Overview: QII Toolkit

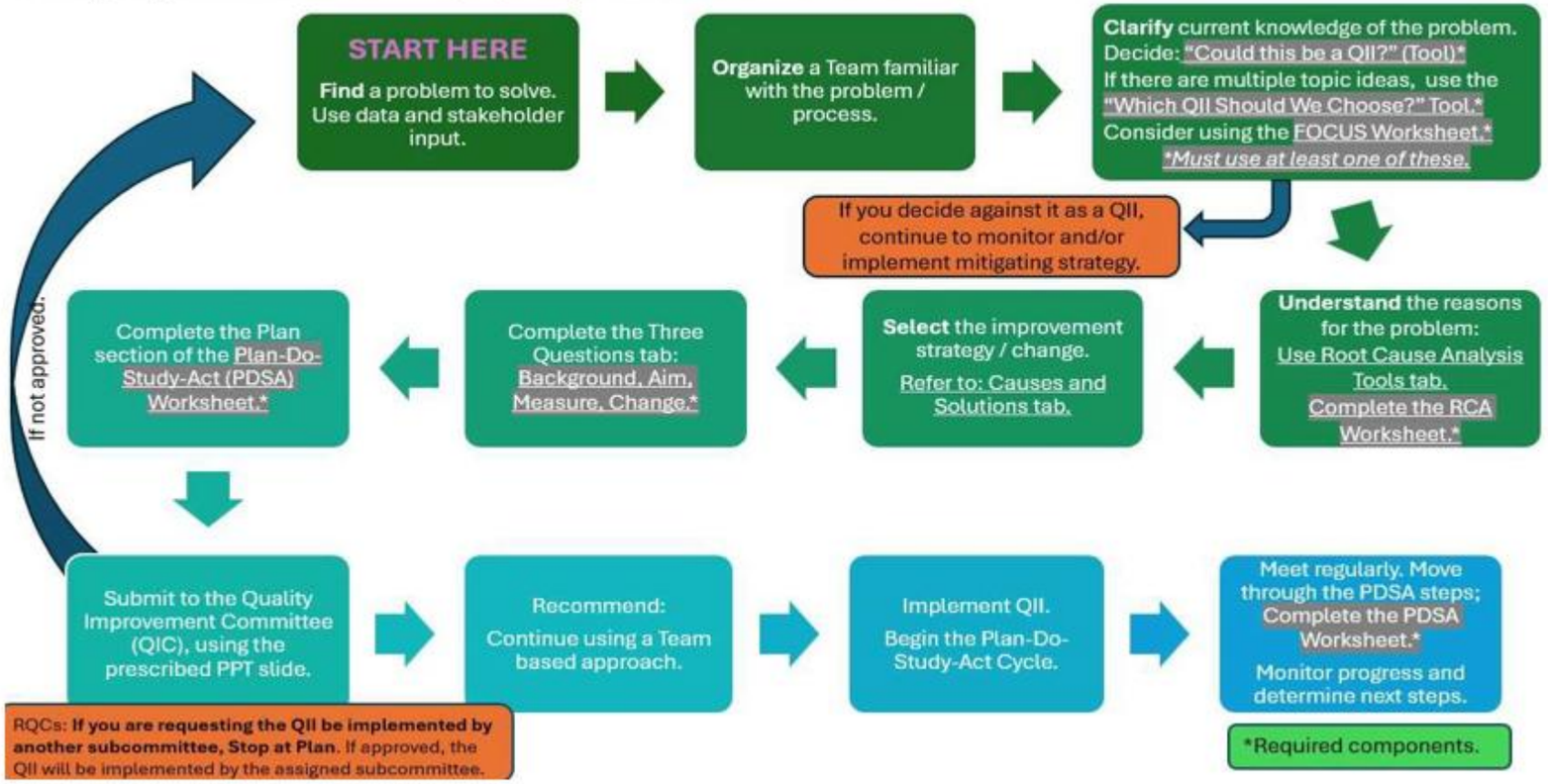
DBHDS Virginia Department of Behavioral Health and Developmental Services

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.
Requirements	At least one of these tools is required before doing the Three Questions and PDSA: 1. Could This be a QII? 2. Which QII Should We Choose? 3. The FOCUS Worksheet Also required: the RCA Worksheet, the Three Questions and the PDSA Worksheet.
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.
FOCUS Worksheet	This tool helps teams think through important questions to prepare to do a QII: find an opportunity to improve, organize a team, clarify the problem, understand causes of the problem, and select a change strategy.
RCA Tools and RCA Worksheet	RCA tools is a list of tools with relevant links that teams can use to conduct a Root Cause Analysis. The RCA Worksheet is a place for teams to summarize the important details of the RCA when it has been done.
Change Ideas	This is a list of potential changes that teams and review and consider.
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 plan-do-study-act (PDSA) cycle, which is part of the Model for Improvement. 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) Proposal Process – Flow Chart



Quality Improvement Initiative (QII) Process - Flow Chart
1.Find a problem to solve. Use data and stakeholder input.
2.Organize a Team familiar with the problem / process.
Be sure to include key offices who will play a role in the QII.
3.Clarify current knowledge of the problem.
1.Decide: “Could this be a QII?” (Tool)*
2.If there are multiple topic ideas, Use the “Which QII Should We Choose?” Tool.*
3.Consider using the FOCUS Worksheet.*
***Must use at least one of these.**
4.Understand the reasons for the problem:
1.Use Root Cause Analysis Tools tab.
2.Complete the RCA Worksheet.*
NOTE: RCA Should occur before proposing to the QIC.
5.Select the improvement strategy / change.
1.Refer to: Causes and Solutions tab.
6.Complete the Three Questions tab: Background, Aim, Measure, Change.*
7.Complete the Plan section of the Plan-Do-Study-Act (PDSA) Worksheet.*
Note: QIIs that are very similar must have different changes.
8.Submit to the Quality Improvement Committee (QIC), using the prescribed PPT slide.
Submit slide and toolkit to OCQM approximately 3 weeks before QIC meeting.
9.Recommend continuing to use a Team based approach.
10.Implement QII. Enter into Plan-Do-Study-Act Cycle.
Meet regularly. Complete the PDSA Worksheet.* Monitor progress and determine next steps.
*Indicates required worksheets.

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

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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	Additional Information to Consider	*Examples*	Yes or maybe	No or unknown
1	**Compelling data**	**Do we have enough data to show this is a persistent, ongoing or concerning problem?**	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	**Systemic problem**	**Is there evidence that this is a system-wide problem, or region-wide for RQCs?**	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	**Complex problem**	**Is this a complex problem, where there are multiple possible causes and solutions?**	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, there are many possible solutions at the individual, provider and community level.* ***No/unknown:*** *For the problem of fixing specific medical equipment, the fix is straightforward and easy to implement.*		
4	**Persistent problem**	**Have attempts been made to solve this problem (mitigating strategies) and they were not successful, or did not last?**	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	**Varying problem**	**Could this problem be solved, at least in part, by expanding or standardizing best practices?**	Best practices that could be expanded or standardized include data collection, training, tools, processes, and protocols.	***Yes/maybe:*** *There are known strategies to reduce med errors but they aren't consistently implemented statewide.* ***No/unknown:*** *For a problem like increasing transportation providers in a low resource community, best practices may be unknown and need more research.*		

Tool: Which QII Should We Choose? 2.0

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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 members. 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. 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 served.	**COST:** The extent to which a QII would reduce costs to DBHDS. *Cost examples: staff time, training, resources and/or hidden costs.*	**RELEVANCE:** The extent to which a QII would positively affect individuals' quality of life and/or care.	**RESPONSIVENESS:** The likelihood a QII on this issue would address a need expressed by individuals, families 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							
0							
0							
0							
0							
0							

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.

FOCUS Worksheet	Using the FOCUS Steps can help a quality improvement team prepare for using the Model for Improvement and PDSA Cycles.	DBHDS Virginia Department of Behavioral Health and Developmental Services
F: Find a problem or process to improve	What problem(s) 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?	
O: Organize a team that is familiar with the problem	What is the role of the team? Understand the team's purpose.	
	Who should be on your team? How can you bring in the voice of all stakeholders?	
	How can you have effective team meetings? Think about agendas, notes and communication.	
C: Clarify current knowledge of the problem	What is your data really telling you? What is the story? Do you need additional information?	
	What else do you know about the issue? 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?	
U: Understand the reasons for the problem - **ALSO SEE RCA WORKSHEET**	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?	
S: Select the improvement strategy	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?	

Source: American College of Cardiology. Introduction to Quality Improvement and the FOCUS-PDSA Model. Link: https://cvquality.acc.org/clinical-toolkits/qi-toolkit

Root Cause Analysis (RCA) Tools

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	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 Resouce - 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.		

NOTE: Many of these tools, and more, are also available in the IHI Quality Improvement Essentials Toolkit. Login required.
http://www.ihi.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx

Root Cause Analysis Worksheet

A strong Root Cause Analysis is the foundation of an effective quality improvement initiative.

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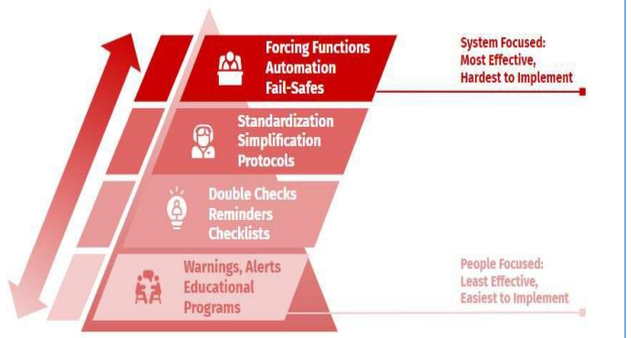
Problem Statement: Clearly state the problem you are trying to solve, or issue you are trying to improve.	
Who conducted your RCA?	
Date your RCA began (MM/DD/YYYY):	
Date it was Complete (MM/DD/YYYY):	
Which Root Cause Analysis Tool(s) did you use? USE DROPDOWN 1:	
Which Root Cause Analysis Tool(s) did you use? USE DROPDOWN 2:	
Which Root Cause Analysis Tool(s) did you use? USE DROPDOWN 3:	
If OTHER - Please describe:	
What did you learn as a result of your Root Cause Analysis? What are the main root causes of your problem?	
Which root cause(s) do you plan to address?	
Check your work: If you address one or more of these root causes, will it help solve/improve the problem?	____Yes ____Maybe ____No
If possible, COPY and PASTE the final RCA product below. *E.g., your Pareto Chart, Fishbone Diagram, 5 Whys, etc.*	

Tools and strategies to identify and select solutions / changes
Use the results and what you learned from your RCA about causes, that might identify solutions.
Create or use a Driver Diagram - A visual display of the strategies that contribute to achieving a set goal or objective. Similar to a logic model.
Creative thinking techniques, e.g., brainstorming
Surveys, focus groups, key informant interviews to identify changes; include people doing the work.
Review the best available evidence for what works:
a) Literature, other evidence of effectiveness - journal articles, evidence based practices
b) Ideas of peers, experts in the field - providers who have successes, '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 making - Examples: a PICK chart, voting, a pro/con list, voting and ranking.
Additional change ideas
Standardize internal (agency) policies and practices
· Develop and adopt topic-related policies and procedures
o Includes information on documentation, communication, referral processes
· Provide training for staff on topic-related policies and procedures
· Have a process to help assure that topic-related policies and procedures are followed
· Have approved/available/accessible topic-related print and electronic materials
Build capacity of and support for staff to address the topic-related issue
· Have topic-related professional development competencies
· Have topic-related training requirements and content
· Establish topic-related performance measures
· Have topic-related 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 and support
o Reflective supervision as an option
· Ticklers/reminders for using topic-related screenings/assessments/tools on a schedule
· Promote topic-related team based practices/care
· Establish referral and linkage process to topic-related internal and/or external treatment health resources/professionals
· Identify and correctly utilize topic-related appropriate screening/assessment instrument (tool)
o Consider periodicity/frequency of utilizing the tool
o Timely, specific and communication of the results to individuals/families
o Response protocol based on results (urgent vs. non-urgent)
o Train staff on tool use and protocols + periodic refresher training
Create community linkages and support systems
· Establish cooperative relationships with key community partners
· Establish relationships with topic-related support groups
· Establish relationships with medical and educational field
· Close loops of communication for referrals, accessing/engaging in supports and services
· Create MOUs with topic-related community partners
· Have up to date topic-related resource lists
· Create topic-related teams that include external partners
Engage individuals and families
· Inform families of the benefits of topic-related information
· Individual is empowered to meet their topic-related goal
· Staff engage in individual-led conversation related to topic
· Use of best practice/evidence-informed strategies to enhance topic-related practices
· Use evidence-based curriculum (and other materials) for families
· Utilize effective counseling strategies
· Use practices/resources to strengthen family support systems

Fig. 1. Hierarchy of Effective Interventions



Source: https://canadiem.org/checklists-and-the-hierarchy-of-effectiveness/

Reference: Incident Analysis Collaborating Parties. Canadian Incident Analysis Framework. Edmonton, AB: Canadian Patient Safety Institute; 2012. https://www.healthcareexcellence.ca/media/gilnw3uy/canadian-incident-analysis-framework-final-ua.pdf

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

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Quality Improvement Initiative

QIC Subcommittee		< Drop-down list	Update Dates:	
Date Proposed to QIC:				
Date Approved by QIC:				
Date Implemented:				
Date Ended*:				
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 _____(the problem) 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/ ( ) quarter/ ( ) year 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 Director of Quality Improvement Analytics and Processes 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) we plan to address is(are) _____. The change(s) we plan to make are: _____.
***Summary:** Once a QII is ended, please provide a **brief** summary of the QII and why it was ended. Summary *could* include how many PDSAs were done, a highlight of key accomplishments, major barriers and/or lessons learned.	Brief summary of QII: What was accomplished during the QII? Was your aim met? ( ) Aim met ( ) Aim not met ( ) Other - explain: We have decided to end this QII because:

PDSA Worksheet

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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 plan to make for this PDSA is _____.
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

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 undersatnding 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 this strategy because _____.
How does this impact your overall QII?
If you Adapt this change, what will you do differently next time?

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

Example

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Quality Improvement Initiative

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:	7/15/2022			
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, Measureable, 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.

***Summary:** Once a QII is completed or abandoned, please provide a **brief** summary of the QII and why it was completed or abandoned. Summary *could* include how many PDSAs were done, a highlight of key accomplishments, major barriers and/or lessons learned.

Brief summary of QII: **This QII was abandoned/completed because:**
We implemented several change cycles focused on improving knowledge, skills and practices. While our questionnaires indicated an increase in knowledge and skills, this increase did not translate into a reduction in the rate of UTIs reported in CHRIS. We collaborated with the Facilities RM QI (Melanie), Dr. Mueller (DD Medical Director), and OIH to create a change cycle focused on improving the the actual practice of recognizing and taking action of signs and symptoms of a possible UTI. This final change cycle resulted in a reducation in the rate of UTIs reported in CHRIS by 20%.

PDSA Worksheet Example

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 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 plan to make for this PDSA is _____.
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. **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.	CIH 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.	CIH 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.	CIH 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.	CIH	Registration	9/1/21- 9/30/2021	9/1/2021	Publicized training	Provider listserv email
Conduct web-based training.	CIH	Recording	On 11/30/2021	11/8/2021	Training conducted	
Collect attendees demographics and do postiest.	CIH	Attendee data	On11/30/2021	11/8/2021	Post-test done	Done
Analyze pre-test and post-test data and compare results.	CIH 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.	CIH 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 (ie. 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

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... 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.

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 (XX) 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.