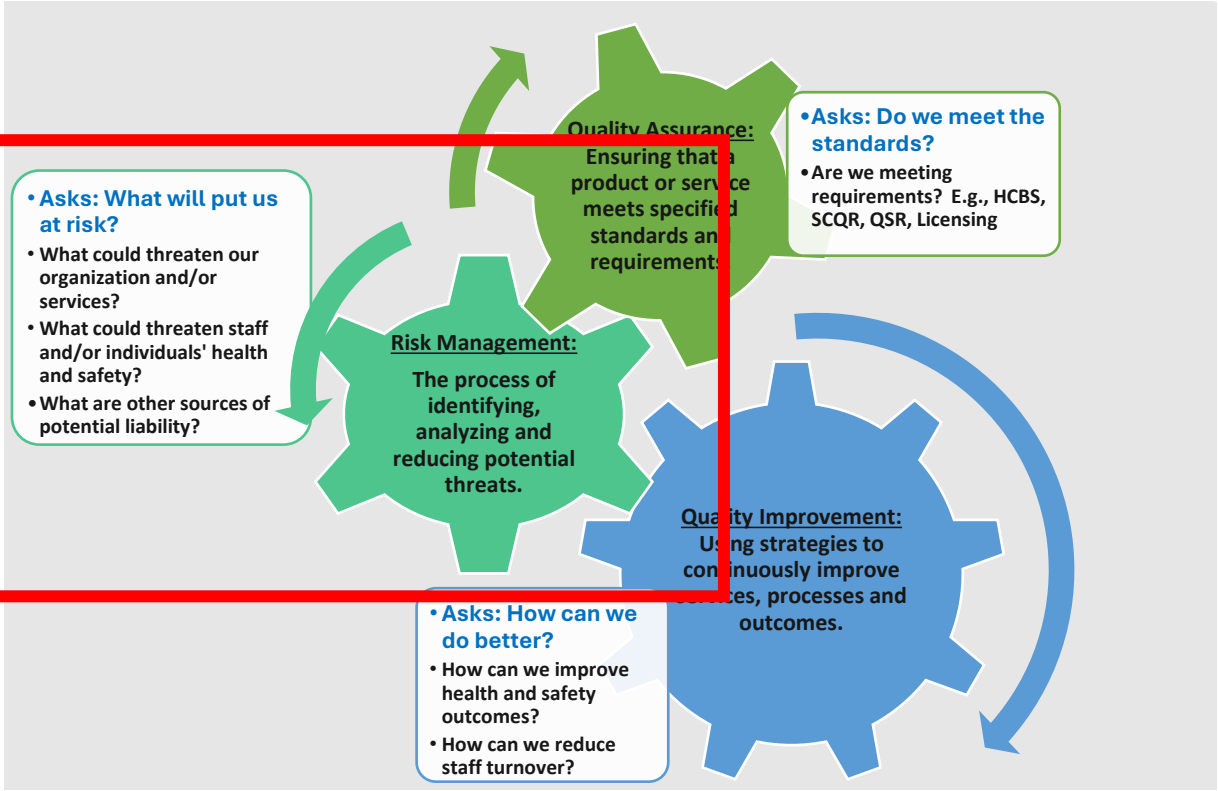
Sample Personnel Audit Form

Employee Name	Service	Audit Date

12VAC35-105-450 Training & Development	* The provider shall provide training and development opportunities for employees to enable them to support the individuals receiving services and to carry out their job responsibilities.	Documentation Present Y/N	Documentation Complete Y/N	Actions Needed / Notes
Serious incident reporting- recommend annually				
Medication administration- prior to expiration/recertification				
Behavior intervention- prior to expiration/recertification				
Emergency preparedness - recommend annually				
Infection control to include flu epidemics- recommend annually				
CPR/First Aid- prior to expiration/recertification				
Enter Regulation		Present Y/N	Complete Y/N	Actions Needed / Notes
(Enter Regulatory Requirement)				
(Enter Regulatory Requirement)				
(Enter Regulatory Requirement)				
(Enter Regulatory Requirement)				
(Enter Regulatory Requirement)				
Enter Regulation		Present Y/N	Complete Y/N	Actions Needed / Notes
(Enter Regulatory Requirement)				
(Enter Regulatory Requirement)				

Signature of Person Auditing _____

5. Risk Management Principles and Strategies



A. Writing a Risk Management Policy and Procedure

Let's begin by distinguishing between policies and procedures, programs and plans. Refer to the graphic below.

What is the difference between a policy and plan?

- **Policies and procedures** explain and lays out expectations and guidelines for how your organization conducts business related to the topic at hand, in this case, risk management and quality improvement.
- **A program** is the structure you use to implement the policy, as defined in the policies and procedures.
- **A plan** can be thought of as a work plan that describes how you are implementing the policy annually and ongoing. The plan is a living document that can be updated at any time. It describes details for what the organization is actively working on.

It is important to have a Risk Management Policy and Procedure (P&P) to describe how your organization goes about identifying, analyzing and reducing potential risks. Having a policy also makes a statement that this is an important part of how the organization functions, and that it is important to all staff, not just those who do the primary risk management functions. It essentially describes and establishes your risk management program.

- First, think about these questions before writing your Risk Management policy and procedures (P&P):
  - ✓ Why do you need RM P&P?
  - ✓ How does it align with your organizational priorities and values?
  - ✓ Who will write your P&P?
- Next, consider addressing the following issues in your P&P:
  - ✓ Describe the risk management structure and activities.
  - ✓ List the staff member who is responsible for leading RM activities and their tasks. (Ensure their job description also includes this information.)
  - ✓ Identify if you will have a RM committee, how frequently it meets, and agenda items.
  - ✓ Describe how you will identify potential risks and threats to the organization, services, staff, people served, and other sources of potential liability.
  - ✓ Describe how you will monitor risks.
  - ✓ Describe how you will reduce and/or minimize risks.
  - ✓ Describe how you will Identify year-over-year trends and patterns and use baseline data to assess the effectiveness of risk management systems.
  - ✓ Identify any key risk management tasks, and tools you will use and the frequency.

It is important to mention that a common area of confusion is the difference between having risk management policies, procedures, program and plan, and quality improvement plan policies, procedures, program and plan. Quality improvement plans will be discussed in the next chapter. Here is a table that compares them side by side to help clarify the differences.

	Risk Management	Quality Improvement
Policies and Procedures:	Describe how your organization goes about identifying, analyzing and reducing potential risks. It describes "this is how we do risk management in this agency' and establishes your risk management program.	Describe how your organization identifies, monitors and improves the quality of programs and services. It describes "this is how we do quality improvement in this agency' and establishes your quality improvement program.
Program:	The structure used to implement RM efforts. How and where the work explained in the P&P gets done.	The structure used to implement QI efforts. How and where the work explained in the P&P gets done.
Plan ("living document"):	A work plan which describes how the organization is: identifying, monitoring, reducing, and minimizing harms and risk of harm through a continuous, comprehensive approach. This plan should identify year-over-year trends and patterns and use baseline data to assess the effectiveness of risk management systems. Include how you use risk assessments and describe strategies to reduce and minimize risk.	A work plan which describes how the organization reviews the quality of services it provides and manages initiatives to improve quality. It consists of systematic and continuous actions that lead to measurable improvement in the services, supports, and health status of the individuals receiving services. Details should include: measurable goals and objectives as well as progress toward meeting those goals. It should also include QI tools and activities such as root cause analysis and plan-do-study-act cycles.

B. Writing a Risk Management Plan

You need to have a Risk Management plan. The plan is a living document that can be updated at any time. It describes in detail what the organization is working on such as the tools and results for risk assessments, monitoring of risk mitigation strategies, plans to reduce and minimize harms/risks of harm, and more. In your plan, you can include:

- ✓ The purpose of the plan.
- ✓ Glossary of terms and acronyms.
- ✓ The role of organizational leadership in the plan.
- ✓ Identify the position responsible for the RM function and their job description must include those responsibilities.
- ✓ Roles and responsibilities of all people(s) writing, overseeing and/or implementing the plan.
- ✓ How you will identify, monitor, reduce, and minimize harms and risk of harm, including personal injury, infectious disease, property damage or loss, and other sources of potential liability.

Licensing tip: Since 'personal injury, infectious disease, property damage/loss, and other sources of potential liability' are specifically spelled out in regulation, it is recommended that each of these have their own section in the plan.

- ✓ Describe what tools, strategies and sources of data and information will be used to identify and address risks (e.g., a risk matrix), and the results.
- ✓ Describe how you are monitoring risks. This would include steps you are taking, such as monthly team meetings, and the results of looking at baseline data and analyzing year-over-year trends and patterns to assess the effectiveness of risk management systems.
- ✓ Describe how you are reducing and minimizing risks, such as training and education, conducting inspections and audits, and integrating results into quality improvement efforts.
- ✓ Frequency of updating the plan, and documenting this with a signature and date.

Licensing Tip: Not only is having a Risk Management Plan a good idea, but it is also a licensing requirement, 520.B.: *"B. The provider shall implement a written plan to identify, monitor, reduce, and minimize harms and risk of harm, including personal injury, infectious disease, property damage or loss, and other sources of potential liability."*

Additional information from Licensing: Risk management plans and overall risk management programs should reflect the size of the organization, the population served, and any unique risks associated with the provider's business model

The risk management plan can be standalone or integrated into the quality improvement plan, but all components of each must be present.

Licensing Tip: The DBHDS Office of Licensing has some guidance on developing a Risk Management Plan, as well as training slides and videos that can help you: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/

C. Identifying Risks Important to Your Organization

It is important to identify risks to your organization. Here are important risk areas to consider:

- Clinical and community aspects of the service /organization/ business.
    - Reducing risks for individuals: for example, Falls, Infections, Seclusion/restraint.
    - Improving outcomes for individuals: for example, Housing, Employment, Community Inclusion, Choice.
- Administrative aspects of the service/organization/business.
    - Processes: for example, completing assessments, ISPs, referral processes, wait times.
    - Staffing: for example, training, turnover, retention, job satisfaction, succession planning.
    - Financial: for example, billing, viability, etc.

Identifying what risks are important to your organization will help you answer the question, What do we want to improve? Do you want to understand, identify, and reduce risks? Do you want to improve outcomes for individuals? Do you want to improve effectiveness, efficiency of services? Perhaps you want to work on all these tasks.

The graphic below outlines steps that you can take to identify risks to your organization.

How to identify risks to your organization?

Analyze what could go wrong.

- Identify important categories and the weaknesses / threats in each one. Categories may include financial, safety, operational, technical, training, etc.
- Think pessimistically: What is the worst thing that could happen? If everything went wrong, what would that look like? What weaknesses would be revealed?

Use internal data and information.

- What do numbers and trends tell you what risks you may have?
- Ask your employees: What are the potential risks they encounter on the job? Ask via interviews, anonymous, survey, etc.
- Customer complaints and feedback. Who are your customers? Ask individuals, families, vendors, etc.
- Ask trusted advisors. For example, an insurance carrier, accountant, legal advisor, etc.
- Use models or software – such as simulations, role playing, SWOT (strength, weakness, opportunities, threats) analysis, risk mapping.

Look to external data.

- Your industry may have trends and common occurrences in risk and threats.
- Look to professional organizations, literature, reports, etc.

Source: Webb, Rebecca.

D. Tools to Help Determine Risk Levels

- **Risk Matrix:** A risk matrix can help you decide how much risk an issue poses to your organization or your work. You take your problem and ask, "What is the likelihood of it happening?" and put it on the Y axis scale ("Likelihood"). Then you ask, "What is the consequence of this issue or problem?" and map it on the X axis ("Consequence"). The higher on the scale, the greater the threat. This type of tool can help you decide which issues to focus on.

Risk Matrix		Consequence				
		Insignificant	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	High	High	Very High	Very High
	Possible	Low	Medium	High	High	Very High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Low	Medium

- **Failure Modes & Effects Analysis (FMEA)** is a risk management tool that identifies and quantifies potential failures in a process. The purpose is to mitigate or eliminate potential failures. Teams use a tool to prioritize potential failures based on the following criteria:
  - Occurrence – How frequently they occur.
  - Severity – How serious the consequences can be.
  - Detection – How easily they can be detected.

Each potential failure is given a score, which can help prioritize what to focus on first. Once assessed, prioritized failures can be addressed and monitored.

These websites offer more information with free templates.

- ASQ. Quality Tools. Site: https://asq.org/quality-resources/quality-tools
- https://goleansixsigma.com/failure-modes-effects-analysis-fmea/

E. Tracking Risks and Serious Incidents

Question: Why does an organization need to collect and track performance data, including serious incidents and other risk information?
Answer: To know what's working well and what isn't working well, so they can know what to focus on to improve their program and services.

Tracking data over time allows you to detect patterns in your data. Is the issue staying the same? Getting better? Getting worse? It also allows you to compare it to other things that may have happened over time that

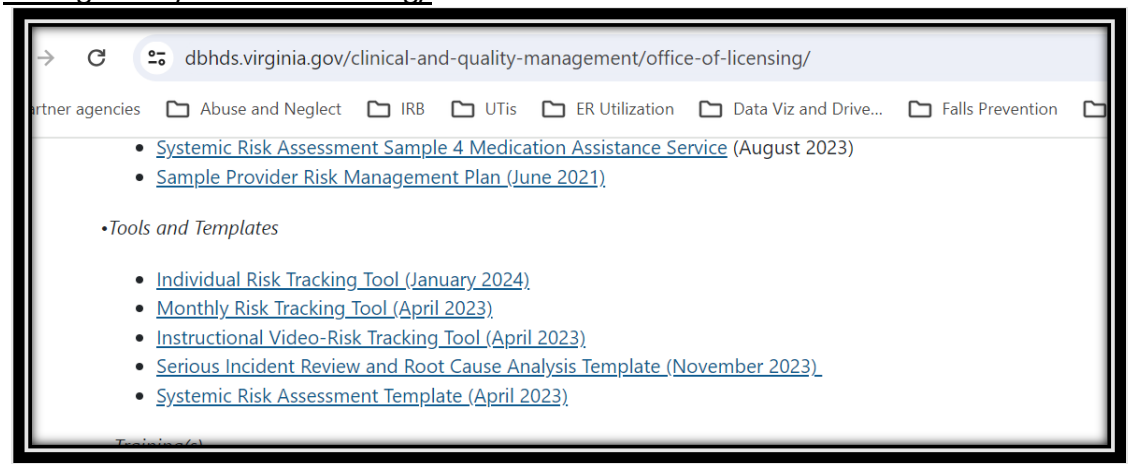
Analogy

- What does a doctor's office measure at each visit?
- Why does he/she measure these things?
- Why does he/she measure them at repeat visits?
- Similarly, a provider needs to measure things about their program to know if their program is doing well or needs improvement.

could help explain patterns you detect. Could weather or time of year play a factor? Did something happen during a certain time that could impact your issue? Was there an organizational change or transition, or a staffing change, etc.?

The DBHDS Risk Tracking Tool was developed in 2023 to help providers track Level 1, 2 and 3 serious incidents and conduct quarterly and annual reviews of serious incidents, in one tool. **The Risk Tracking Tool:**

- Helps providers meet several licensing requirements.
- Includes Level I, Level II, Level III serious incidents and Care Concerns
- Has a customizable list of metrics.
- Has auto-populating graphs that you can use to look at trends over time.
- Includes a worksheet for quarterly and annual discussions.
- Includes the Systemic Risk Assessment Template.
- Is located on Office of Licensing Website: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/



Even if your organization does not use the Risk Tracking Tool, you need to make sure you are using some sort of process or system to routinely record data about risks and serious incidents and track them over time. This means that you record how many serious incidents of each type occur, on an ongoing basis.

F. Risk Triggers and Thresholds / Care Concerns

A **risk trigger** is an incident or condition that can cause harm to an individual. Risks triggers can include things such as falls, seizures, urinary tract infections and dehydration. A **threshold** is setting an amount, or number, of risks that help determine when further action may be needed. DBHDS has defined several risk triggers and thresholds that the Incident Management Unit tracks and triages using the CHRIS system. These are also known as **care concerns** (CC). Providers need to track, on an ongoing basis, their organization's serious incidents and care concerns. Serious incidents are defined by regulation 12VAC35-105-20. This helps identify trends and can help with root cause analysis and drive discussions about how to better protect individuals' health and safety.

 **Licensing Tip:** It is important to understand that regulation 12VAC35-105-520.D states, *"The systemic risk assessment process shall incorporate uniform risk triggers and thresholds as defined by the department."* Link: https://law.lis.virginia.gov/admincode/title12/agency35/chapter105/section520/

You can learn more about Risk Triggers and Thresholds and Care Concerns by downloading this DBHDS handout: https://dbhds.virginia.gov/wp-content/uploads/2023/02/Risk-Triggers-and-Thresholds-Handout-1.1.23.pdf

G. Completing an Annual Safety Inspection

Safety inspections can be used to inform your Systemic Risk Assessment specific to regulation 520.C.1.

 **Licensing Tip:** Providers are required to complete annual safety inspections per licensing regulation 520.E: *"The provider shall conduct and document that a safety inspection has been performed at least annually of each service location owned, rented, or leased by the provider. Recommendations for safety improvement shall be documented and implemented by the provider."*

There is no set template for performing a safety inspection. Several examples are offered below.

DBHDS

Environment Safety Checklist (Example)

Name of Location: Oscar Rd Home									***Date: 11/25/24***
Item	***Condition***				***Need Replacing/ Improving***				***Findings or Steps to Take to Fix Issue***
SAMPLE: Refrigerator Temp	***Poor***	***Fair***	***✓Good***		***Yes***		***✓No***		*Thermometer was reading at appropriate degree*
SAMPLE: Handrail (basement)	***✓Poor***	***Fair***	***Good***		***✓Yes***		***No***		*Handrail was loose/contacted repair to fix on 11/25/24*
SAMPLE: Entry door lock	***Poor***	***Fair***	***✓Good***		***Yes***		***✓No***		*Lock was replaced on 7/1/24*
SAMPLE: Carpet	***Poor***	***✓Fair***	***Good***		***Yes***		***✓No***		*Showing wear & tear/ added to quarterly meeting agenda*

Name of Location:									**Date:**
Item	**Condition**				**Need Replacing/Improving**				**Findings or Steps to Take to Fix Issue**
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
	Poor	**Fair**	**Good**		**Yes**		**No**		
Completed by:									

DBHDS

SAMPLE of Physical Environment Safety Inspection Form		
Completed by: _____	**Date: _____**	
Agency and Location: _____ **Area of Focus: _____**	**Compliance: Yes or No?**	**Date resolved/ planned date of resolution (as applicable)**
General Items:		
Enter areas inspected		
EXAMPLE: License Posted	*Ex: Yes*	*No concerns.*
EXAMPLE: Human Rights posted	*Ex: Yes*	*No concerns.*
Shared Space:		
Enter areas inspected		
EXAMPLE: Walkways accessible and clear of clutter	*EX: No*	*EX: Power cords in hall. Was resolved on [DATE].*
Lighting:		
Enter areas inspected		
Laundry Room:		
Enter areas inspected		
Kitchen:		
Enter areas inspected		
Medication Room/Medication Area		
Enter areas inspected		
Bedrooms:		
Enter areas inspected		
Bathrooms		
Enter areas inspected		
Privacy for Bedrooms and Bathrooms		
Enter areas inspected		
Other Things to Consider:		
Enter areas inspected		

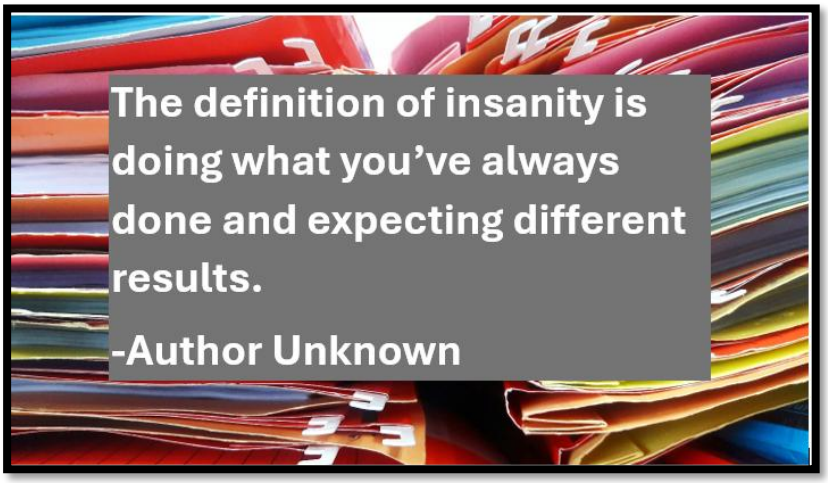
H. Completing an Annual Systemic Risk Assessment

An Annual Systemic Risk Assessment is an opportunity to understand what risks and threats have been present during the year and identify where and how to implement improvement strategies. It is recommended to complete this tool as a team, to ensure a variety of perspectives and input.

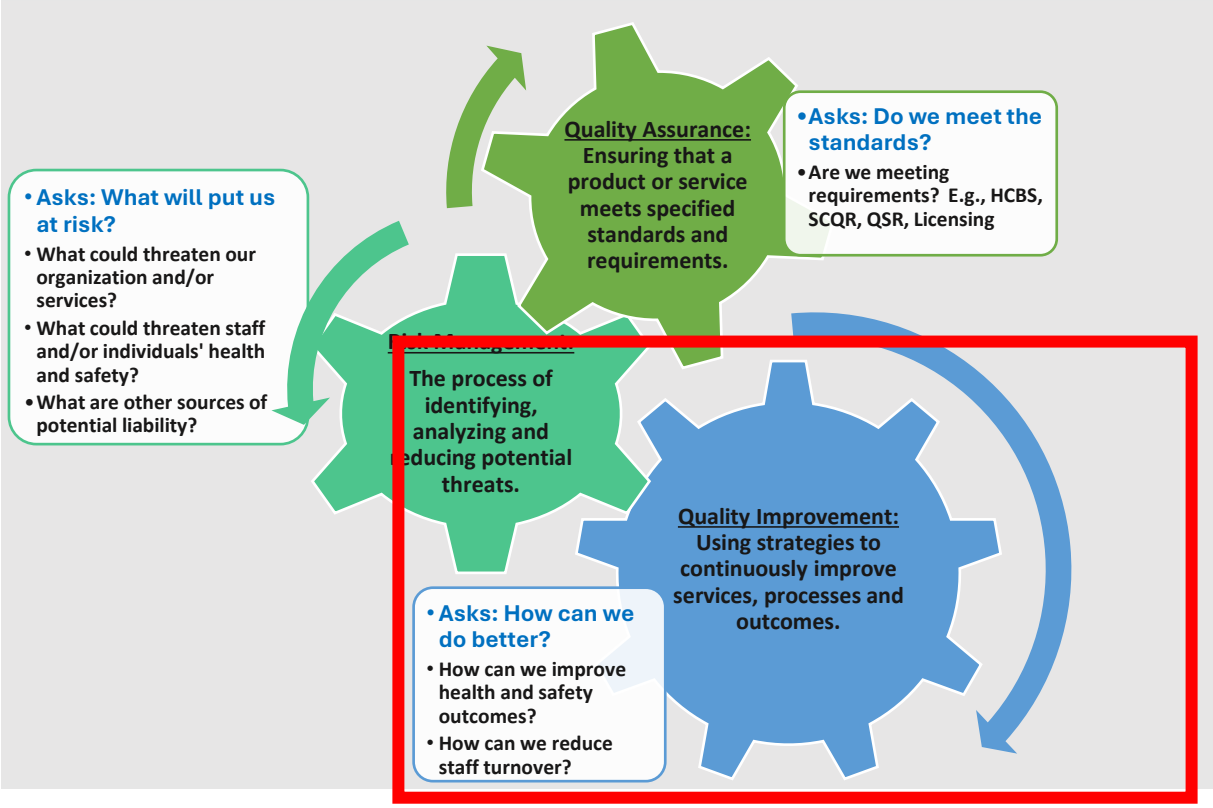
Licensing Tip: Providers are required to conduct a systemic risk assessment per regulation 12VAC35-105-520 as described below:

- *"520.C. The provider shall conduct systemic risk assessment reviews at least annually to identify and respond to practices, situations, and policies that could result in the risk of harm to individuals receiving services. The risk assessment review shall address at least the following:*
  1. *The environment of care;*
  2. *Clinical assessment or reassessment processes;*
  3. *Staff competence and adequacy of staffing;*
  4. *Use of high-risk procedures, including seclusion and restraint; and*
  5. *A review of serious incidents.*
- *520.D. The systemic risk assessment process shall incorporate uniform risk triggers and thresholds as defined by the department."*

The Office of Licensing offers a template for a Systemic Risk Assessment, located on their website, as well as examples for providers in a variety of settings. There is also a template embedded as the final tab in the Risk Tracking Tool. There's also information in the Minimizing Risk Training about how to complete this document.
https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/



6. Quality Improvement Principles and Strategies



A. Defining Quality Improvement

Quality Improvement is an ongoing effort to achieve measurable improvements in quality. It is a way to improve efficiency, effectiveness, performance, accountability, and outcomes. A best practice is to use a model supported by strategies, methods, and tools. A repeatable set of steps works best if they become a routine part of your business operations. Quality is the responsibility of everybody in an organization.

B. Writing Quality Improvement Policies and Procedures

It is best practice to have quality improvement policies and procedures. Quality improvement policies and procedures will describe how your organization conducts the business of quality improvement, including how to identify, monitor and improve the quality of programs and services on an ongoing basis. It describes “this is how we do quality improvement in this agency” and establishes your quality improvement program.

When writing your QI P&P, first think about these questions:

- ✓ Why do you need quality improvement policy and procedures?
- ✓ Who will write your P&P?

Next, consider addressing the following issues in your P&P:

- ✓ Ensure that QI efforts are consistent with your organization’s mission and strategic plan.
- ✓ Describe the Quality Improvement structure and activities.

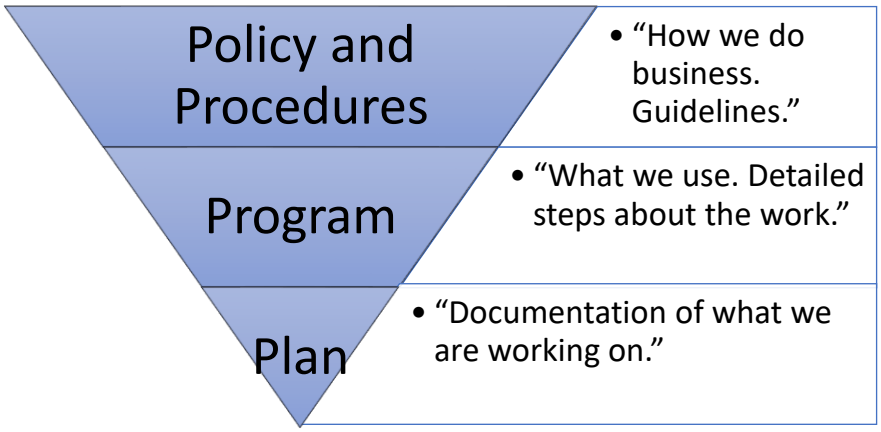
- ✓ Describe the role of leadership; how are they involved?
- ✓ Who is responsible for leading and monitoring QI activities?
- ✓ How often will the QI team/committee meet? What will be on the agenda?
- ✓ What models and tools will be incorporated into your QI program? Will you use a QI framework such as the Model for Improvement and PDSA Cycles?
- ✓ What tools will you use for root cause analysis?
- ✓ How will QI goals and objectives be established and monitored?
- ✓ What data will be collected? How will it be collected and visualized?
- ✓ How will you incorporate input from individuals and families receiving services?
- ✓ What criteria will you use to establish new goals and objectives?
- ✓ What criteria will you use to update the QI Plan?
- ✓ How will you monitor corrective action plans (CAPs)?
- ✓ What criteria will you use to submit a revised CAP to the department for approval, or put in place additional measures to address the citation?
- ✓ How will you ensure that QI is a continuous process (CQI)?

Licensing Tip: Licensing regulations require that DBHDS licensed providers develop and implement written QI policies and procedures, per regulation 12VAC35-105-620. Specifically, regulations 620.A., 620.B., and 620.D. address QI P&P and state:

> *A. The provider shall develop and implement **written policies and procedures for a quality improvement program** sufficient to identify, monitor, and evaluate clinical and service quality and effectiveness on a systematic and ongoing basis.*
>
> *B. The **quality improvement program** shall utilize standard quality improvement tools, including root cause analysis, and shall include a quality improvement plan.*
>
> *D. The provider's **policies and procedures** shall include the criteria the provider will use to*
>
> > *1. Establish measurable goals and objectives.*
> >
> > *2. Update the provider's **quality improvement plan**; and*
> >
> > *3. Submit revised corrective action plans to the department for approval or continue implementing the corrective action plan and put into place additional measures to prevent the recurrence of the cited violation and address identified systemic deficiencies when reviews determine that a corrective action was fully implemented but did not prevent the recurrence of the cited regulatory violation or correct a systemic deficiency pursuant to 12VAC35-105-170.*

The DBHDS Office of Licensing has some guidance on developing a Quality Improvement Policy: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/

C. Writing a Quality Improvement Plan



In addition to having QI policy, your organization also needs a plan. The difference between a policy and plan is that a plan describes how you are implementing the policy annually and ongoing. The plan is a living document that can be updated at any time. It can be thought of as a work plan which describes how the organization reviews the quality of services it provides and manages initiatives to improve quality. It consists of systematic and continuous actions that lead to measurable improvement in the services, supports, and health status of the individuals' receiving services. Details should include measurable goals and objectives, progress toward meeting those goals, and how you use QI tools and activities such as root cause analysis and plan-do-study-act cycles.

Licensing Tip: It is required by licensing regulations that DBHDS licensed providers must have a QI Plan, per regulation 12VAC35-105-620. Specifically, regulations 620.C and 620.E. address the QI Plan requirements and are included below.

*C. The **quality improvement plan** shall:*

1. Be reviewed and updated at least annually;
2. Define measurable goals and objectives;
3. Include and report on statewide performance measures, if applicable, as required by DBHDS;
4. Monitor implementation and effectiveness of approved corrective action plans pursuant to 12VAC35-105-170; and
5. Include ongoing monitoring and evaluation of progress toward meeting established goals and objectives.

*E. Input from individuals receiving services and their authorized representatives, if applicable, about services used and satisfaction level of participation in the direction of service planning shall be part of the provider's **quality improvement plan**. The provider shall implement improvements, when indicated.*

In your plan, you can include:

- ✓ The purpose of the plan.
- ✓ Frequency of updating the plan, and documenting this with a signature and date.
- ✓ Glossary of terms and acronyms.
- ✓ The role of organizational leadership in the plan.
- ✓ Who is responsible for writing, overseeing and/or implementing the plan.
- ✓ Roles and responsibilities of staff and/or team for implementing and monitoring QI efforts.

- ✓ Define what model(s) and tools will be used and how.
- ✓ Measurable goals and objectives. (Consider the SMART Framework!)
- ✓ Tracking progress towards your measurable goals and objectives. (Consider the SMART Framework!)
- ✓ Incorporating and tracking progress on other quality improvement projects and efforts, such as Corrective Action Plans (CAPs) and Quality Service Review (QSR) elements.

The DBHDS Office of Licensing has some guidance on developing a Quality Improvement Plan: https://dbhds.virginia.gov/clinical-and-quality-management/office-of-licensing/

D. Developing SMART Goals and Objectives

An important component of a quality improvement plan can be developing and including measurable goals and objectives. An effective strategy is to use the SMART framework. After understanding and assessing your risks, you will need to set goals and objectives to address these risks. *For more information about this, see Section 3H.*

Licensing Tip: Regulation 12VAC35-105-620.C.2. requires that the quality improvement plan *"Define measurable goals and objectives".*

E. Tracking and Documenting Progress

Monitoring and Tracking Goals and Objectives

It is important to have strong processes and tools for monitoring and tracking progress on your SMART goals and objectives.

Licensing Tip: Per state licensing regulation 12VAC35-105-620.C.5: *"The quality improvement plan shall: …5. Include ongoing monitoring and evaluation of progress toward meeting established goals and objectives."*

Since measurable goals and objectives are required in a QI Plan, you must also include how you will monitor and track your progress: how often it will be tracked, who will monitor it, and how progress will be documented. Once you have a plan, follow it! Make sure that, however you plan to monitor and track your progress, that you do it, and that the information is easily understandable and accessible to other staff and reviewers.

This template below gives an example of making sure you have a SMART goal that is supported by SMART objectives. It also includes columns where you could record information about how you will monitor each goal and objective.

SAMPLE SMART Goals and Objectives, and Monitoring and Tracking Information

GOAL	OBJECTIVES	KEY STEPS	WHO IS RESPONSIBLE	HOW OFTEN TO MONITOR	WHO WILL MONITOR	HOW PROGRESS WILL BE DOCUMENTED	RESULTS + DATE
In CY 2025, XYZ company will implement a new employee record format. DATA USED: YES / NO Was a new record format done and in use by 12/31/25?	By 3/31/25, we will identify required components of an employee file. DATA: Y / N, Did this take place?	Identify items required for payroll	Admin Assistant	MONTHLY UNTIL COMPLETE	QM COMM-ITTEE	QM COMMITTEE MEETING NOTES	4/30/25 – YES, Components identified.
		Identify items required for insurance / HIPAA	Admin Assistant				
		Identify items required for general training	Program Director				
		Identify items required for enhanced training per service requirements	Program Director				
		Identify items required by regs to show supervision and employment reviews	Program Manager				
	By 6/30/25, create and place a new table of contents into each employee file. DATA: Y / N, Do 100% of employee files have the new TOC?	Group items required by topic	Admin Assistant	MONTHLY UNTIL COMPLETE	QM COMM-ITTEE and PROGRAM DIRECTOR	QM COMMITTEE MEETING NOTES	4/30/25 – IN PROGRESS 5/30/25 – IN PROGRESS 6/30-25 -YES, all employee files have TOC.
		Create a table of contents incorporating all items	Admin Assistant				
		Place the standard TOC into each employee file.	Admin Assistant				
	By 9/30/25, we will file all information in the correct section in the employee files following the new format / TOC, including a purged file. DATA: Y / N, A random sample of 50% of employee files are reviewed and have items filed correctly.	Make sure that all current information is filed according to the new TOC.	Admin Assistant and Program Manager	MONTHLY AFTER TOC IS FINALIZED UNTIL COMPLETE	PROGRAM DIRECTOR	QM COMMITTEE MEETING NOTES and DATA REPORT	7/30/25 -YES, a Sample of 50% of employee files showed 80% had information filed correctly per TOC. *Need to increase to 100%.*
		Ensure that all relevant items remain in the main employee file and are easy to access and provide when requested.	Admin Assistant and Program Manager				
		Keep all info. that is "old" like expired CPR cards, in the back of the record in the same format as the main file OR create a "purge" file for each employee with old info.	Admin Assistant and Program Manager				

PRINT the section below to use as a worksheet.

DBHDS

Worksheet for SMART Goals, Objectives, and Monitoring Plans

GOAL	OBJECTIVES	KEY STEPS	WHO IS RESPONSIBLE	HOW OFTEN TO MONITOR	WHO WILL MONITOR	HOW PROGRESS WILL BE DOCUMENTED	RESULTS + DATE

Monitoring and Tracking CAP implementation

Similarly, it is important to have strong processes and tools for monitoring and tracking progress on your Corrective Action Plans (CAPs).

Licensing Tip: Per state licensing regulation 12VAC35-105-620.C.4: *"The quality improvement plan shall: … 4. Monitor implementation and effectiveness of approved corrective action plans pursuant to 12VAC35-105-170."* Also, if you are monitoring a CAP and you determine that it is not effective (i.e., based on your own audits/checks, etc.) you must review your QI program as it relates to 620.D.3. Based on the criteria outlined in your written policy, you need to continue to implement the CAP and put into place additional measures to prevent the recurrence or submit a revised CAP to the department.

The template below gives an example of making sure you have a plan to monitor CAPs and document how you are tracking progress.

DBHDS

EXAMPLE - MONITORING CAPS

CITATION	OUR CORRECTIVE ACTION STEPS	HOW and HOW OFTEN WILL THIS BE MONITORED	WHO IS RESPONSIBLE
DATE of CITATION: ***1/23/24***	***QM Committee will review available data and determine topic for QI Goal***	**Within 3 months**	**QM Committee**
Standard cited and/or description of noncompliance: ***Did not have measurable goals and objectives in the QI Plan (620.C.2)***	***QM Committee will draft a goal using SMART terms***	***Within 3 months***	
	QM Committee will ensure new QI Goal is incorporated into the QI Plan	***Within 3 months***	
	HOW WILL WE HELP PREVENT REOCCURENCE: ***QM Committee will review QI Plan at least annually to ensure there is an updated QI Goal in place***	WERE ACTION STEPS EFFECTIVE: ***4/5/24-Yes. New goal incorporated***	

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SAMPLE FORM FOR MONITORING CORRECTIVE ACTION PLANS (CAPs)

CITATION(s) & DATE of CITATION:	OUR CORRECTIVE ACTION STEPS	HOW and HOW OFTEN WILL THIS BE MONITORED?	WHO IS RESPONSIBLE
DATE of CITATION: / / Standard cited and/or description of noncompliance:			
	HOW WILL WE HELP PREVENT REOCCURENCE?	DATE MONITORED AND WERE ACTION STEPS EFFECTIVE?	
CITATION(s) & DATE of CITATION:	OUR CORRECTIVE ACTION STEPS	HOW and HOW OFTEN WILL THIS BE MONITORED?	WHO IS RESPONSIBLE
DATE of CITATION: / / Standard cited and/or description of noncompliance:			
	HOW WILL WE HELP PREVENT REOCCURENCE?	DATE MONITORED AND WERE ACTION STEPS EFFECTIVE?	
CITATION(s) & DATE of CITATION:	OUR CORRECTIVE ACTION STEPS	HOW and HOW OFTEN WILL THIS BE MONITORED?	WHO IS RESPONSIBLE
DATE of CITATION: / / Standard cited and/or description of noncompliance:			
	HOW WILL WE HELP PREVENT REOCCURENCE?	DATE MONITORED AND WERE ACTION STEPS EFFECTIVE?	

F. Using the FOCUS Steps

The FOCUS steps were developed by the American College of Cardiology. They are a nicely defined set of steps that help you prepare for doing the Model for Improvement to help make sure your project is well thought-out and set up for success. DBHDS has created a worksheet to help facilitate the process of going through the FOCUS Steps. DBHDS FOCUS Worksheet: FOCUS-Worksheet_2024.pdf

Let's look closely at each step.

Find an opportunity to improve

First, you need to find an opportunity to improve. There are several ways to do this which include:

- Ask your team – What should we improve? What seems to be a problem in our program? Why?
- Do we have data to describe the problem?
  - If not, how can we get the data?
- Look at your performance metrics. Compare and contrast. What problems have you identified?
  - How do you know it's a problem?
  - How did you identify the problem, or the need to do something?
  - What does the data show? How long has this been a problem?
  - What are the trends?
- What if you don't have data but you think there's a problem?
- How can you get baseline data?
- Use a tool to help decide which to focus on first, for example, a risk matrix.

Risk Matrix		Consequence				
		Insignificant	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	High	High	Very High	Very High
	Possible	Low	Medium	High	High	Very High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Low	Medium

Organize a team familiar with the problem

As discussed previously, a team brings diverse perspectives and creativity and can be a great way to share the workload. Who should be on your team?

- Risk/quality staff.
- Team members doing the work.
- People affected by the problem.
- Be mindful of how many people are part of the team, as a larger team may impact being able to be efficient with tasks and decision making.
- Do you need to involve Subject Matter Experts?
- Do you need to involve people who are impacted by the service/process?

Clarify understanding of the problem

It's important to understand the problem at hand and ensure the problem is clearly understood by all team members. People will likely come to the table with different understandings of the problem. Understand how the current process works and analyze it. Begin establishing baseline and other measurement processes.

- What is your data really telling you? What is the story?
- How does the process or situation work now?
- What has been done already to try to address this problem? Did it work? Why or why not? How do you know?
- Do you need additional information?
- What else do you know about the issue?

Understand the causes of the problem

It is important to use analytical tools to understand **why the problem is happening**.

- Understand causes of variation in the system.
- Ask questions such as:
    - Why is the problem or process variation happening?
    - Have you done a root cause analysis (RCA)? What did it tell you?
    - What RCA technique(s) did you use?
    - If the problem involves a process, have you done a process map? What did it tell you?

IMPORTANT!! Please read the next section on <u>Root Cause Analysis</u> which includes detailed information about how to conduct an RCA using different strategies.

Select a change to make, to improve the problem

Involve your team in identifying, evaluating, and selecting potential solutions. Consider questions like:

- What change(s) can you try to improve the problem?
- Have you used tools like brainstorming and identifying evidence-based solutions?
- Is there one strategy you can try first? How did you pick this solution? Why do you think this will work?
- If those solutions were in place, what improvements would you see?

- Is there a solution that would produce improvement in more than one area?
- What effort is required to implement each solution?
- What would the impact of each solution be?

The following table describes some tools to help teams make decisions.

Tools and strategies to identify solutions /changes	
Your root cause analysis	The process of identifying root causes can help identify solutions by addressing the problem at the source.
Create or use a Driver Diagram	A visual display of a team's theory of what "drives," or contributes to, the achievement of a project aim.
Creative thinking techniques	For example, brainstorming.
Surveys, focus groups, key informant interviews	Be sure to include perspectives of the people doing the work and most directly affected by any changes.
Review the best available evidence for what works:	
a) Literature, other evidence of effectiveness	Journal articles, evidence-based practices, benchmark data.
b) Ideas of peers, experts in the field	Providers who have success, "bright spots".
c) Guidelines	Manuals, guides, instructions, process maps.
d) What has worked at other organizations (copy)	Other states, similar agencies/institutions.
Use team-based decision strategies to select a change	Examples: a PICK chart, voting, pro/con list, voting and ranking.

Here is a list of Change Ideas Categories, mainly from the perspective of organizational processes that can be changed for the better. You can use this to help you generate ideas specific to your situation.

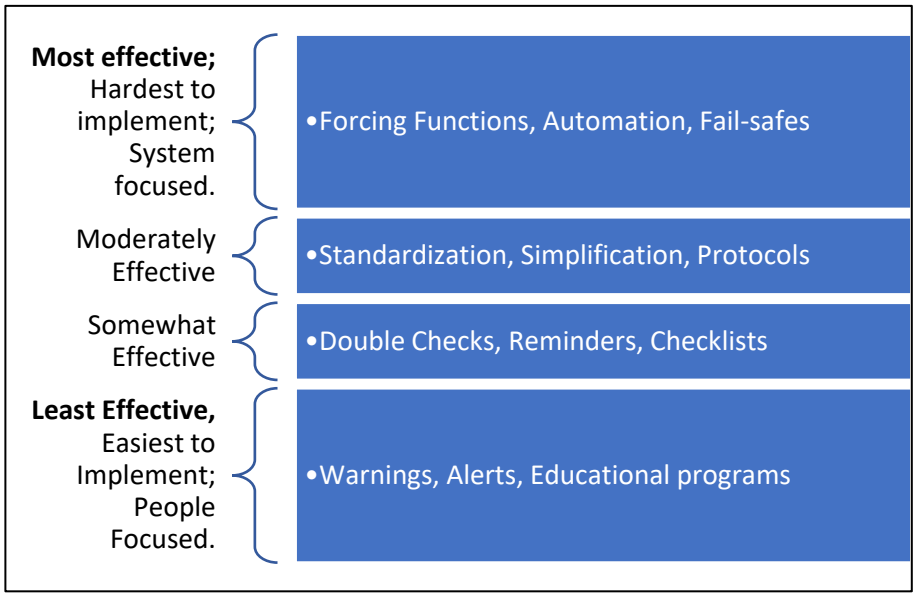
Pro Tip: Pick ONE thing to work on at a time.

- Standardize internal (agency) policies and practices
  - Develop and adopt topic-related policies and procedures.
  - Include information (in the P&P) on documentation, communication, and referral processes.
  - Provide training for staff on related policies and procedures.
  - Have a process to help assure that topic-related policies and procedures are followed.
  - Streamline related processes, to increase effectiveness or efficiency.
  - Have approved /available /accessible topic-related print and electronic materials.
  - Standardize formats to ensure all tangible material is consistent and easy to understand.
- Build capacity of, and support for, staff to address the issue.
  - Establish professional development competencies.
  - Establish training requirements and content.
  - Establish performance measures.
  - Establish data to use for quality improvement.
  - Share topic-related data on measures with staff.
  - Utilize a quality improvement process and framework.

    - Promote topic-related timely and effective supervision practices.
    - Ticklers/reminders for using screenings/assessments/tools on a schedule.
    - Promote team-based practices/care.
    - Establish referral and linkage process to topic-related internal and/or external resources/professionals.
- Create community linkages and support systems related to the topic.
    - Establish cooperative relationships with key community partners.
    - Establish relationships with support groups.
    - Establish relationships with medical and educational field.
    - Close loops of communication for referrals, and processes for accessing/engaging in supports and services.
    - Create Memorandum of Understanding (MOUs) with community partners. (An MOU is a is a non-binding agreement between two or more parties that outlines their intentions, goals, and expectations for a potential collaboration or project.)
    - Have up to date topic-related resource lists.
    - Create teams that include external partners to focus on the topic.
    - Host community meetings to share topic-related information and education.
- Engage individuals and families
    - Inform families of the benefits of topic-related information.
    - Individuals are empowered to meet their goal.
    - Staff engage in individual-led / person-centered conversations related to topic.
    - Use of best practice/evidence-informed strategies to enhance practices on the topic or issue.
    - Use evidence-based curriculum (and other materials) with families.
    - Utilize effective counseling strategies.
    - Consider peer-to-peer strategies on the topic.
    - Use practices/resources to strengthen family support systems.

G. Hierarchy of effective changes.

Not all changes will have the same potential impact. Some changes are more effective than others. Researchers have found that the least effective changes tend to rely on changes in human behavior, while the most effective changes essentially take human behavior out of the equation and only allow for the correct processes to be followed. This is something to keep in mind as

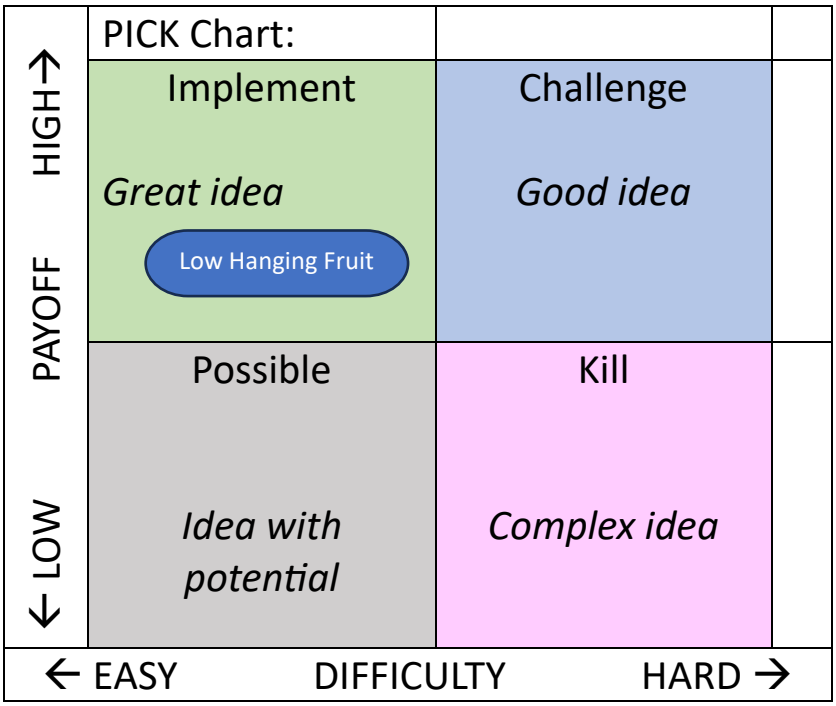


you select your changes: How can you make the 'right thing' to do, the easiest thing to do? (Source: *Woods et al.*)

H. Prioritizing and deciding where to start

There are a number of ways to decide what change(s) to make, to try to address your problem and achieve your goal. Teams can use strategies such as voting and achieving conesensus. They could use a tool such as a decision matrix. A decision matrix is used to rate the effectiveness of an action, paired with the amount of effort the action will require. A Pick Chart is an example of a decision matrix. By doing this, the group or individual will have a visual of which actions may be more beneficial and which should be addressed first.

A PICK Chart helps a team to rate ideas based on Difficulty (Easy to Hard) and Payoff (Low to High). After analyzing ideas by difficulty and payoff, they land in one of four categories: Possible, Implement, Challenge or Kill. This can help a team decide what to do next.



One approach to deciding what action to take can be called the concept of "low hanging fruit." Teams may be interested in considering the 'low hanging fruit' – changes that will be easier to address and yield significant rewards. That may be a good starting point, to help the team achieve and realize success, that could then lead to implementing more complex changes.

More information about Decision Matrixes: https://asq.org/quality-resources/decision-matrix
Another Template: https://www.vertex42.com/Files/download2/themed.php?file=pick-chart.xlsx

I. Root Cause Analysis

A root cause analysis (RCA) is a problem-solving method designed to identify the underlying causes of a problem. The focus of a RCA is on the systems, processes, and outcomes that require change to achieve desired outcomes, strengthen areas of weakness, and prevent or substantially mitigate future risk of harm. There are many tools to help you conduct a helpful RCA.

It is good practice to put some work into preparing to conduct a root cause analysis, to ensure it is a meaningful process. These steps are outlined below.

- Have a team and a plan for how to conduct your RCA.
    - Include people with expertise on different aspects of the problem. These are subject matter experts (SMEs). For example, people who work with different roles and at different stages of the problem.
- If the SMEs cannot attend a meeting, create a structured way for them to contribute to the process. For example, use a survey or interviews. Once you have done your RCA, ask them to review it.
- If the team has been given some information about root causes of a problem that was prepared by somebody else….
    - Review it closely. Can you rely on it?
    - Does the team need to do another RCA, or enhance what you were given, before moving forward?
- Consider using the language of RCA in agendas, discussions, and QII proposal and PDSA Steps.
    - **Consider this: "**We are doing a Root Cause Analysis to explore why this happens."
    - **Instead of this: "**We are exploring why this happens."
- Begin with a clear Problem Statement (This is different than your Aim.) If you want people to identify CAUSES of a problem, they need to clearly understand what the problem is.

Not a (good) problem statement	What is the problem with this problem statement?	Good problem statement, Includes what you've learned from data
How do we get more people employed?	This is asking for a solution; it is not a problem statement.	Fewer than 30% of individuals have an employment outcome.
Falling is a big problem.	This is too broad.	Falls are the leading cause of ER visits and unplanned hospitalizations for people on a DD Waiver.
I really want my kids to remember to brush their teeth.	This is the desired state (what you want to happen), not the problem.	Most nights, my kids forget to brush their teeth.

After thinking through Quality Improvement processes and defining a team and areas to focus on, now it is time to review some commonly used tools that can be used to complete a Root Cause Analysis.

Brainstorming

- What is it? A strategy that uses critical thinking and creativity.
- Who does it? Your team or a group familiar with the problem.
- Why? **During RCA**: To fully **Understand** all the possible causes.
- Why else? To Identify **Solutions** to the aspect of the problem you want to improve.
- When? At the beginning of your RCA process.
- How?
    - Use in tandem with other RCA strategies (e.g. Fishbone Diagram, 5 Why's).
    - Share the Problem Statement with the group.
    - Encourage a wide variety of ideas. Use "and" instead of "but". ("and" means you are adding something, "but" usually means you are taking away from the conversation or backtracking.
    - Don't criticize any ideas.
    - Build on each other's ideas.
    - Consider:
        - Setting a time limit.
        - Giving people some time to write down their ideas first.
- Questions to ask during Brainstorming for RCA: "What is causing this?" "Why is this happening?" "What are the reasons for this?" "What else can you think of?"

Affinity Diagram

- What is it? A diagram used to organize brainstormed ideas into categories based on similar traits.
- When to use it? After brainstorming. When categorizing ideas would help to decide what to do next.

Instructions:

- Take your brainstormed ideas and sort them into categories.
- Combine or eliminate duplicates.
- Benefits: Helps you organize information into categories.
- Potential challenges: You could have 'blind spots' in certain categories if no 'causes' are identified for a category.

Affinity Diagram Example; Problem: Falls are the leading cause of ER visits and unplanned hospitalizations for individuals on the DD waiver.

Environment	Individuals' Lack of Awareness	Individuals' Health / Medical concerns	Staffing Issues	Risk assessment
•Slippery floor / surface •A rug gets in the way •A pet gets in the way •Lack of hand rails •Poor lighting •No ramp available	•Missing a step •Rushing / in a hurry •Shoes or clothing too loose	•Taking 4+ medications •Lacking strength, balance •Poor vision •Dizzy •Trouble getting out of bed	•Staff aren't there to help when needed •Not enough staff to help	•People don't have a fall risk assessment •Risk assessment not completed / out of date •Risk assessment not done correctly

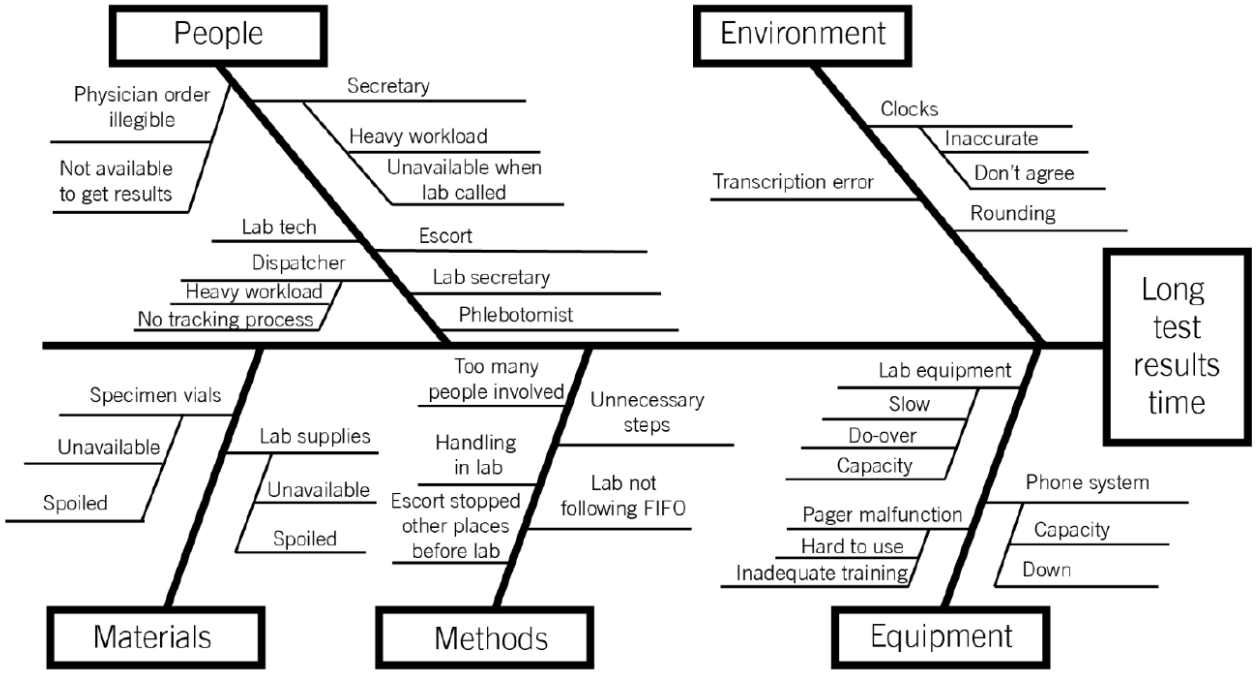
Cause and Effect / Fishbone Diagram

- What is it?
    - "Brainstorming within categories."
    - A tool that helps teams explore and display the many causes contributing to a certain effect or outcome.
    - It graphically displays the relationship of the causes to the effect and to each other, helping teams identify areas for improvement.
- When to use it?
    - At the beginning of your RCA process
    - Use it as your Brainstorming exercise, or to categorize what your group brainstormed.
- Benefits: Ensures you identify possible causes in each category; It has visual appeal.
- Potential challenges: May become overwhelming; Can get quite detailed with bones upon bones.

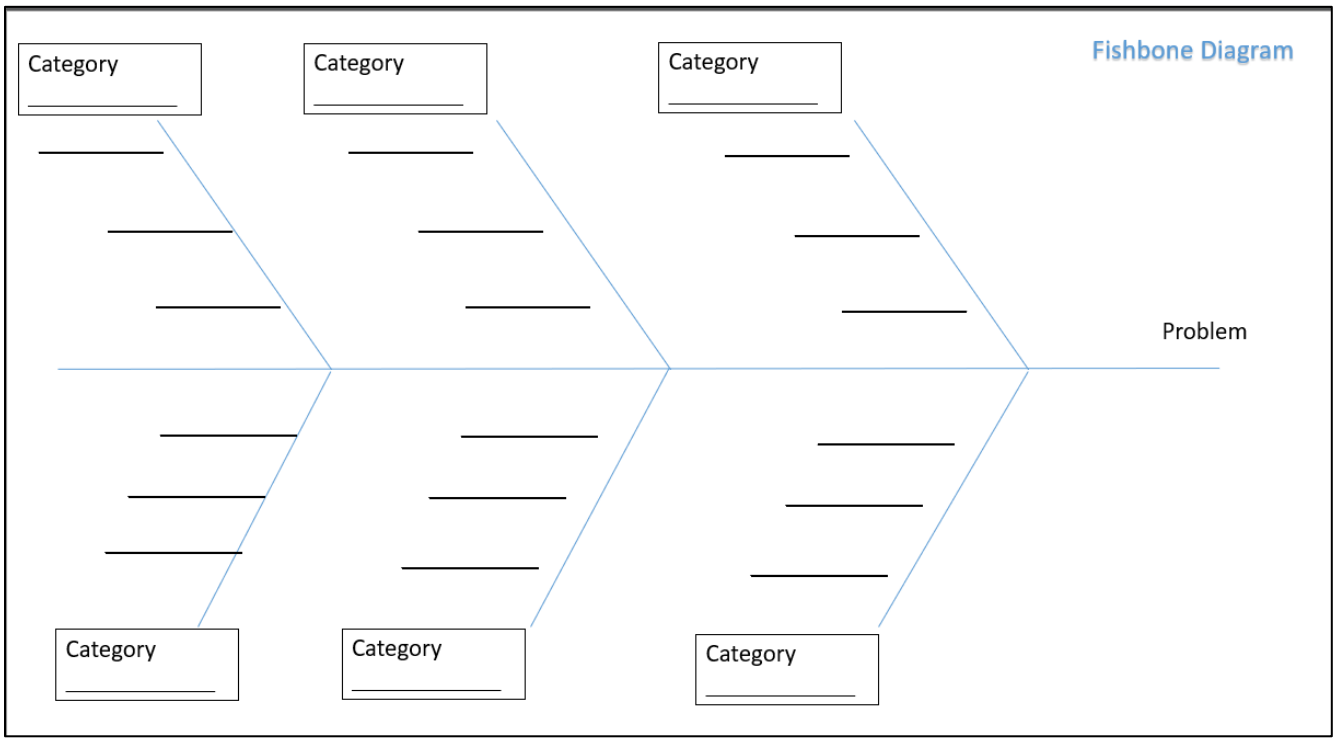
Source: IHI QI Essentials Toolkit

- IHI categories:
    - Materials,
    - Methods,
    - Equipment,
    - Environment, and
    - People
- Other categories to consider:
    - Staffing
    - Individuals
    - Families
    - Policies and Procedures
    - Resources
    - Training and Tools

Example: Cause and Effect Diagram



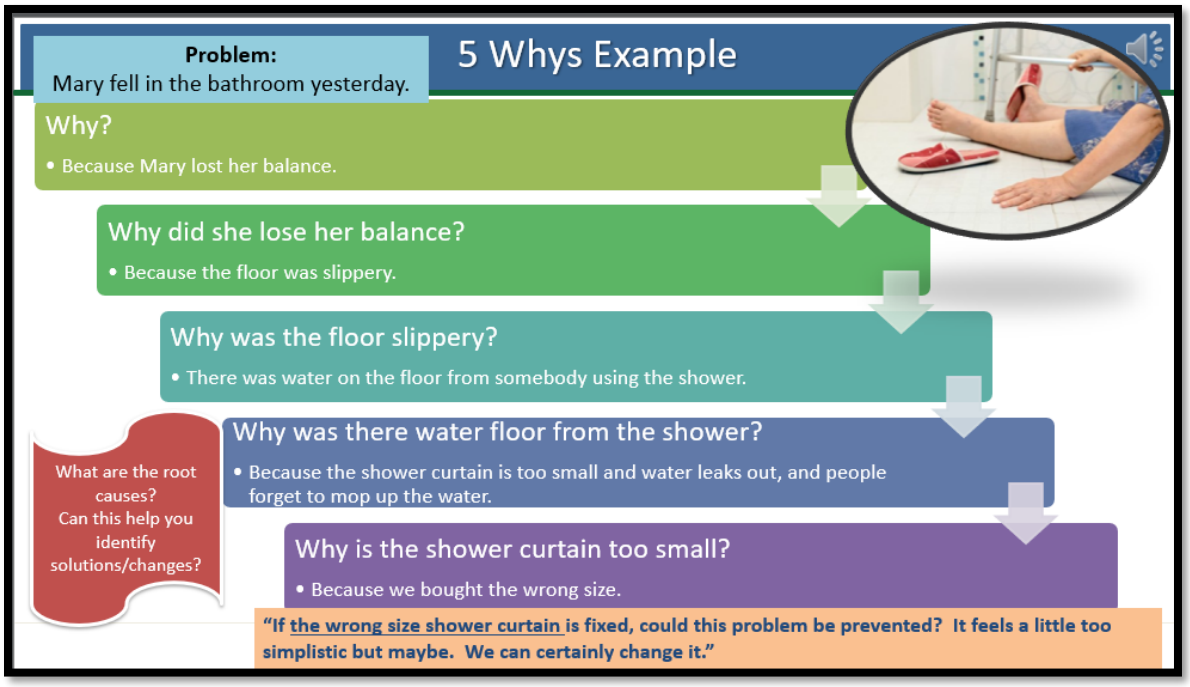
DBHDS **Fishbone Diagram Template**



5 Whys

The Five Whys is a simple problem-solving technique that helps to get to the root of a problem quickly. It involves looking at any problem and drilling down by asking: "Why?" or "What caused this problem?" five times.

- How to use it?
    - Begin with the problem statement, and ask, “Why does this happen?
    - For each subsequent reason, ask again “Why does this happen?”
    - You may need fewer or more than 5 Whys. Five is not a magic number.
    - At the end of the 5 Whys, you should have the root(s) identified and can further validate by asking the question: "If you removed [or addressed/fixed] this root cause, would this event or problem have been prevented?"
- What are the root causes? Can you stop here with your RCA?
- What solutions or changes to test can you identify from this diagram?
- Benefits – Easy to use and understand; straightforward. Good tool to understand the cause of a single event, defect or aspect of a problem.
- Potential challenges: Can lead to linear thinking about causes and solutions. May be too simplistic for systemic problems.



Resource: CMS QAPI 5 Whys Worksheet:
https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/fivewhys.pdf

5 Why Template

Date: _____/_____ / _____

Person(s)/ Team completing this tool:

PROBLEM: _____

WHY?: _____

_____

WHY?: _____

_____

WHY?: _____

_____

WHY?: _____

_____

WHY?: _____

_____

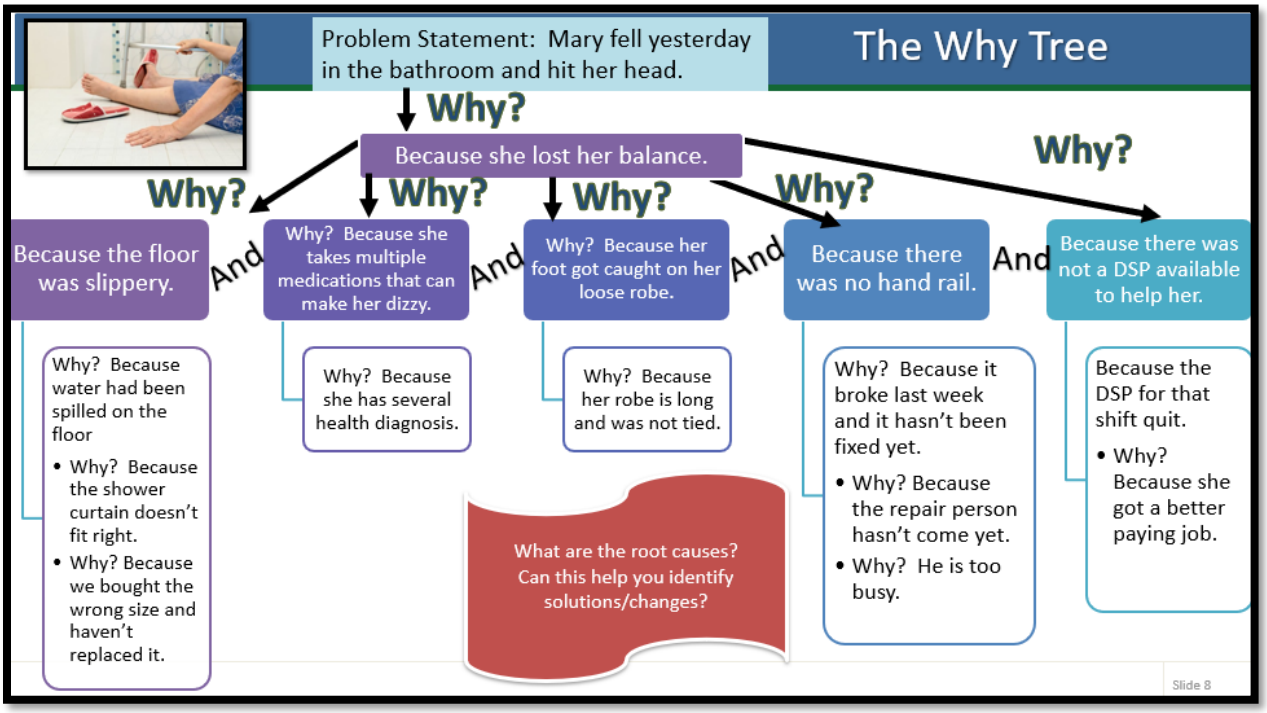
Recommendations and Next Steps:

Why Tree, or Branching Whys

A 'Why Tree' can help explore a problem with multiple direct causes, and multiple causes of those causes. It is a '5 Whys' with branches.

- How?

    - Identify issues that were direct causes of the problem; For each one, ask ‘why’.
    - For each identified cause, ask ‘why’ until you run out of questions.
- Benefits
    - Can give a more realistic picture of causation.
    - Can lead to multiple possible solutions.
- Potential challenges
    - May be overwhelming.
    - Can get quite detailed if you have many branches.



Why Tree Template

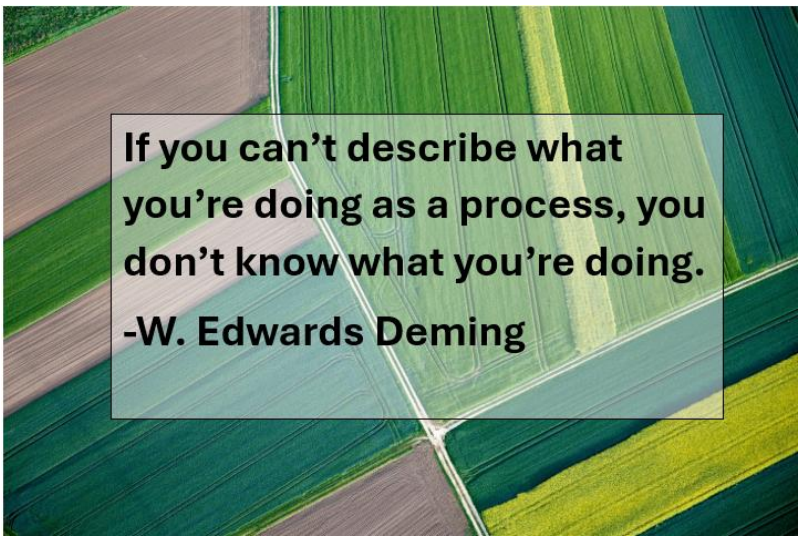
Date: ____ /____ / _____ Person(s)/ Team completing this tool: _____

Describe the problem: _____

	A. Why is this happening?	B. Why ELSE is this happening?	C. Why ELSE is this happening?	D. Why ELSE is this happening?	E. Why ELSE is this happening?
2	Why?	Why?	Why?	Why?	Why?
3	Why?	Why?	Why?	Why?	Why?
4	Why?	Why?	Why?	Why?	Why?
5	Why?	Why?	Why?	Why?	Why?
Check	If the reason in Row 5 is addressed, would it help solve the problem?	If the reason in Row 5 is addressed, would it help solve the problem?	If the reason in Row 5 is addressed, would it help solve the problem?	If the reason in Row 5 is addressed, would it help solve the problem?	If the reason in Row 5 is addressed, would it help solve the problem?
Recommendations and Next Steps:					

Process Map

- A process is a series of steps or actions performed to achieve a specific purpose. **Your work involves many processes!** A process map is a visual representation of steps in a process. It describes the way things get done.



Why do a process map?

- Build a step-by-step picture of the process for analysis or communication.
- Find areas for improvement.
- Define or standardize a process.
- Concentrate more intently on each individual step, without feeling overwhelmed by the bigger picture.

Steps to creating a Process Map:

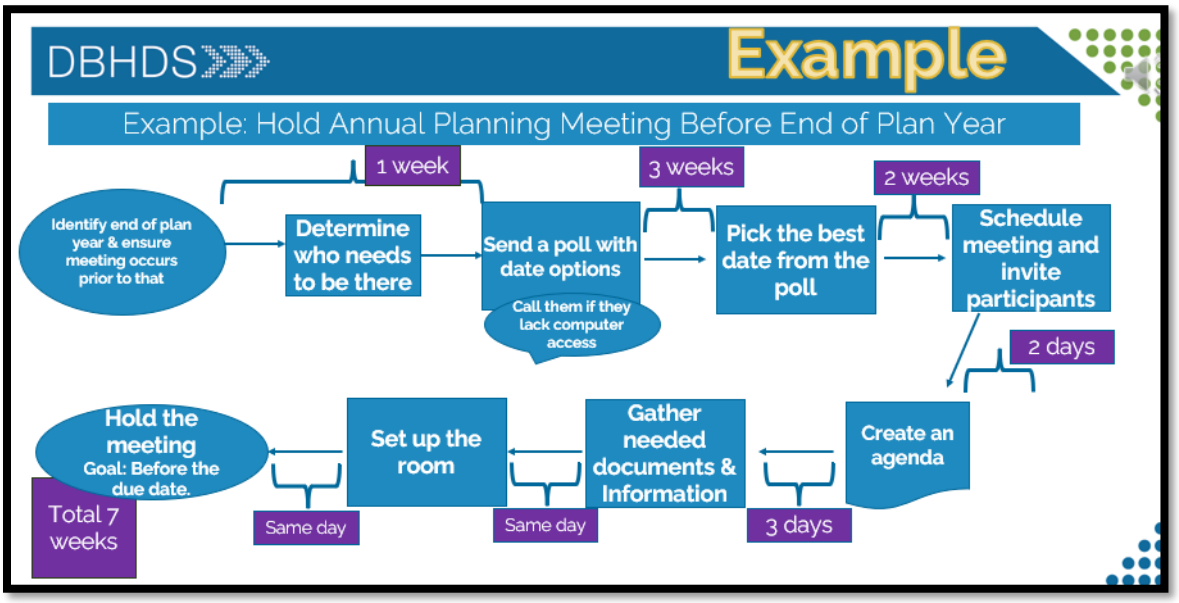
Step 1. Brainstorm steps in the process, and list them in the order they occur.
Step 2: Put it in a flow chart
Step 3. Challenge your flow chart
Step 4. Use it to inform your QI Project

When mapping to identify improvement areas, keep these tips in mind:

- Clarity is key. Throughout the exercise, help ensure that people are clear about what step the group is on, use of words/terms, etc. Clear communication is very important.
- **Map what the process is, not what you would like it to be.** It is a tool to learn about and improve your work.
- **Don't try to fix the process during mapping**; just focus on describing it. People will want to fix the process while mapping it. Don't let them. Put that in a parking lot.
- Revisit the purpose of the map, and the start and stop points, as needed.
- Consider a 'swim lane' diagram if there are multiple people or offices that are responsible for parts of the process. Each 'swim lane' represents a person or office.
- Aspects of the process that are in your 'sphere of control' will be easier to address than aspects that are NOT in your 'sphere of control'. But don't rule it out!

"You don't learn to Process Map, You Process Map to learn." -Dr. Myron Tribus

Process Map Example



Surveys, Focus Groups, and Key Informant Interviews

- **Survey:** A written questionnaire designed to collect certain information from a group of people. Examples: Demographic information, opinions, beliefs, preferences, knowledge.
- **Focus group:** Assemble a group, typically 5-7 people, to discuss a topic using, in response to questions and facilitation.
- **Key informant interviews:** Interview people who have specialized knowledge or experience of a topic.

Counting Causes: Now we're going to look at some RCA techniques where we move to counting the causes. These tools will help you identify the prevalence of each cause, or how frequently it's happening.

Check Sheet /Tally Sheet, and Histogram

A check sheet, also known as a tally sheet, is a structured form for collecting and analyzing data. It is typically used to collect data based on observations over time.

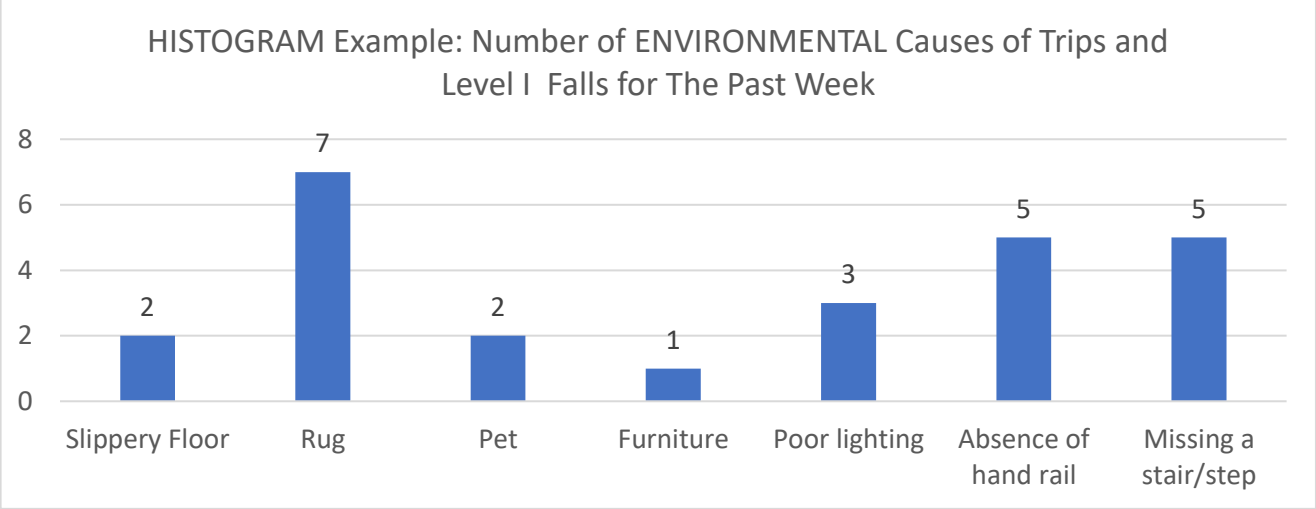
- When to use it:
  - When data can be observed and collected repeatedly by the same person and/or at the same location.
  - When collecting data on the frequency or patterns of events, problems, defects, defect location, defect causes, or similar issues.
- It can help you better understand a problem (e.g. collect baseline data), and for an RCA, it can help you count and identify patterns in the causes.
  - When does your problem occur?
  - Which causes happen the most often?
  - When does each cause happen most often?

Source: https://asq.org/quality-resources/check-sheet

Check Sheet Example: How often are certain ENVIRONMENTAL CAUSES of falls occurring? Tick mark = Staff observation or individual reported of CAUSE for Week 1

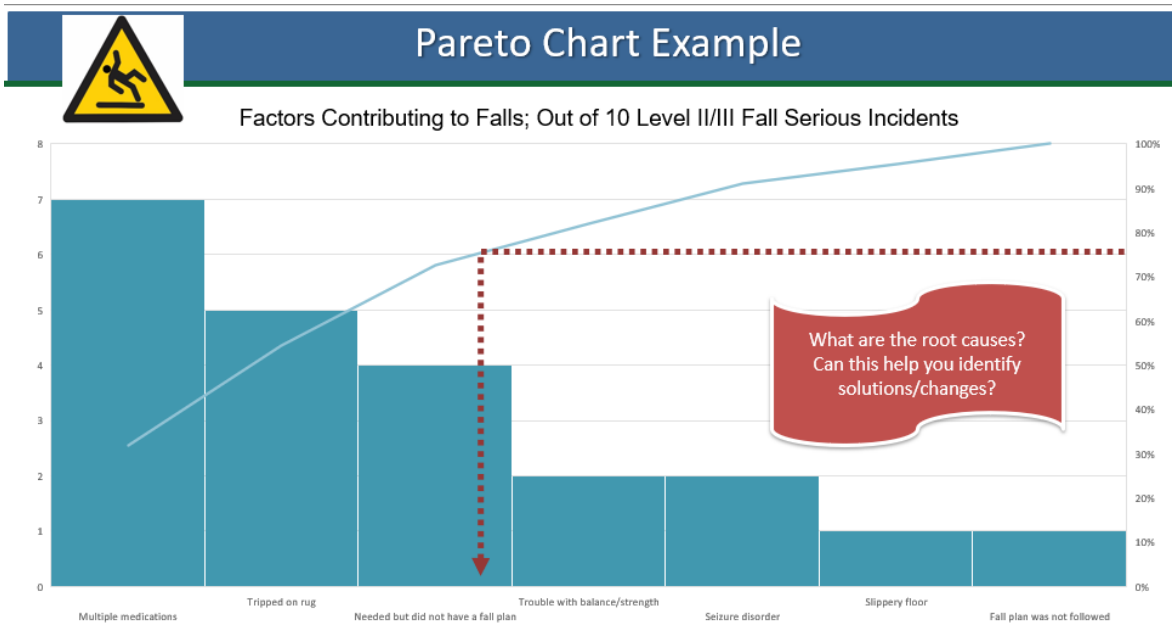
Fall Caused By…	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTAL
Slippery floor	1	0	1	0	0	0	0	2
Rug	2	0	1	2	1	1	0	7
Pet	2	0	0	0	0	0	0	2
Furniture	0	1	0	0	0	0	0	1
Poor lighting	0	0	0	0	0	1	2	3
Absence of handrail	1	2	0	1	0	1	0	5
Missing a stair/step	0	0	2	1	2	0	0	5
TOTAL	**6**	**3**	**4**	**4**	**3**	**3**	**2**	**25**

A Histogram is putting check sheet data into a bar graph so you can visually see which of your observations happened most often.



Pareto Chart

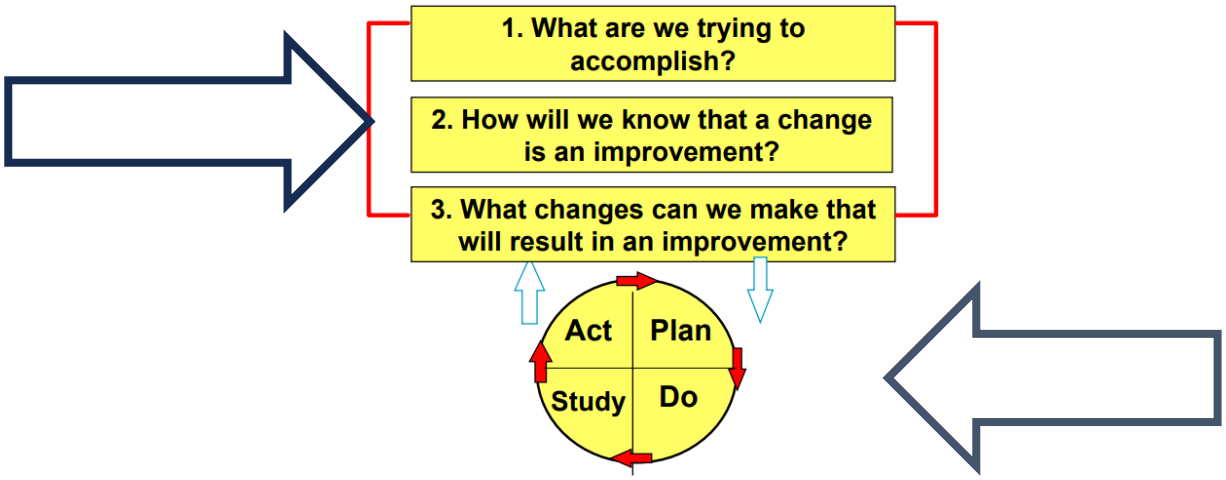
- A Pareto chart is a type of bar chart in which the various factors that contribute to an overall effect are arranged in order from the largest to the smallest contribution to the effect.
- According to the "Pareto principle" — also known as the "80/20 rule" — in any group of factors that contribute to an overall effect, roughly 80% of the effect comes from 20% of the causes.
- This ordering helps identify the "vital few" (the factors that have the largest contribution to the effect and therefore warrant the most attention), as distinguished from the "useful many" (factors that, while useful to know about, have a relatively smaller contribution to the effect).
- The Pareto chart is a helpful tool because it can help you pinpoint WHICH CAUSEs to focus on. It basically tells you which causes will give you the 'biggest bang for your buck' --- or which will be most likely to solve the problem, if they are addressed.
- *IHI QI Toolkit*



Here is a tutorial on how to create a two-y-axis chart in Excel: https://support.microsoft.com/en-us/office/add-or-remove-a-secondary-axis-in-a-chart-in-excel-91da1e2f-5db1-41e9-8908-e1a2e14dd5a9

J. The Model for Improvement and Plan-Do-Study-Act Cycles

Now we arrive at the Model for Improvement. The model has two parts: Three fundamental three questions, which can be addressed in any order, and a cycle to test a change. Using FOCUS, we've already answered the three 'change' questions. Then, you enter the Plan-Do-Study-Act (PDSA) cycle to test the change and determine if there is an improvement. Let's look at each step a little closer.

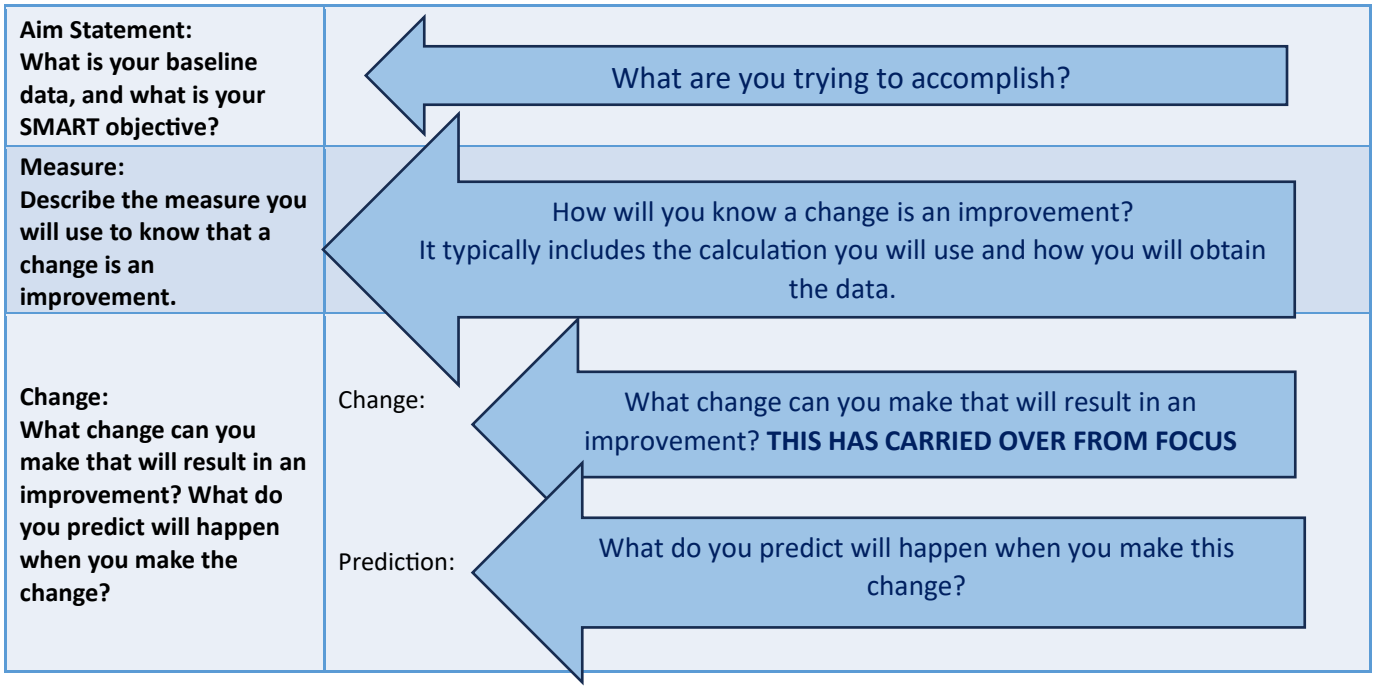


Aim, Measure, Change

First, we're going to do an Aim statement to answer the question, "what are we trying to accomplish?' An Aim statement will have your baseline data, and it should be phrased like a SMART objective.

Now we are at Measure. This answers the question "How will you know the change is an improvement?" It typically includes the calculation you will use and how you will obtain the data. There are situations when the measure is a simple "Yes, it was effective," but most of the time there is an amount of improvement that you are wanting to see as the result of a change, like improvement of a certain percent, or a decrease in events, etc.

Let's also describe our Change and make a prediction about what will happen. What change have we decided on? What is our prediction for when we make that change?

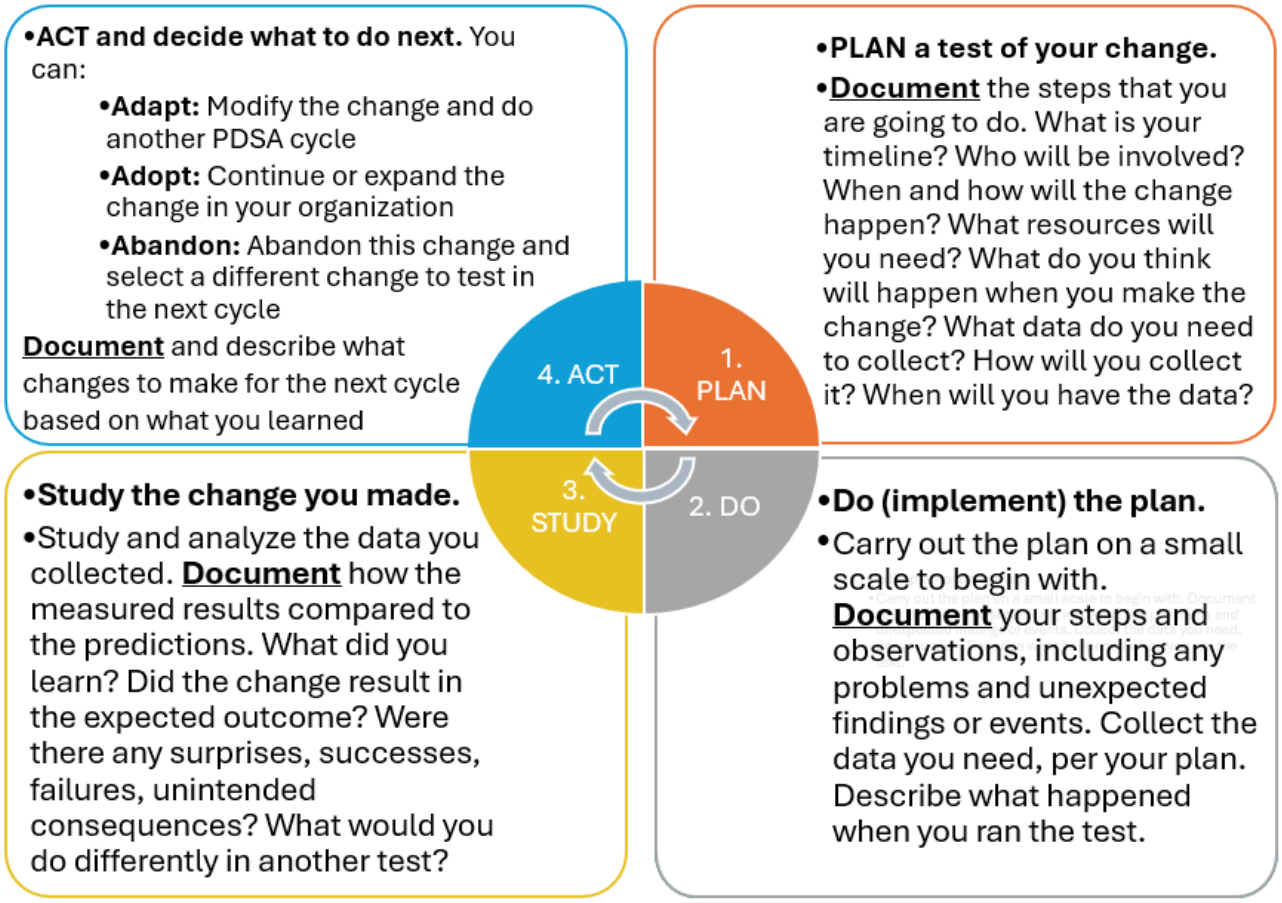


An Aim statement is basically the same thing as a SMART Goal. SMART stands for Specific, Measurable, Achievable, Relevant and Time-Bound. Review fill-in-the-blank and example.

S	Specific	**Let's develop a SMART Aim.** **Fill in the blanks:** By ___(date)_____ we want to improve _____(problem)___ from ___(baseline data)___ to ____(goal data)_____. *EXAMPLE: By January 1, 2026, we want to decrease the percent of people who experience a Level I or Level II fall/trip from 20% to 15%.*
M	Measurable	
A	Achievable	
R	Relevant	
T	Time-bound	

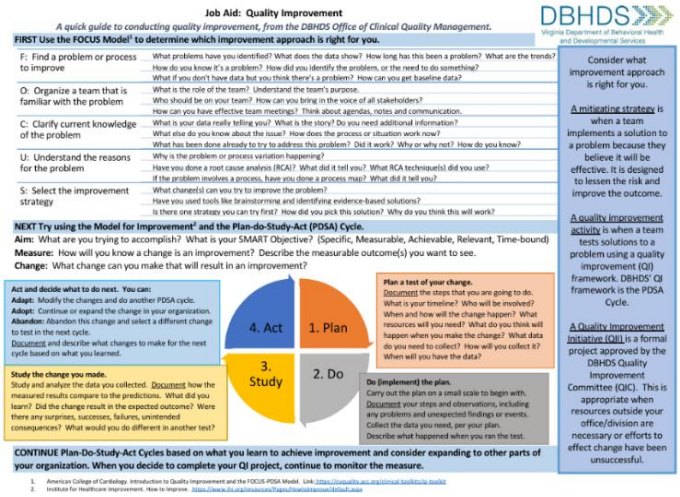
Plan-Do-Study-Act (PDSA) Cycles

The PDSA cycle is perhaps the most 'famous' part of the Model for Improvement. However, you can hopefully see that a lot of work has happened up to this point, to help prepare for doing a PDSA cycle. A PDSA cycle is a strategy for testing a change in the real world using a repeatable set of steps. These are outlined in the graphic below.



When doing the Model for Improvement and PDSA Cycles, it is important to document your work. It is highly recommended to use a PDSA Worksheet. DBHDS has developed a QI Job Aid, featuring a PDSA Worksheet, that you may choose to use. It helps keep track of the steps, communicate with your team and be accountable to the process. This worksheet is available on our website. You can use it, or something else you prefer, but definitely use a worksheet to track your progress!

QI-Job-Aid-w-PDSA-worksheet_2024_b.pdf



It is important to CONTINUE doing Plan-Do-Study-Act cycles based on what you learn to achieve improvement and, as you learn what works and is effective, consider expanding to other parts of your organization. When you decide to complete your QI project, continue to monitor the measure.

That takes us all the way through FOCUS and the Model for Improvement!

Job Aid: Plan-do-Study-Act (PDSA) Worksheet

DBHDS Virginia Department of Behavioral Health and Developmental Services

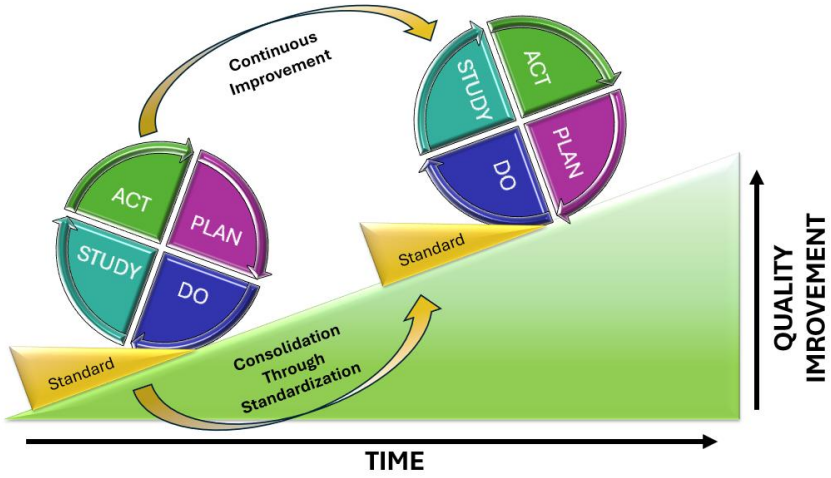
Aim Statement: What is your baseline data, and what is your SMART objective?				
Measure: Describe the measure you will use to know that a change is an improvement.				
Change: What change can you make that will result in an improvement? What do you predict will happen when you make the change?	Change: Prediction:			
Plan: Plan a test of your change. Document the steps that are needed. What is your timeline? Who will be involved? Include how you will plan to collect and analyze data to study your change.	Task	Who is responsible?	Begin and end dates	Result
Do: Implement your plan. Describe what happened.				
Study: Study and analyze the data you collected. What did you learn?				
Act: Decide what to do next. Will you adapt, adopt or abandon?				

1. American College of Cardiology. Introduction to Quality Improvement and the FOCUS-PDSA Model. Link: https://cvquality.acc.org/clinical-toolkits/qi-toolkit
2. Institute for Healthcare Improvement. How to Improve. https://www.ihi.org/resources/Pages/HowtoImprove/default.aspx

Continuous Quality Improvement

Continuous quality improvement is an important concept to focus on. It is important to realize that successful quality improvement efforts are based on repeat cycles and should never stop. There is always room for improvement!

Standards that we are expected to meet may change or increase. Improvement efforts that once met standards may no longer be enough to meet the new quality assurance threshold. Remember to think of standards/quality assurance as the basic requirements you must meet and ensure. By focusing on **continuous** quality improvement, you are more likely to meet not only current requirements but be in a better position to meet new requirements. Many times, you will find that once you focus on continuous quality improvement efforts, meeting the standards becomes very achievable!



Common Quality Improvement Pitfalls

This list describes some **common pitfalls** when teams embark on a quality improvement project. *(Source: Moran, JW.)*

1. AIM Statement - Having a goal statement that is too large, a scope that is too large. AIM Statements should be discreet, measurable, and time bound.

2. Team Charter – Not having a team charter that provides direction. A detailed charter provides the start-up direction a team needs to be successful in tackling the task it has been assigned. Too often teams spend a considerable amount of their valuable resources trying to figure out what they are supposed to do.

3. Team Members – Team members were selected based on who was available rather than who was needed. Starting off with the wrong team is a key ingredient in the recipe for disaster. Get the right people at the start, not just those who are available.

4. Problem-Solving Process – Teams began their journey by not following a defined problem-solving process like Plan-Do-Check/Study-Act (PDSA), or they skipped steps since the solution seemed obvious. If there is no defined process, the team wanders aimlessly.

5. Rapid Cycle – Teams took too long to go through the PDSA cycle. Have a limited AIM Statement, go through the PDC/SA cycle quickly, and get a quick win. Then move on to something more complex and keep repeating the PDC/SA cycle.

6. Team Maturity – Teams go through a growth cycle. If the behaviors are not maturing, it can derail the problem- solving process.

7. Base-Line Data – Teams never collected any data on where they were starting from and never knew if they made an improvement.

8. Training – Lack of training is a problem. People think, “This QI stuff seemed so obvious we just jumped right in and started solving problems.” Team members were never sure what was going on or what the next steps were.

9. Root Cause Analysis (RCA) – Treating the symptom instead of doing an RCA is a common problem. Root Cause Analysis is a structured investigation that aims to identify the true cause of a problem and the actions necessary to eliminate it. Treating the symptom may provide a temporary fix, but it just masks the real cause until it reappears.

10. Pilot Testing – Many teams like to jump to solutions and not identify potential improvements that could address the root cause, agreeing on which one to test. We need to pilot test a potential solution to determine how the solution will impact the problem.

7. Quality Related Training Opportunities and Resources

The DBHDS Office of Clinical Quality Management has compiled a collection of guides, toolkits and training resources to help build quality improvement (QI) knowledge and skills.

First, we have created a list of Quality Improvement Guides, Toolkits and Training Resources that can help build your knowledge and skills. Here is the link: https://dbhds.virginia.gov/wp-content/uploads/2022/10/QI-Resources_revised-10.22.pdf

Next, we have created a series of videos about Quality Improvement that is available on the DBHDS YouTube Channel. Here is a direct link: https://www.youtube.com/playlist?list=PLmFe443VQ9xUxxc85z--thJUFCjjKrTfL. There are more than ten videos, ranging from 10 minutes to 24 minutes long - easy to fit into your schedule! The topics include:

- Introduction to Quality Improvement and Plan-Do-Study-Act (PDSA) Cycles
- Root Cause Analysis (RCA) Techniques
- Setting Up for Success
- Process Mapping for Improvement
- Using Data to Drive Improvement
- …. And more!

Finally, we have created a Quality Improvement Job Aid, featuring a Plan-Do-Study-Act (PDSA) Worksheet. This is a front-back one page job aid that can help determine which quality improvement approach is right for you. It includes a quick guide and worksheet to help you use plan-do-study-act (PDSA) cycles. Here is a direct link: QI-Job-Aid-w-PDSA-worksheet_2024_b.pdf

We hope you will find these tools useful in your work to improve quality and achieve your goals. For more information, contact Rebecca Laubach, Director, Quality Improvement Analytics and Processes @ Rebecca.Laubach@dbhds.virginia.gov

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DBHDS Licensing and Human Rights Listserv: https://visitor.r20.constantcontact.com/manage/optin?v=001fonDe7OLpVle31MpMgDtiZ79Er3SHdqfktj0SczMP8M_F6paUn08BjGOxIAw7n9av__3xCNfme_6CxjWQuu51uWNqkQb8JgE_-mSTst0cqnVr48ZWzdgITiTl2rGmDqLTZn_-qLU_HuoAWCCrdoiZk4wPufvBXB1

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9. Acknowledgements

DBHDS would like to acknowledge and thank the following staff for contributing to the development of this manual.

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