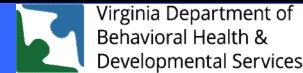
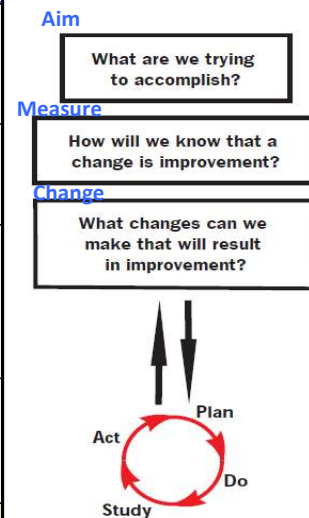


Overview: QII Toolkit



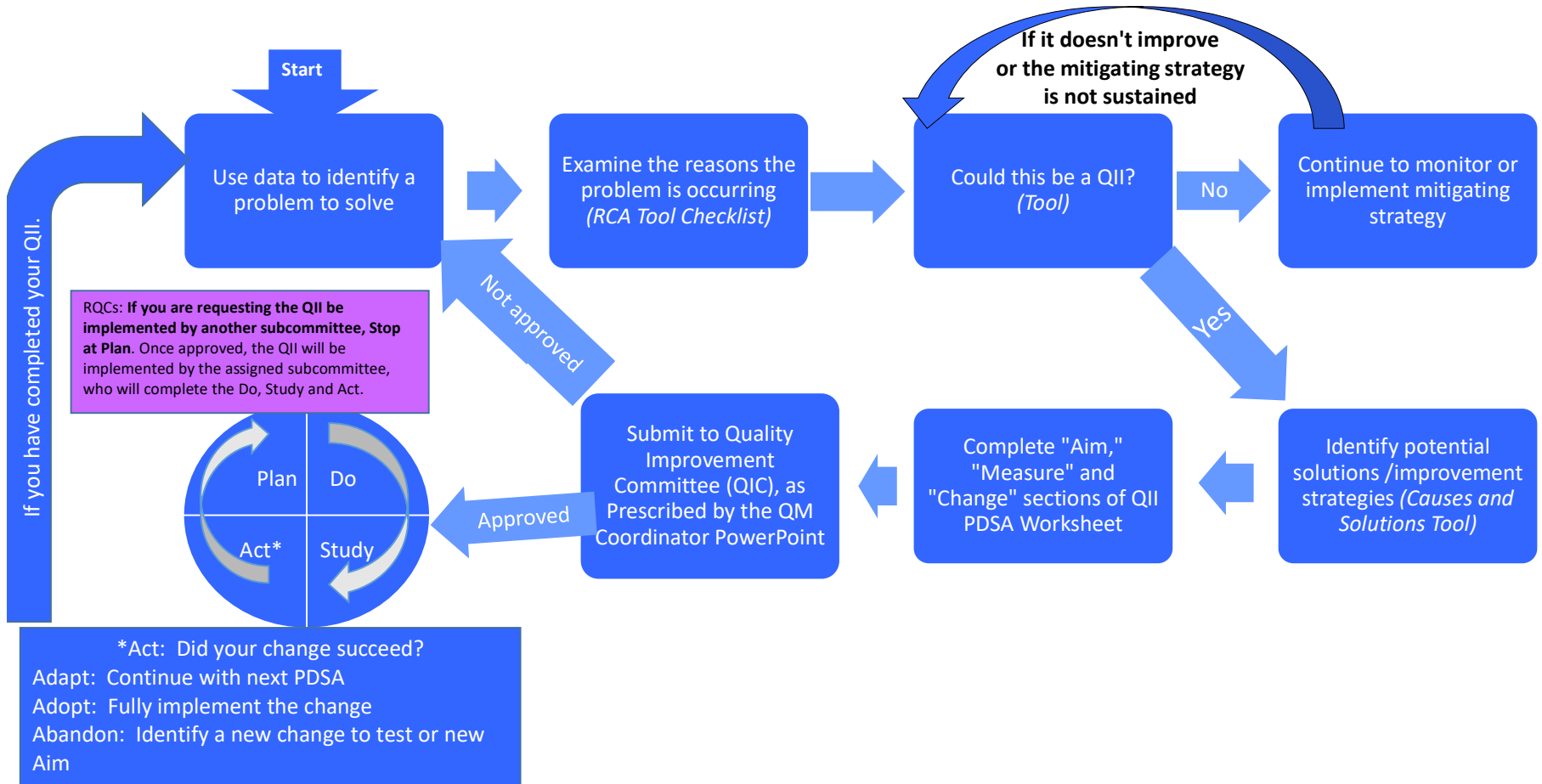
| | |
|---|---|
| QII Defined | A DBHDS Quality Improvement Initiative (QII) is defined as "strategies designed to support quality improvement activities, whose implementation and use follow the PDSA cycle to achieve these improvements. QIIs seek to improve systems and processes to achieve desired outcomes; strengthen areas of weakness, to prevent and/or substantially mitigate future risk of harm." (Source: QIC and QIC Subcommittees Protocol) |
| What is the purpose of this toolkit? | The purpose of this toolkit is to help the Quality Improvement Committee (QIC) subcommittees develop and implement a QII. It includes tools to help a subcommittee identify causes and solutions of a problem, select and prioritize a QII topic, answer the 'Three Questions' (Aim, Measure, Change) and complete the steps of the Plan-Do-Study-Act (PDSA) Cycle. |
| Why do we need this toolkit? | DBHDS has adopted the Model for Improvement as the framework for conducting quality improvement initiatives (QII) (See Figure). This framework involves using data to identify an area for improvement, developing an Aim Statement, establishing a Measure, identifying changes that could result in improvement, using the Plan-Do-Study-Act cycle to plan and study the progress. This strategy is most effective when team members collaborate to develop and design the QII. This toolkit serves as a tool to help them do that. |
| When should this toolkit be used? | If the subcommittee has identified a potential area for improvement, they can use the tools in this toolkit to identify root causes, think through solutions, select from multiple QII ideas, and walk through the steps of the Model for Improvement. Each tool is described below. *At least one of these tools (Problems and Solutions, Could This be a QII?, Which QII Should We Choose?) is required to be completed before moving into the Three Questions and PDSA. |
| Tools for RCA and Solutions | This is a list of tools and strategies that can help a team conduct a Root Cause Analysis (RCA) and identify solutions for the problem. |
| *Problem and Solutions | This tool helps a team think through critical questions to help them better understand the problem and potential solutions. |
| *Could This Be a QII? | The purpose of this tool is to help a subcommittee think through whether an identified problem could be solved using a QII approach. |
| *Which QII Should We Choose? | The purpose of this scored tool is to help a subcommittee prioritize QII ideas and choose one QII idea, if there are multiple options. |
| The Three Questions | This is the first tool for the Model for Improvement. The subcommittee will use it to describe the Background, Aim, Measure and Change for the QII. |
| PDSA Worksheet | This is the Model for Improvement, focusing on the plan-do-study-act (PDSA) cycle. The subcommittee will use it throughout the PDSA cycle to document efforts to plan, do, study and act. |
| How should use this toolkit be used? | The toolkit is a living document that the subcommittee will use throughout the QII. The QIC subcommittee is responsible for completing the tools in this toolkit, completing the QII PDSA Worksheet and ensuring it is up to date. The team conducting the QII should review this toolkit each time they meet about the QII and complete each section sequentially as they go through the process. The subcommittee should create a COPY of the worksheet for each PDSA cycle. Quality improvement will be most effective when team members share their perspectives and collaborate. |
| Where can this toolkit be found? | This document should be accessible to all subcommittee members at all times, and should be clearly labeled. If there are multiple versions, the file names should include the version and date. For DBHDS subcommittees: This toolkit should be saved in the subcommittee's Teams folder. |

Figure 3. Model for Improvement



Source of image: Institute for Healthcare Improvement

Quality Improvement Initiative (QII) Process - Flow Chart



Tools to Help Conduct a Root Cause Analysis (RCA)

| Tool or technique | Brief description and examples | For more information | |
|---|---|---|-----------------------------|
| 5 Why's | Technique to identify why an event happened | CMS QAPI 5 Whys Tool | IHI Toolkit |
| Affinity Diagram | Use in conjunction with brainstorming | Affinity diagram resource - Six Sigma Daily | |
| Brainstorming | Technique for generating ideas | Brainstorm resource - Mindtools | |
| Check sheet | Tool to count the frequency of event occurrences | Check Sheet resource - CI Toolkit | |
| Driver Diagram | A visual display of the strategies that contribute to achieving a set goal or objective. Similar to a logic model. | Driver Diagram Resource - UNC | IHI Toolkit |
| Fishbone Diagram or Cause and Effect Diagram | This is a technique to identify causes of a problem; it can be used to categorize ideas generated during brainstorming. | Fishbone Diagram Resource - CMS | IHI Toolkit |
| Pareto Chart / Pareto Analysis | This technique helps identify the most common issue and helps identify where to focus improvement efforts to maximize impact. | Pareto Chart Resource - iSixSigma | IHI Toolkit |
| Process Map | This is a technique to map a process to identify challenges and improve efficiency. Opportunities for improvement include: (a) Where breakdowns occur; (b) "Work arounds" that have been developed, (c) Variation; (d) Duplicate or unnecessary steps | Process Mapping - Six Sigma Study Guide | |
| Surveys, focus groups, key informant interviews | These techniques can help you get more information from people doing the work and impacted by the work. | | |

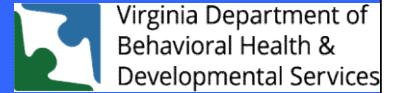
Tools and strategies to identify solutions and select changes

| | | | |
|---|---|--|----------------------------|
| Your root cause analysis (See list above) | The process of identifying root causes can help identify solutions. | | |
| Create or use a Driver Diagram | See above | | |
| Creative thinking techniques | For example, brainstorming - see above | | |
| Surveys, focus groups, key informant interviews | Be sure to include perspectives of the people doing the work. | | |
| Review the best available evidence for what works: | | | |
| a) Literature, other evidence of effectiveness | Journal articles, evidence based practices | Sources of Evidence Based Practice - CDC | |
| 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, a pro/con list, voting and ranking. | Group Techniques - Mindtools | PICK chart |

NOTE: Many of these tools, and more, are also available in the IHI Quality Improvement Essentials Toolkit. Login required.

<http://www.ihl.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx>

Tool: Defining the Problem, Identifying Solutions



These questions will help a team ensure that they have worked to understand the causes of a problem and identify potential solutions and changes to improve the problem. This will help answer the question "What changes can we make that will result in improvement?"

1 What is your problem statement? Include how you know it's a problem.

Our problem is... We know it's a problem because...

2 What tools have you used to understand the causes of the problem (e.g. why the data look the way they do, the reason the goal is not met.) Refer to the *RCA Tool Checklist*.

We used the.... (tool(s)). This tool showed us.....

3 What is causing your problem? You may not know all the causes but, based on your analysis, what are some key causes?

The cause(s) of the problem are....

4 What tool(s) did you use to identify potential solutions/changes you can make to address the problem, or improve the outcome? Refer to the *RCA Tool Checklist*.

To identify solutions/changes, we used.... (tool(s)).

5 What change(s) will you make to address the root causes? What intervention will you try, based on your analysis?

The change(s) we will make are....

This information will help you fill out the PDSA Worksheet!



Discussion Tool: Could This Problem Be Addressed Using a QII?

The purpose of this tool is to help a committee discuss whether the problem they are interested in solving could be addressed as a QII, as opposed to solving the problem through mitigating strategies or some other means. If the subcommittee answers 'Yes or maybe' to most or all questions, it could be a QII. Saying 'no' to one or more questions does not mean it cannot be a QII.

| Element | Discussion question | Yes or maybe | No or unknown | Additional Information | Examples |
|---------|----------------------------------|--------------|---------------|---|---|
| 1 | <u>Compelling data</u> | | | It is preferable to have at least 1 year of consistent data collected, via the same mechanism, with consistent data definitions. | Yes/maybe: Four quarters of data showing an outcome is below the desired goal. No/unknown: After meeting the goal for Quarters 1 and 2, the measure dipped below the goal for Quarters 3 and 4. |
| 2 | <u>Systemic problem</u> | | | A system-wide problem would impact, or occur in, multiple regions, CSBs, providers, etc. | Yes/maybe: There are numerous providers in each region not meeting the outcome. No/unknown: There are fewer than 10 providers in 2 regions not meeting the outcome. |
| 3 | <u>Complex problem</u> | | | If a problem is simple, or the solutions straightforward, the team may decide to try a mitigating strategy first instead of a QII. | Yes/maybe: For the problem of preventing Falls and Trips, there are many possible solutions at the individual, provider and community level. No/unknown: For the problem of fixing a specific type of medical equipment, the fix is straightforward and easy to implement. |
| 4 | <u>Persistent problem</u> | | | It is important to understand previous attempts to solve the problem and explore why they did not work. | Yes/maybe: A health measure improved and met a goal after a statewide training, but went back to below-goal levels 6 months later. No/unknown: An attempt to improve a measure was achieved and maintained. |
| 5 | <u>Varying problem</u> | | | Some are addressing the problem better than others. Best practices that could be expanded or standardized include data collection, training, tools, processes, and protocols. | Yes/maybe: There are known strategies to reduce medication errors but they aren't being consistently implemented statewide. No/unknown: For a problem like increasing transportation providers in a low resource community, the best practices may be unknown and need more research. |

Tool: Which QII Should We Choose?

Directions: This tool will assist in choosing which potential area for improvement is the highest priority based on the needs of the individuals served and the organization. This process will consider such factors as high-risk, high-volume, or problem-prone areas that adversely affect outcomes and the quality of care. This tool is intended to be completed by the QI Team member, in conjunction with the QIC subcommittee. Begin by listing potential areas for improvement in the left-hand column. Then score each area in the following columns based on a rating system of 1 to 5 as defined below: 1 = very low, 2 = low, 3 = medium, 4 = high, or 5 = very high. The score for each item will auto-calculate in the final column. **Rating is subjective and is meant to be a guide and to stimulate discussion.** Potential areas for Improvement with a higher score indicate a higher priority.

| | 1 = very low | 2 = low | 3 = medium | 4 = high | 5 = very high | | | |
|--|--|--|---|--|---|--|--|-------------|
| LIST EACH POTENTIAL QII. Consider areas identified through: Feedback from staff, families, individuals served, other incidents, near misses, unsafe conditions | PREVALENCE: The frequency at which data analysis reveals this as an issue. | RISK: The level of risk this issue poses, to the health, safety, and wellbeing of the individuals that DBHDS serves. | COST: The cost(s) incurred, by DBHDS, associated with this problem. <i>This could include staff time, training, resources and/or hidden costs</i> | RELEVANCE: The extent to which addressing this issue would affect individuals' quality of life and/or quality of care. | RESPONSIVENESS: The likelihood an initiative on this issue would address a need expressed by individuals, family and/or staff | FEASIBILITY: The ability of DBHDS to implement a QII on this issue, given current resources. | CONTINUITY: The level to which an initiative on this issue would support DBHDS goals and priorities. | TOTAL SCORE |
| | | | | | | | | 0 |
| | | | | | | | | 0 |
| | | | | | | | | 0 |
| | | | | | | | | 0 |
| | | | | | | | | 0 |
| | | | | | | | | 0 |

Brief rationale for each score. In each box that corresponds to the potential QII and area, type a short rationale for how the committee arrived at the score.

| | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| 0 | | | | | | | | |
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This tool was adapted from the "Prioritization Worksheet for Performance Improvement Projects" available from the Centers for Medicaid and Medicare Services online at <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/downloads/PIPPriorWkshtdebedits.pdf>.

Background, Aim, Measure and Change (The Three Questions)



| | | | |
|----------------------------|------------------|---------------|--|
| QIC Subcommittee | < Drop-down list | Update Dates: | |
| Date Proposed to QIC: | | | |
| Date Approved by QIC: | | | |
| Date Implemented: | | | |
| Date Completed/Abandoned*: | | | |
| Key Performance Area: | < Drop-down list | | |

Background: Why was this selected for a QII? Summarize why you selected this for a QII. Why was it chosen over others? What data did you review or use? Why is it an important topic to address? Reference the other tools you have completed in the QII Toolkit and briefly summarize here.

This was selected for a QII because...

Aim, Measure, Change

Aim: What is the overall goal you wish to achieve? The Aim needs to be measurable. An Aim statement is measurable when it has a numeric baseline, a numeric goal, a population, and a target date. It is connected to the Measure described in the next step. *The Aim should be SMART: Specific, Measurable, Achievable, Realistic/Relevant and Time-bound. The problem or issue should be based on baseline data. If available, benchmark data should be used. The target %/rate should be realistic and achievable. The population should be specified. The target date is the date the group would like to achieve the result and complete the QII. Define key terms that could be interpreted in different ways. If baseline data are not available, explain why; the QII should demonstrate how you plan to obtain it.*

Our goal is to improve ___ for _ (priority population) to _____ (desired %, rate, etc.) by _____ (target date). The baseline was ____ (% , rate, etc.) during _____ (date or time frame for baseline).

Measure: How will you use measurement to know a change is an improvement? *Think about: What measure or data will you use? Is it a PMI or other type of measure? What is the numerator and denominator? What is the data source? How frequently will you track it? A current PMI can be used, surveillance data can be used, or a proposed PMI that will demonstrate that a change has occurred.*

We will measure _____ every () month or () quarter and obtain the data from _____ (data source). If data being used to measure QII is only available yearly, consider adding a secondary data source that can provide input to the QII.

Data Process and Attestation: For each data source being used in the QII, identify if there is an approved, existing process document and attestation that supports this QII and the change being measured. This will involve reaching out the business owner of the data source system. If none, a process document must be developed and the data attestation completed within 90 days of the QIC approving the QII. The subcommittee recommending the QII and the business owner of the data source system are responsible for collaborating in developing the dataset process document.

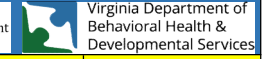
List the dataset process document name:
List the dataset attestation name:
If none exist, indicate none:

After the QIC has approved the QII, the Asst. Commissioner of Developmental Services and the QM Coordinator review and approve the dataset process document for use with the QII. This review will determine if the existing dataset process needs modification.

Change: What change(s) can you make that will result in improvement? *What are the root causes of the problem and how does the change address them? Refer to the Checklist of Analysis Tools and the Causes and Solutions Tool to help identify impactful changes. Root causes can be unknown; the PDSA can focus on making a change to identify root causes.*

The root cause(s) of this issue is(are) _____ . The change(s) we plan to make are: _____.

PDSA Worksheet



Update dates: Enter the date each time you update this PDSA.

Plan What change are you going to test for this PDSA? Clearly describe it. Think about it like writing a recipe, so that somebody else could follow your directions. Include who, what, when, where, why and how as needed. **NOTE: You will need a separate PDSA for each change.** Who will be involved in this PDSA? Whenever feasible, it will be helpful to involve direct care staff. RQCs should describe what they can do within the PDSA. For RQC QIIs, has a subcommittee been designated to facilitate implementation? Can the RQC implement this initiative on their own given their construct of meeting quarterly?

The change we are testing for this PDSA is _____. In summary, our plan for testing this change is to _____.

| TASKS: List the tasks needed to test this change. You can add more rows for additional tasks as needed, or use the 'Additional Tasks' tab. | Owner | Indicator of Success | Anticipated Begin and End Dates: List both the begin and end dates for this task as a date range. | Date Completed | Final Result of this Task. Don't forget to update the 'Do' section as needed. | Comments |
|--|-------|----------------------|---|----------------|---|----------|
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PLAN TO STUDY: How will you study this change? First, make a prediction (i.e. hypothesis). Then, plan how you will test that prediction. Studying your change is different than measuring your Aim. For example, if you provided an educational resource or training, did it result in improved knowledge or practice? If you implemented a new tool, did people use it correctly? What data or information do you need, and how will you get it? Then - What products will show your results? You can use tools such as a report, run chart, data table, presentation, etc.

PREDICTION: We think that when we make this change _____, the direct result will be _____.

The data or information we will use to study this prediction is: _____. We will get this data/information by _____ (describe how you will get it.)

The products that we will use to show our results are _____.

RESOURCES: What resources do you need to implement the initiative. Examples include: currently available or new resources needed: people, report development, technology needs, data needs, collaborations with other offices or agencies, etc. Are there resources you need beyond your authority to ask, direct or employ? This is an opportunity to share with the QIC.

The resources we need are:

Do Describe what actually happened when you ran the test. Describe what worked well. What positive aspects did you observe and experience? Describe the barriers or challenges. What made those things difficult? What impact did they have on the test? Describe how you collected and analyzed the data you needed.

What happened was...

What worked well was...

The barriers and challenges were...

We collected the data / information we needed by....

Study Describe the measured results and how they compared to the predictions. What are the results of your data analysis? How did they compare to the predictions? Did the change result in the expected outcome? Describe any surprises or unexpected results. What made them surprising? How did they impact your understanding of the test? What did you learn? How will this impact your next steps?

The results of our data analysis showed....

The surprises or unexpected results were....

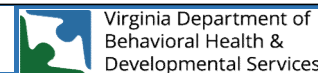
We learned... This will impact what we do next by....

Act Describe what you learned and what you will do next: Adapt, Adopt or Abandon? Adapt: Change some things about this Plan and test it again. Adopt: This change worked and maybe we can 'hard wire' it into our practice, and expand it to other areas if appropriate. Abandon: This change did not work and is not worth trying again. We may revisit our AIM and Plan and start fresh.

We will () Adapt () Adopt () Abandon () Complete this strategy because _____. Next time, we will....

Background, Aim, Measure and Change (The Three Questions)

Example



| | | | | |
|-----------------------|-----------------------|------------------|---------------|----------|
| QIC Subcommittee | RMRC | < Drop-down list | Update Dates: | 7/1/2022 |
| Date Proposed to QIC: | 7/1/2022 | | | |
| Date Approved by QIC: | 7/1/2022 | | | |
| Date Implemented: | 7/16/2022 | | | |
| Date Completed: | Pending | | | |
| Key Performance Area: | Health and Well Being | < Drop-down list | | |

Background: Why was this selected for a QII? Summarize why you selected this for a QII. Why was it chosen over others? What data did you review or use? Why is it an important topic to address? Reference the other tools you have completed in the QII Toolkit and briefly summarize here.

This was selected for a QII because...UTIs are the 2nd most frequently reported serious incident in CHRIS. UTIs can be very painful and lead to serious health problems such as sepsis and even death. A recent study of UTI CHRIS reports showed that UTIs are most common among people with SIS Level 6, people living in group homes, people over age 50, and women. (Note: real data.)

Aim, Measure, Change

Aim: What is the overall goal you wish to achieve? The Aim needs to be measurable. An Aim statement is measurable when it has a numeric baseline, a numeric goal, a population, and a target date. It is connected to the Measure described in the next step. The Aim should be SMART: Specific, Measurable, Achievable, Realistic/Relevant and Time-bound. The problem or issue should be based on baseline data. If available, benchmark data should be used. The target %/rate should be realistic and achievable. The population should be specified. The target date is the date the group would like to achieve the result and complete the QII. Define key terms that could be interpreted in different ways. If baseline data are not available, explain why; the QII should demonstrate how you plan to obtain it.

Our goal is to improve ___ for _ (priority population) to ___ (desired %, rate, etc.) by ___ (target date). The baseline was ___ (% , rate, etc.) during ___ (date or time frame for baseline). Our goal is to improve the rate of Level II or Level III UTIs for individuals with DD (priority population) to 20.2 per 1,000 (desired %, rate, etc.) by July 30, 2022 (target date). The baseline was 22.4 per 1,000 (% , rate, etc.) during October 1, 2019-September 30, 2020 (date or time frame for baseline) (Note: THIS BASELINE DATA IS REAL FOR THIS EXAMPLE.) Note: This would be a 10% reduction in UTIs.

Measure: How will you use measurement to know a change is an improvement? Think about: What measure or data will you use? Is it a PMI or other type of measure? What is the numerator and denominator? What is the data source? How frequently will you track it? A current PMI can be used, surveillance data can be used, or a proposed PMI that will demonstrate that a change has occurred.

We will measure _____ every () month or () quarter and obtain the data from _____ (data source). We will measure the rate of UTIs among individuals on the DD waiver every (X) month or () quarter and obtain the data from matching CHRIS data with WaMS data to obtain the rate of Level II or Level III UTIs per 1,000 individuals (data source).

Data Process and Attestation: For each data source being used in the QII, identify if there is an approved, existing process document and attestation that supports this QII and the change being measured. This will involve reaching out the business owner of the data source system. If none, a process document must be developed and the data attestation completed within 90 days of the QIC approving the QII. The subcommittee recommending the QII and the business owner of the data source system are responsible for collaborating in developing the dataset process document.

List the dataset process document name: 29.13 Serious Incident Reports by type_Surveillance Rates; 29.13_29.15 RMRC Review Processes
List the dataset attestation name: 29.13 Serious Incident Attachment B:
If none exist, indicate none:
After the QIC has approved the QII, the Asst. Commissioner of Developmental Services and the QM Coordinator review and approve the dataset process document for use with the QII. This review will determine if the existing dataset process needs modification.

Change: What change(s) can you make that will result in improvement? What are the root causes of the problem and how does the change address them? Refer to the Checklist of Analysis Tools and the Causes and Solutions Tool to help identify impactful changes. Root causes can be unknown; the PDSA can focus on making a change to identify root causes.

The root cause(s) of this issue is(are) _____. The change(s) we plan to make are: _____. The root cause(s) of this issue is(are) unknown. However, we believe that providers are not comfortable discussing or helping individuals with personal hygiene issues, or noticing when a UTI may be present given its often unusual symptoms. The change(s) we plan to make are: Design and conduct provider training to improve skills and practices related to discussing and helping individuals with personal hygiene and recognizing and acting on possible signs and symptoms of a UTI.

PDSA Worksheet Example



Virginia Department of Behavioral Health & Developmental Services

Update dates: Enter the date each time you update this PDSA. 7/15/2022

Plan What change are you going to test for this PDSA? Clearly describe it. Think about it like writing a recipe, so that somebody else could follow your directions. Include who, what, when, where, why and how as needed. **NOTE: You will need a separate PDSA for each change.** Who will be involved in this PDSA? Whenever feasible, it will be helpful to involve direct care staff. RQCs should describe what they can do within the PDSA. For RQC QILs, has a subcommittee been designated to facilitate implementation? Can the RQC implement this initiative on their own given their construct of meeting quarterly?

The change we are testing for this PDSA is _____. In summary, our plan for testing this change is to _____. The change we are testing for this PDSA is to design and conduct a training on personal hygiene and signs and symptoms of UTIs that more than 60% of licensed DD providers will attend. In summary, our plan for testing this change is to track the number of providers in attendance and use a pre-test/post-test design.

| TASKS: List the tasks needed to test this change. You can add more rows for additional tasks as needed, or use the 'Additional Tasks' tab. | Owner | Indicator of Success | Anticipated Begin and End Dates: List both the begin and end dates for this task as a date range. | Date Completed | Final Result of this Task. Don't forget to update the 'Do' section as needed. | Comments |
|--|--------------------|----------------------|---|----------------|---|-------------------------|
| Establish a work group for this project. | RMRC | Meeting schedule | 7/1/2021-6/30/2022 | 7/15/2021 | Work group established | Five members |
| Develop training goals, objectives, content and duration. | OIH and Work Group | Training description | 8/1/21 - 8/31/2021 | 8/31/2021 | Goals, objectives, and content developed. | |
| Develop pre-test and post-test questions. | OIH and Work Group | Pre and post test | 8/1/21 - 8/31/2021 | 8/15/2021 | Pre/post-test developed. | good collaboration |
| Determine if registration can include pre-test questions. | OIH and Work Group | Result | 8/1/21 - 8/31/2021 | 8/15/2021 | Abandoned | Decided not to do this |
| Publicize training opportunity and open registration. | OIH | Registration | 9/1/21- 9/30/2021 | 9/1/2021 | Publicized training | Provider listserv email |
| Conduct web-based training. | OIH | Recording | On 11/30/2021 | 11/8/2021 | Training conducted | |
| Collect attendees demographics and do posttest. | OIH | Attendee data | On 11/30/2021 | 11/8/2021 | Post-test done | Done |
| Analyze pre-test and post-test data and compare results. | OIH and Work Group | Report of results | 12/1/31- 12/31/2021 | 12/15/2021 | Data analyzed | DQV did this |
| Share results with the RMRC and QIC. | OIH and Work Group | Minutes | 2/1/22-2/8/22 | 2/14/2022 | Results were shared. | Done! |

PLAN TO STUDY: How will you study this change? First, make a prediction (i.e. hypothesis). Then, plan how you will test that prediction. Studying your change is different than measuring your Aim. For example, if you provided an educational resource or training, did it result in improved knowledge or practice? If you implemented a new tool, did people use it correctly? What data or information do you need, and how will you get it? Then - What products will show your results? You can use tools such as a report, run chart, data table, presentation, etc.

PREDICTION: We think that when we make this change _____, the direct result will be _____. We think that when we conduct this training (describe the change), the result will be participants will feel more comfortable and have additional skills for discussing and helping with personal hygiene issues, and be able to identify and act on signs and symptoms of UTIs.

The data or information we will use to study this prediction is: _____. **We will get this data/information by** _____ (describe how you will get it.) The data or information we will use is: Pre-test and post-test data. We will get this data/information by Sending training participants a pre-test, and conducting a test (post-test) following the training to assess change in knowledge, attitudes and practices (describe how you will get it.) Pre-test questions will assess participants' baseline comfort and practice related to helping individuals with personal hygiene and recognizing signs and symptoms of a UTI. The post-test will include questions to assess whether participants improved in knowledge, skill and opinion in these areas.

The products that we will use to show our results are _____, a brief report showing pre-test and post-test results and describing changes.

RESOURCES: What resources do you need to implement the initiative. Examples include: currently available or new resources needed: people, report development, technology needs, data needs, collaborations with other offices or agencies, etc. Are there resources you need beyond your authority to ask, direct or employ? This is an opportunity to share with the QIC.

The resources we need are: The resources we need are staff to design and conduct the training. A mechanism to promote the training and track participants. Staff to design and implement the pre and post test.

Do Describe what actually happened when you ran the test. Describe what worked well. What positive aspects did you observe and experience? Describe the barriers or challenges. What made those things difficult? What impact did they have on the test? Describe how you collected and analyzed the data you needed.

What happened was...we planned the training and the pre/post-test. We decided to offer the training several times. So far we have done the first training.

What worked well was...The training information and materials were designed to meet the learning objectives. We were able to do a pre-test for people who registered and also count the number of people who registered. We were able to offer a post-test to people who attended the training.

The barriers and challenges were...It was not easy to match the post-test with the pre-test because of how the web-based training system is set up. We had to do it manually and were not able to include all attendee's responses.

We collected the data / information we needed by...Doing a pre-test and post-test to assess improvement in knowledge and skills. Out of 150 attendees, we were only able to match 40 pre-tests to post-tests. This is an area for improvement. NOTE: FAKE DATA HERE FOR THE EXAMPLE

The results of our data analysis showed... For the 40 participants with matched pre-tests and post-tests, 85% gained knowledge and skills regarding personal hygiene, and 70% said they learned new strategies to identify UTIs. We feel these are successful results. NOTE: FAKE DATA HERE FOR THE EXAMPLE

The surprises or unexpected results were...When we just looked at the pre-test results, we were surprised at the low percent of people who felt comfortable talking about hygiene of sex organs as it relates to UTIs; out of 150 people, 30% said they felt comfortable doing this. NOTE: FAKE DATA HERE FOR THE EXAMPLE

We learned... that this training meets a need. Also, we need a better system to match pre-tests to post-tests, or just do a post-test that assesses knowledge before and since the training. **This will impact what we do next by...**Testing out a retrospective post-test.

Study Describe the measured results and how they compared to the predictions. What are the results of your data analysis? How did they compare to the predictions? Did the change result in the expected outcome? Describe any surprises or unexpected results. What made them surprising? How did they impact your understanding of the test? What did you learn? How will this impact your next steps?

Act Describe what you learned and what you will do next: Adapt, Adopt or Abandon? Adapt: Change some things about this Plan and test it again. Adopt: This change worked and maybe we can 'hard wire' it into our practice, and expand it to other areas if appropriate. Abandon: This change did not work and is not worth trying again. We may revisit our AIM and Plan and start fresh.

We will (X) Adapt () Adopt () Abandon () Complete this strategy because _____. **Next time, we will...**The training worked well and met a need but we want to adapt how we do the pre/post-test to get better data. Next time, we will...do the 2nd training and try a retrospective post-test approach where we ask training attendees to report their knowledge and skills before and after the training, in one questionnaire.