



# Introduction to the Quality Council Region 4 Urinary Tract Infection (UTI) Learning Collaborative

Developed and Presented by Office of Community Quality Improvement in collaboration with the Office of Integrated Health Supports Network at the Virginia Department of Behavioral Health and Developmental Services





Time	Topic	Presenter
9:30 - 9:45	Introductions	Faculty & Participants
9:45 – 10:15	Welcome to the Learning Collaborative!	Mary Beth Cox and Pebbles Brown
10:15 - 11:45	Handwashing Presentation Behavioral Presentation Handwashing Activity & Behavioral Activity	Office of Integrated Health – Tammie Williams, RNCC Marylou Bryan, RNCC Brian Phelps, BCBA
11:45 - 12:15	Using Quality Improvement Techniques	Mary Beth Cox & Pebbles Brown
12:15 - 12:30	Question and Answer	Faculty & Participants
12:30	Adjourn	





# Welcome! Introductions

**Your Name**  
**Organization**  
**Your Role**

**What are you  
hoping to gain  
from the  
Learning  
Collaborative?**

**How long have  
you been  
providing care  
for individuals  
with IDD?**





# Learning Objectives

At the end of this presentation, learners will be able to:

- Describe the history of this project.
- State the name of the DBHDS computerized system that tracks serious incidents, illness and injuries.
- Describe how DBHDS clinical staff identifies risks to individuals with intellectual and developmental disabilities (IDD).
- Identify the leading illnesses and conditions reported as serious incidents.
- Name at least 3 reasons individuals with IDD are at higher risk for UTIs than the general population.
- Identify the goals of the Learning Collaborative.





# A Brief History of this Project

- Every year, DBHDS reviews data and examines trends in the Computerized Human Rights Information System (CHRIS).
- DBHDS uses the CHRIS system to track data relating to injuries, illness and preventable deaths among individuals with IDD in the Commonwealth.
  - Information is entered into CHRIS by licensed DBHDS providers.
- Data from the DBHDS Mortality Review Committee (MRC) is also used to better understand preventable deaths.
- DBHDS clinical staff (on an ongoing basis) research best practice evidence relating to illnesses and preventable deaths to develop trainings to reduce identified risks among individuals with intellectual and developmental disabilities (IDD) in Virginia.
- Annually, the DBHDS Region 4 (Central Virginia) Quality Council (RQC-4) examines the data and research and collaborates with community providers and DBHDS clinical staff, to identify a problem/focus for improvement and submits a Quality Improvement Initiative proposal to the Quality Improvement Committee.





# DBHDS Region 4 – CHRIS Serious Incident Data 2021-2022

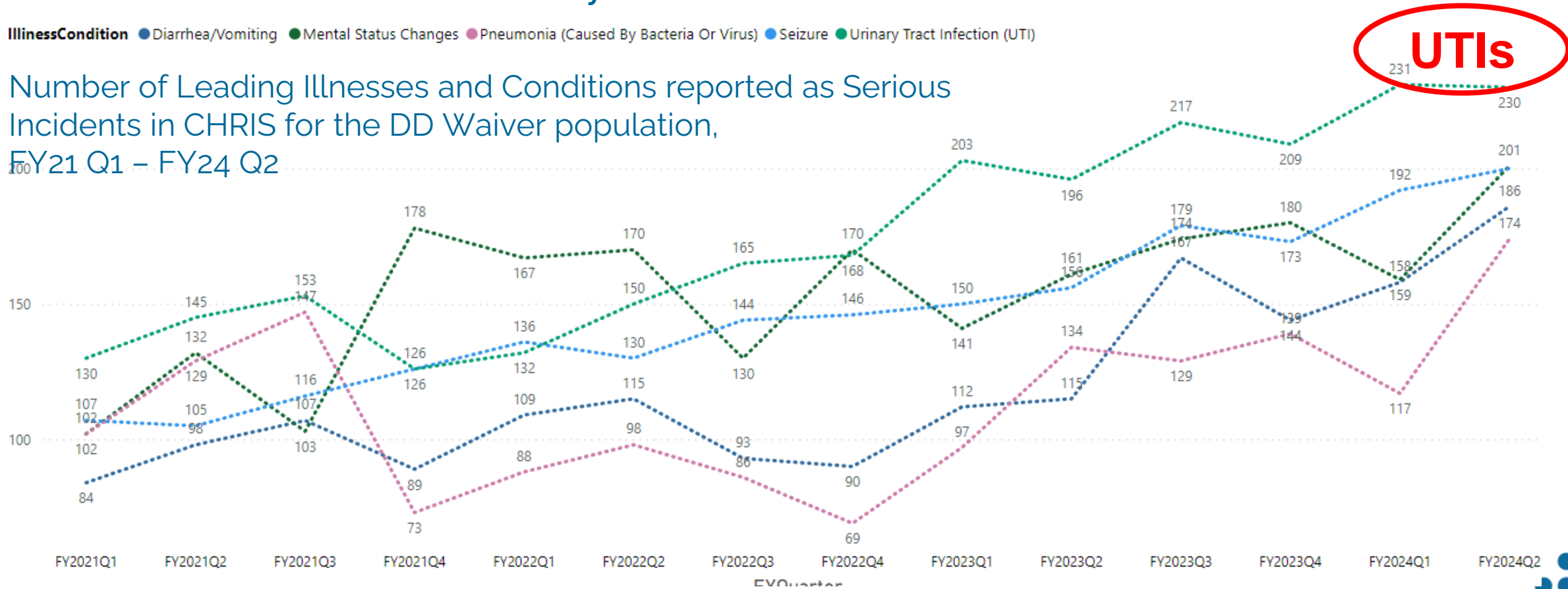
- According to a review of CHRIS serious incident data presented by Risk Management Review Committee (RMRC) for FY21 Q1- FY23 Q2, **Region 4 UTIs accounted for the third highest number of reported UTIs in the Commonwealth** (RMRC, 2023). *FY = Fiscal Year, July – June.*
- Since FY21 Q4, UTI serious incident reports have continued to increase throughout the Commonwealth and as of FY23 Q2 is **the leading serious illness reported** (RMRC, 2023).
- During FY22 Q2, the RMRC presented a special report that showed **Group Home and Sponsored Residential settings had the largest proportion of UTIs in comparison to other living situations in Region 4 and statewide** (RMRC, 2023).



## DBHDS System-Wide / State Data

IllnessCondition ● Diarrhea/Vomiting ● Mental Status Changes ● Pneumonia (Caused By Bacteria Or Virus) ● Seizure ● Urinary Tract Infection (UTI)

Number of Leading Illnesses and Conditions reported as Serious Incidents in CHRIS for the DD Waiver population, FY21 Q1 – FY24 Q2

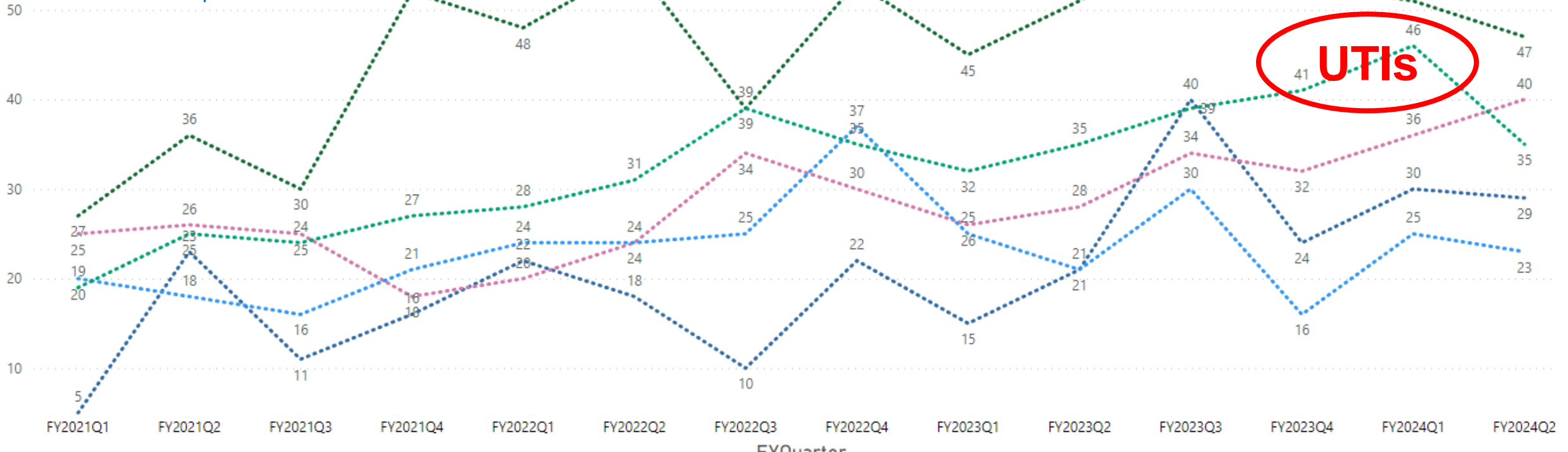




## Region 4 Data

**IllnessCondition** ● Diarrhea/Vomiting ● Mental Status Changes ● Seizure ● Suicidal Thoughts/Behaviors ● Urinary Tract Infection (UTI)

<sup>60</sup>REGION 4: Number of Leading Illnesses and Conditions reported as Serious Incidents in CHRIS for the DD Waiver population, FY21 Q1 – FY24 Q2



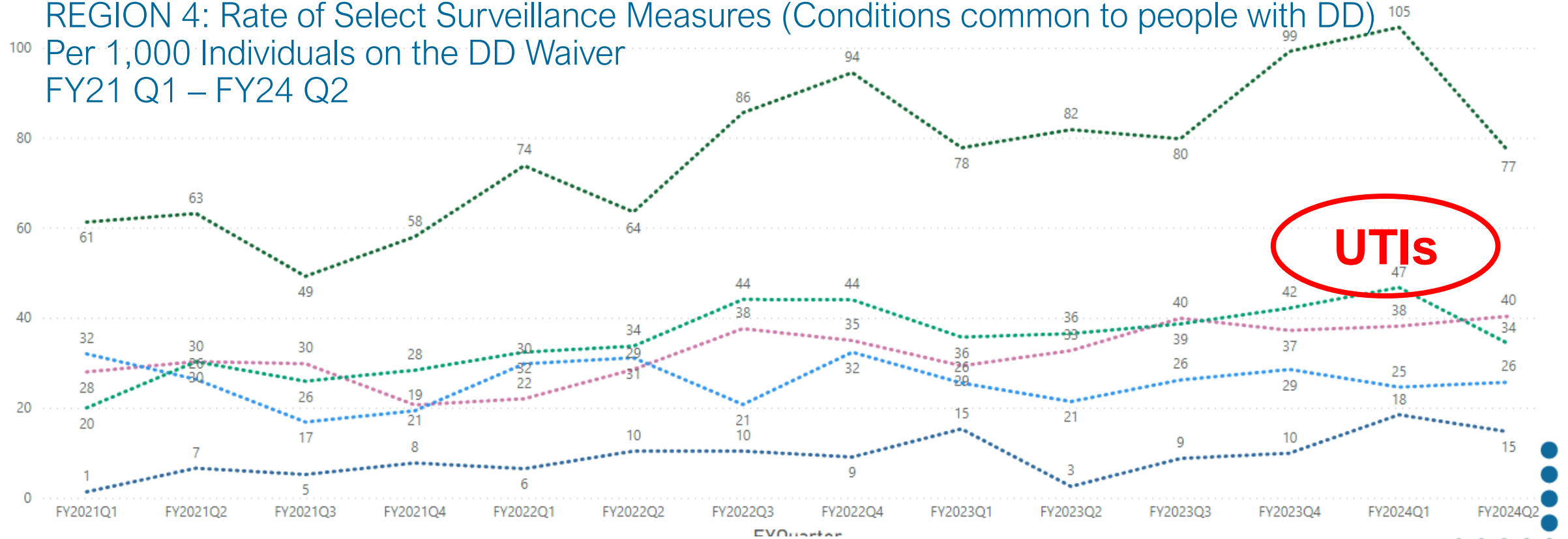




## Region 4 Data

Surveillance Measure ● Dehydration ● Fall or Trip ● Seizures ● Self-injury ● Urinary Tract Infection

REGION 4: Rate of Select Surveillance Measures (Conditions common to people with DD)  
Per 1,000 Individuals on the DD Waiver  
FY21 Q1 – FY24 Q2



**UTIs**





## What Does Best Practice Research Say About UTIs and Individuals with Intellectual and Development Disabilities (IDD)?

- Individuals with intellectual and developmental disabilities (IDD) are **at high risk for Urinary Tract Infections (UTIs)** due to a variety of reasons including, but not limited to: incontinence; dehydration; dependence on caregivers; lack of proper toileting training; poor hand hygiene practices of both individuals and caregivers; inability of caregivers to recognize signs of illness or pain; poor perineal care; inability of individuals to communicate symptoms of illness or pain; lack of training and experience among paid caregiving staff; difficulty/unease of caregivers relating to discussions of body parts and/or genitalia cleaning; etc. (Nasrolahei et al., 2013; NIDDK, 2017).
- Urinary tract infections (UTIs) are **the second leading cause of sepsis** (Flores-Mireles et al., 2015; Lajiness and Lajiness, 2019).
- **Sepsis results in many preventable deaths each year** among individuals with intellectual and developmental disabilities (Forman-Hoffman et al., 2015).
- Individuals with IDD receive a poorer quality of healthcare than those among the general population (Burke and Heller, 2017; St. John et al., 2018).





# Best Practice Research on Healthcare Quality Among Individuals with IDD

## Factors Contributing to the Poor Healthcare Quality Individuals with IDD Receive:

- Poor accessibility in exam rooms negatively impacts and limits clinical assessment.
- Communication difficulties (may be non-verbal or have unclear speech).
- Cognitive issues (lack of ability to understand or communicate what they are feeling, where they are feeling it and when symptoms started;..
- Cognitive issues (many do not understand abstract ideas (nausea, heartburn, itching, confusion, dizziness, etc.)
- Behavioral Issues (inexperienced clinicians attribute crying, etc. to assumed/contrived behavior issues instead of attributing them to pain, achiness, lethargy, discomfort, serious illness, etc.
- Multiple co-occurring conditions often cloud a clinician's judgment.
- Poor communication between caregivers and acute care staff.
- Feelings of indifference of healthcare staff towards IDD individuals (negative views relating to the individual's quality of life, physical deformities, behavior, etc.)
- Delays in ordering diagnostic and/or lack of diagnostic testing led to preventable deaths (i.e. Fatal 7).





## RQC4 QII Process Steps

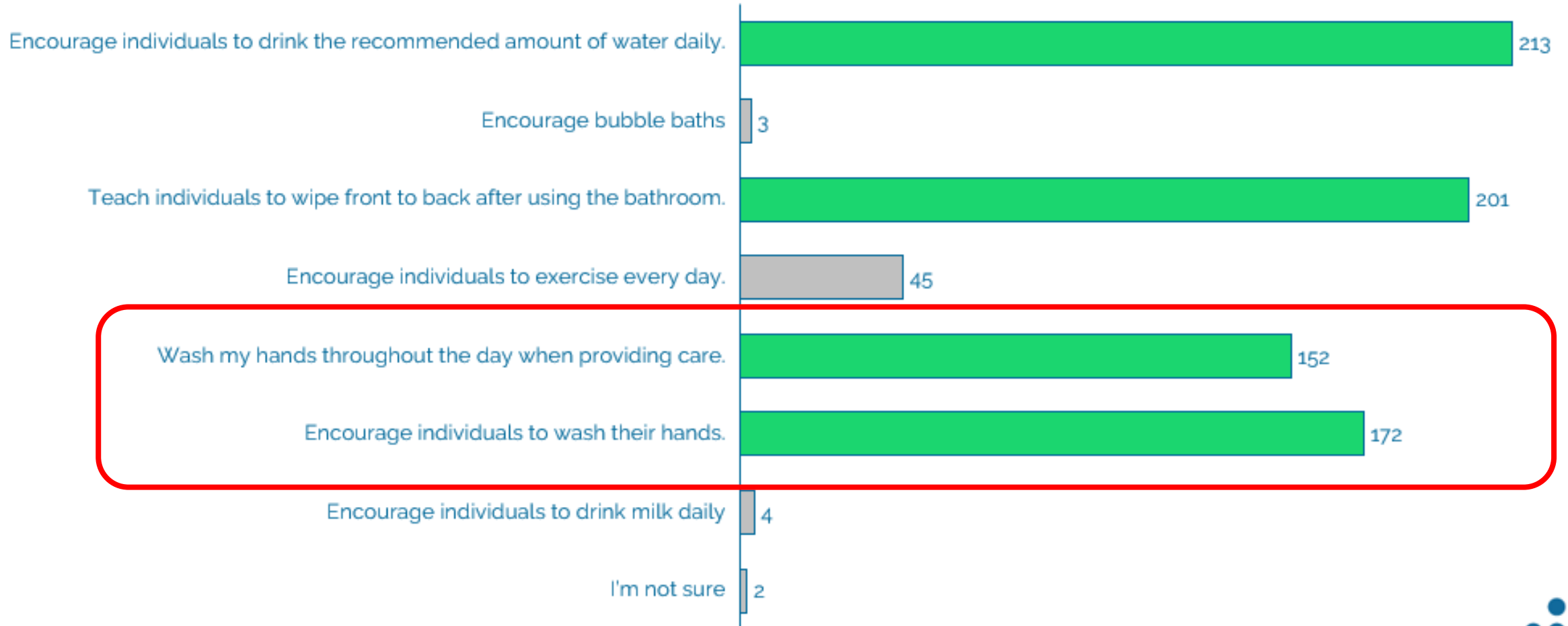
- Urinary Tract Infections was identified as a risk to individuals with IDD in Region 4 based on the data.
- Best practice recommendations to reduce risk of Urinary Tract Infections among individuals with IDD were identified.
- Direct Support Professionals and Supervisors were surveyed to assess current knowledge and caregiving practices relating to UTIs.
- Current UTI knowledge and training gaps were identified within the survey.
- Collaborated with DBHDS licensed providers in Region 4 and DBHDS clinical staff to develop a plan for change/improvement to address UTI knowledge and training gaps.
- The Learning Collaborative for DBHDS licensed providers in Region 4 was established.





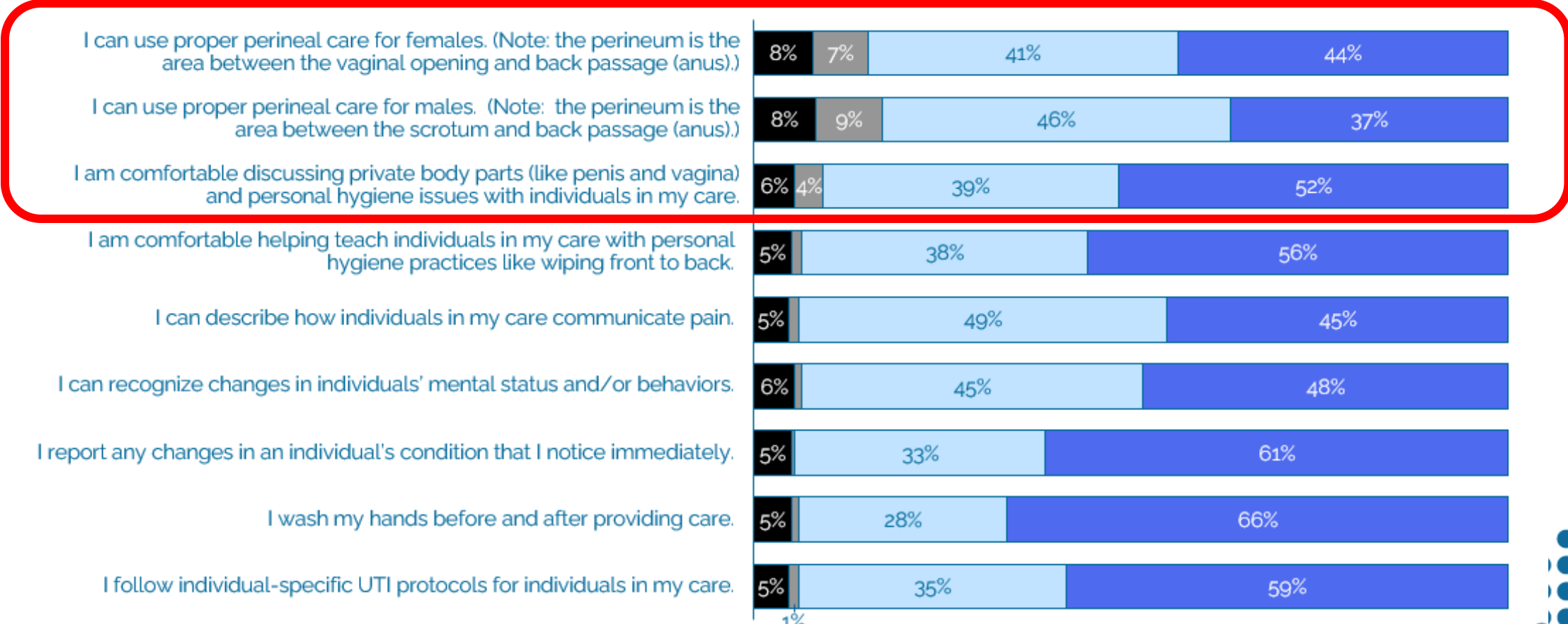
How can you help reduce the risk of a UTI in an individual? Check all that apply.

Correct responses

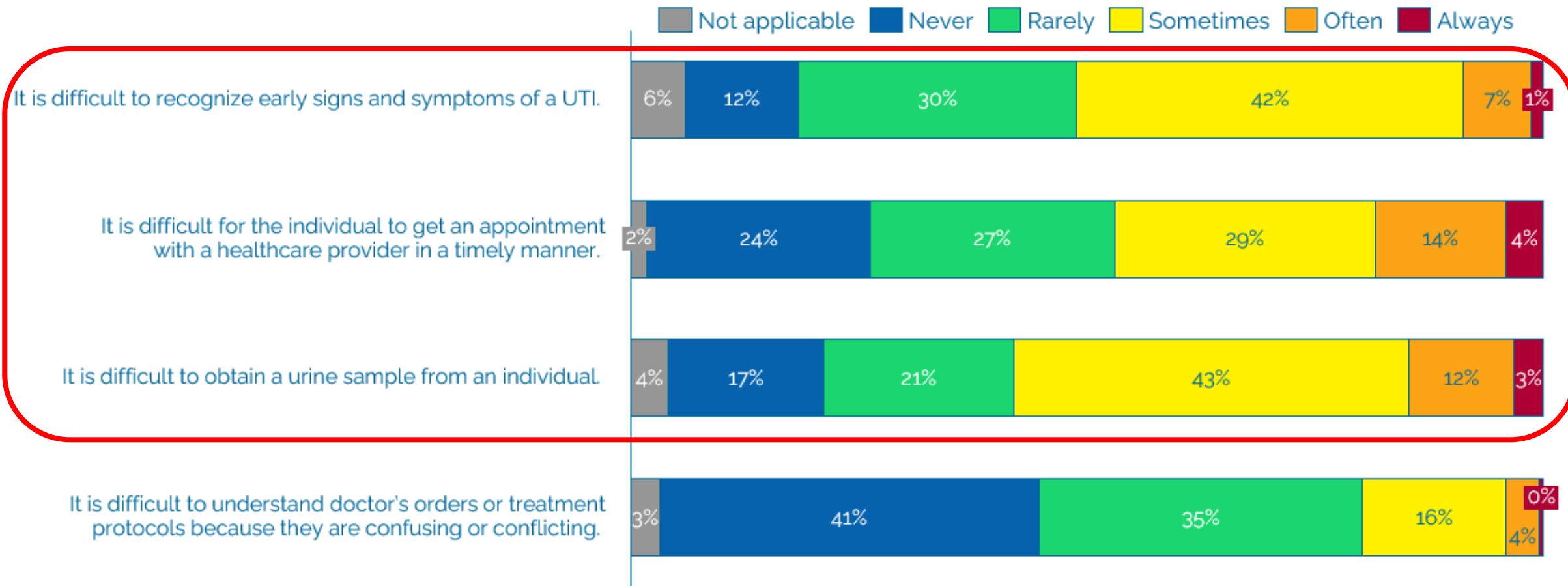


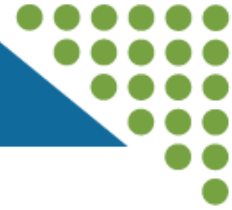
The following statements are about your familiarity with UTIs and related issues. Please rate how much you agree with the following statements.

Strongly disagree
  Disagree
  Agree
  Strongly Agree

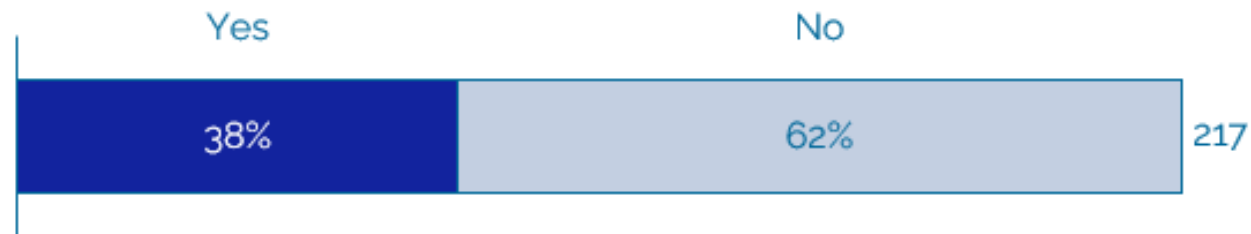


How often do you experience the following barriers?

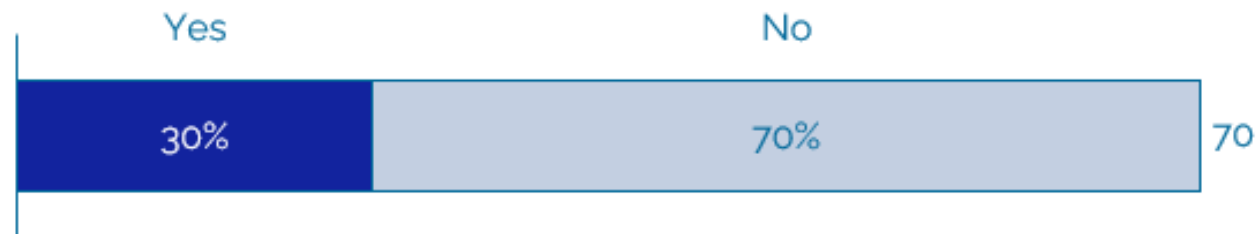




Have you heard about the My Care Passport from the DBHDS Office of Integrated Health?



(If yes) Have you used the My Care Passport for the individuals that you serve?





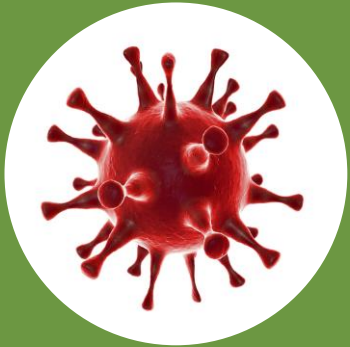


Topics Identified	Description	Tool / Resource
<p><b>Hand hygiene/ Handwashing</b></p>	<p>Proper handwashing/hand hygiene, for staff and individuals receiving services, is critical to preventing UTIs. It prevents the spread of germs from one person to another.</p>	<p>Demonstration of proper handwashing/ hand hygiene. Instructions on the frequency and timing of handwashing. Ideas for fun ways to encourage proper handwashing in your organization.</p>
<p><b>Perineal care (peri-care) for males and females</b></p>	<p>The perineum is the area between the penis or vagina, and the rectum. UTIs are caused by bacteria that enter the urethra, or the tube that allows urine to leave the body when you urinate. Proper perineal care is important to prevent bacteria from entering the urethra.</p>	<p>A video that demonstrates proper perinatal care for males and females with developmental disabilities.</p>
<p><b>Timely medical care for UTIs</b></p>	<p>It is important to get medical treatment for UTIs as soon as possible. It helps to have a plan where an individual can get medical care.</p>	<p>A ‘Local Medical Care Card’ that lists the primary, urgent, and emergency medical care locations, and contact information, that an individual can go to in the event of an urgent health matter. Also includes the OIH My Care Passport.</p>
<p><b>Obtaining urine for a urinalysis</b></p>	<p>It is important to get a clean catch of urine to test for UTIs using urinalysis.</p>	<p>A resource that describes how to get a clean urine sample for individuals who have developmental disabilities.</p>





## RQC - Region 4 Learning Collaborative Plan



Reduce UTIs



Identify knowledge and training gaps relating to UTIs



Recruit providers to participate

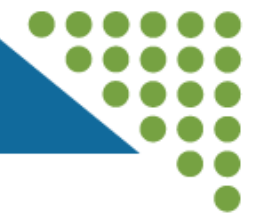


Ongoing education, sharing and support to providers



Collecting and sharing of data to track progress towards the goal





Learning Collaborative Schedule of Events	Duration
<ul style="list-style-type: none"> <li>✓ Information session Thursday Feb. 29, 2024, 10:00 am – 11:00 am</li> </ul>	30 minutes
<ul style="list-style-type: none"> <li>✓ Pre-work Due: Registration Information Due: Friday March 8, 2024</li> </ul>	60 minutes
<ul style="list-style-type: none"> <li><b>Introduction meeting &amp; Topic 1</b> Thursday March 28, 2024, 9:30 am – 12:30 pm – <b>IN PERSON*</b> <b>This will be in Richmond, Virginia. Carpooling is encouraged.</b> <b>Limited parking passes available.</b></li> </ul>	<b>3 Hours</b>
<ul style="list-style-type: none"> <li><b>Meeting 2 - Virtual &amp; Topic 2</b> Thursday April 25, 2024, 10:00 am – 11:30 am</li> </ul>	90 minutes
<ul style="list-style-type: none"> <li><b>Meeting 3 - Virtual &amp; Topic 3</b> Thursday May 30, 2024, 10:00 am – 11:30 am</li> </ul>	90 minutes
<ul style="list-style-type: none"> <li><b>Meeting 4 - Virtual &amp; Topic 4</b> Thursday June 27, 2024, 10:00 am – 11:30 am</li> </ul>	90 minutes
<ul style="list-style-type: none"> <li><b>Meeting 5 - Virtual - Wrap-up</b> Thursday July 25, 2024, 10:00 am – 11:30 am</li> </ul>	90 minutes





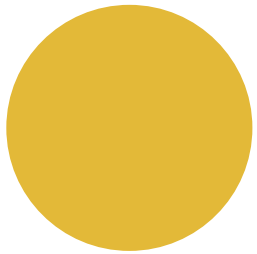
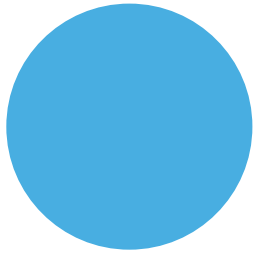
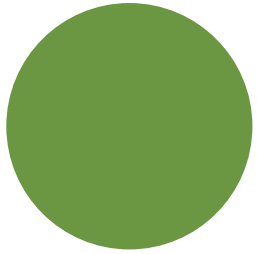
# Remember

- Please attend each call to the best of your ability.
- Please actively participate in discussions by asking questions and sharing your opinions and what you have learned.
- Please take information you learn back to your organization and share it with your team members, especially DSPs who work directly with individuals.
- Please collect and submit the data elements each month in a timely fashion.
- Please utilize the quality improvement tools, for example the plan-do-study-act cycle worksheet, to test the changes in your organization.





# Handwashing





# Using Quality Improvement Tools in the Learning Collaborative

By:

Mary Beth Cox, MSW, MPH, QI Coordinator





# Learning Objectives

Participants will...

- Define the components of Quality Improvement.
- Be able to describe the Model for Improvement and Plan-Do-Study-Act Cycles.
- Help establish and state the Aim, Measure and Change of the Collaborative.
- Be able to use the PDSA Worksheet Job Aid.
- Describe how to collect and submit monthly data.



# What is Quality Improvement?

Quality Improvement is:

- An ongoing effort to achieve measurable improvements in quality.
- A way to improve efficiency, effectiveness, performance, accountability, and outcomes.
- Use of a model supported by strategies, methods and tools.
- A repeatable set of steps that work best if they become a routine part of your business operations.





## The Three Questions

1

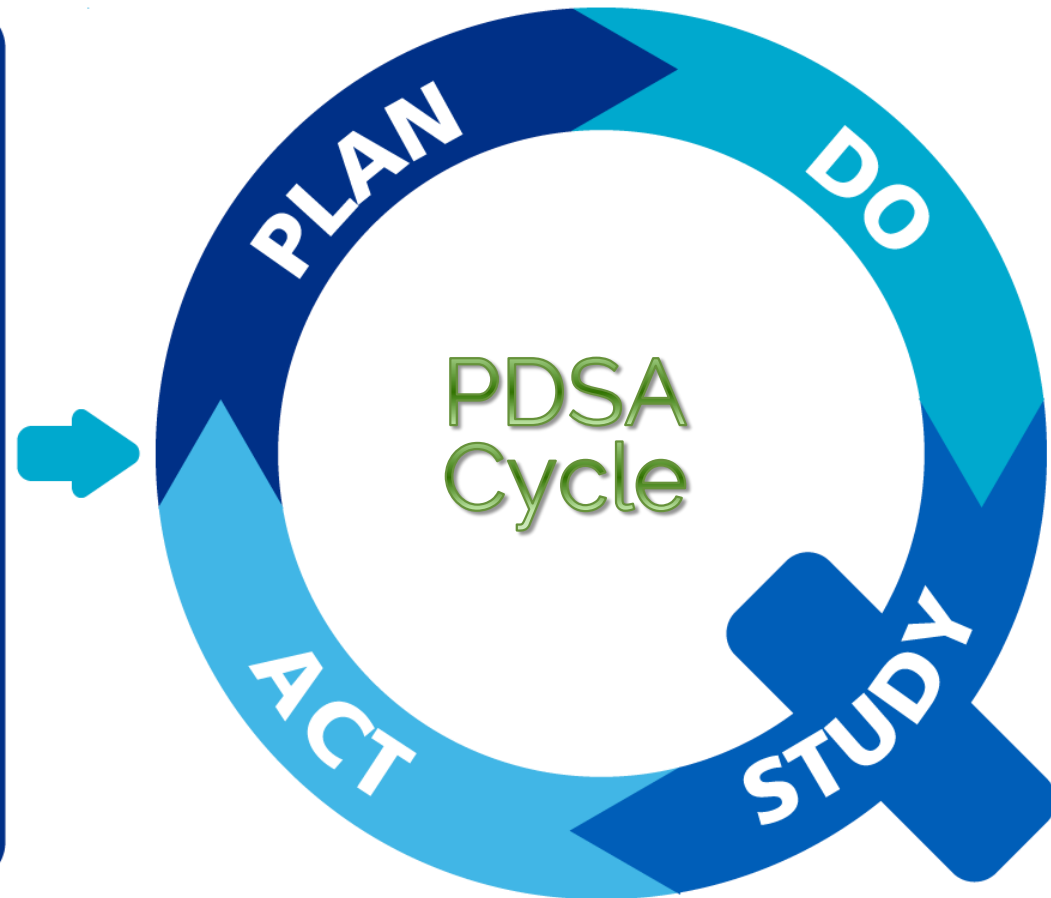
Aim  
What are we trying to accomplish?

2

Measure  
How will we know that a change is an improvement?

3

Change  
What changes can we make that will result in an improvement?





## Data: Learning Collaborative Providers

Summary data, Calendar Year 2023:

- 21% of individuals had a UTI in 2023 (16 out of 75 individuals = 21%)
- 9% of individuals had two or more UTIs
- 17% of individuals had one or more Level I UTI serious incident
- 9% of individuals had one or more Level II UTI serious incident
- 7% of individuals had two or more Level II UTI serious incidents




Thank you for submitting your baseline data!





**Aim** – The goal that the group will be working together to try to achieve.

- We aim to reduce the percent of individuals experiencing UTIs by September 2024.
- The baseline is 21% (16/75) during 2023, and the goal is 13% (10/75).



Help set the goal!

**Measure** – How will we know we have achieved our goal?

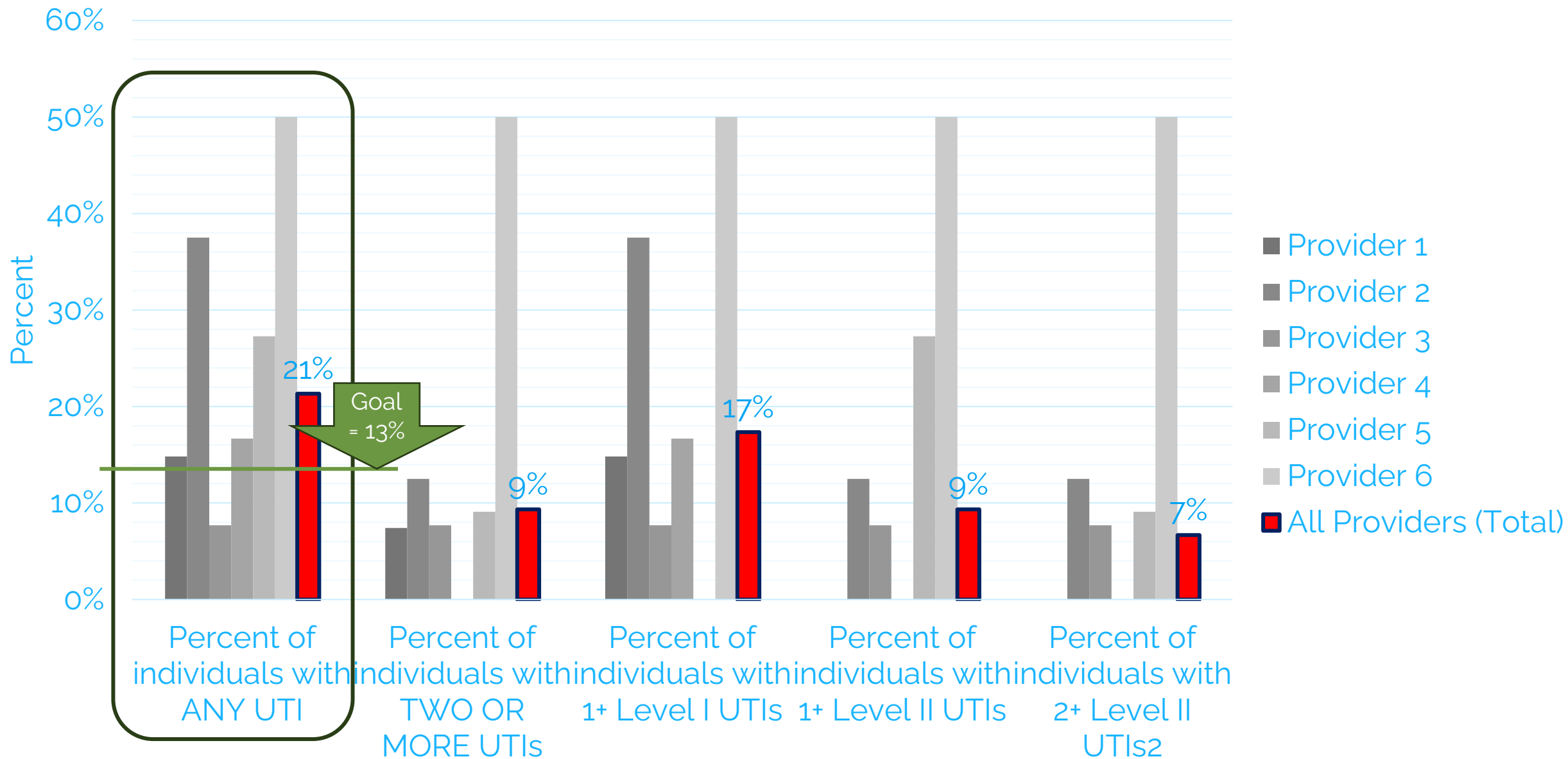
- We will measure the **number and percent of individuals experiencing any UTIs during the collaborative period (1/1/2024-9/30/2024)**. We will annualize the results to compare to 2023.
- **How we will collect the data:** Participants will report these data for the baseline period (Calendar Year 2023), and then monthly within 5 days of the following month, each month, during the learning collaborative data period, using a MS Form survey tool.

**Change** – What are we doing different to improve the problem?

- The change we are making is to provide information and resources on four prevention strategies (hand washing/hand hygiene, proper perineal care, timely medical care, and urine sample). Providers will then train their staff and use these new strategies each month, for four months.



# UTI Learning Collaborative: Percent of Individuals with UTIs among Participating Providers (N=6)



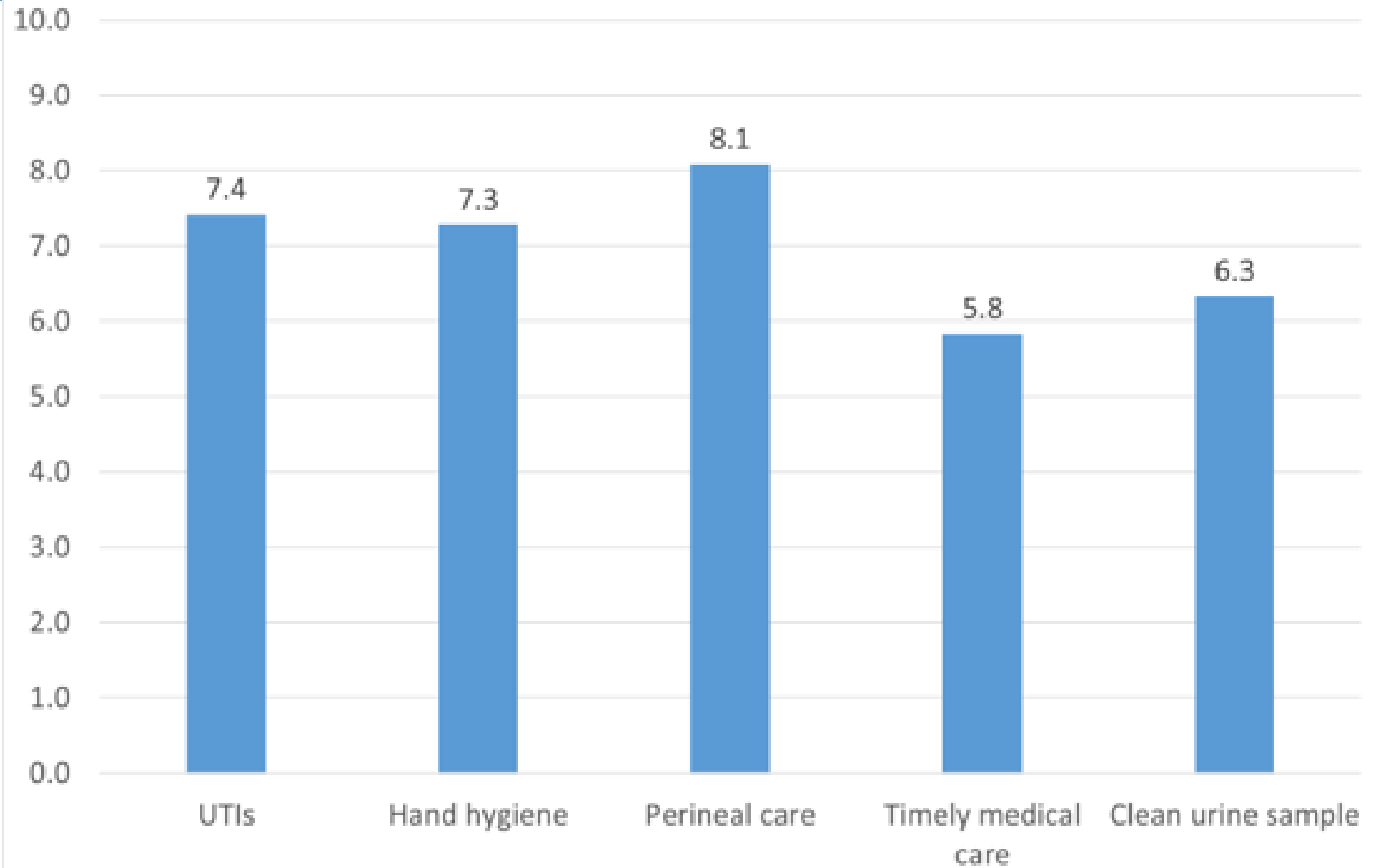
# Data Tracking

Number of UTIs	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	TOTAL
Provider 1	1						
Provider 2	0						
Provider 3	2						
Provider 4	0						
Provider 5	1						
Provider 6	2						
Total	6						

We will look at a table or graph like this every month as a collaborative and see how we are doing!

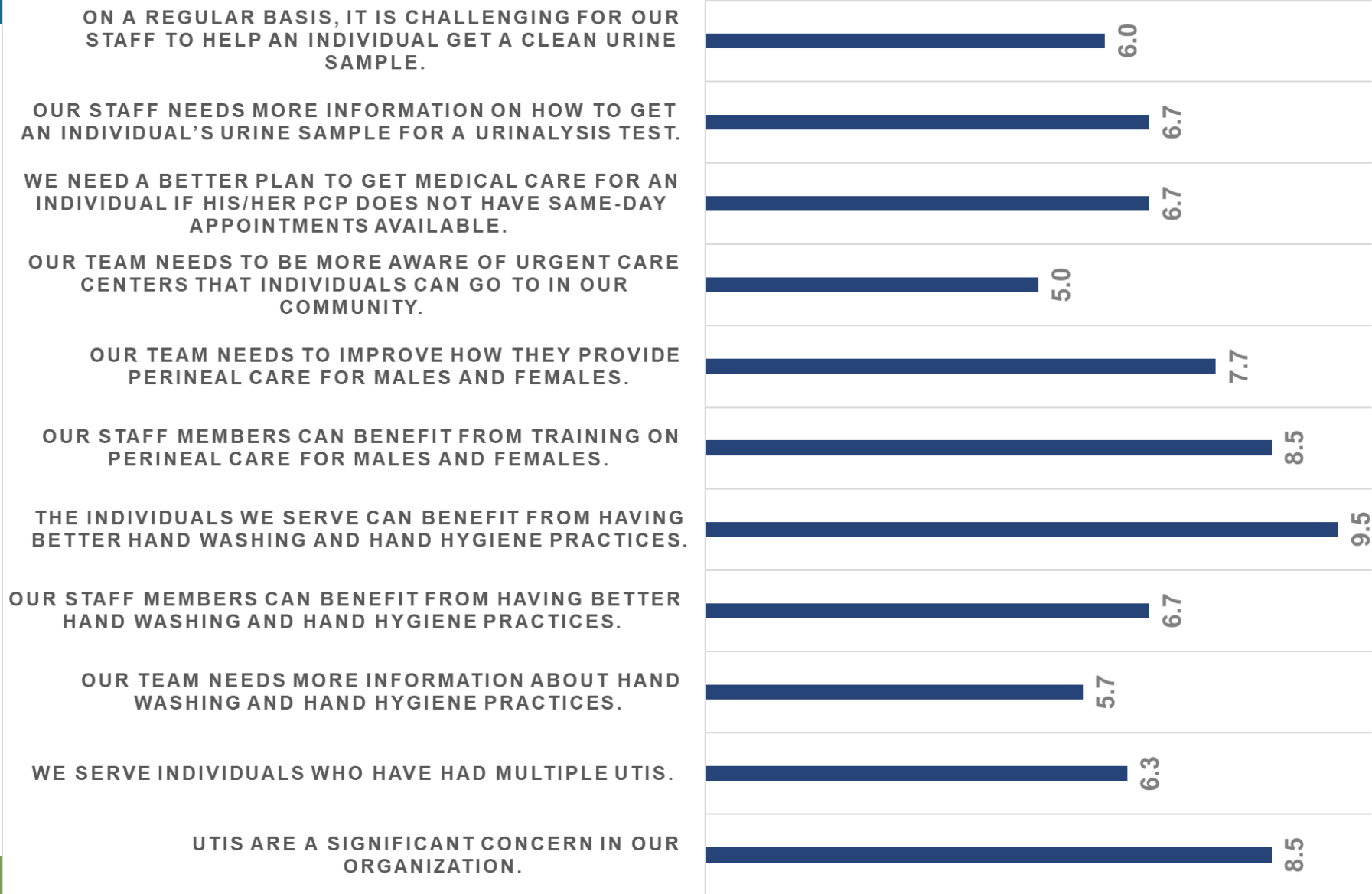
UTI Learning Collaborative - Participating Providers Self-Assessment  
Average rating (1=Low, 10=High need)

Readiness  
Assessment



UTI LEARNING COLLABORATIVE, PARTICIPATING PROVIDERS' SELF-ASSESSMENT RESULTS; AVERAGE (N=6 RESPONSES)

Readiness Assessment



# Using the Plan-Do-Study-Act Job Aid

<p><b>Aim Statement:</b> What is your baseline data, and what is your SMART objective?</p>			
<p><b>Measure:</b> Describe the measure you will use to know that a change is an improvement.</p>			
<p><b>Change:</b> What change can you make that will result in an improvement? What do you predict will happen when you make the change?</p>	Change:		
<p><b>Plan:</b> 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.</p>	Task		Result
<p><b>Do:</b> Implement your plan. Describe what happened.</p>			
<p><b>Study:</b> Study and analyze the data you collected. What did you learn?</p>			
<p><b>Act:</b> Decide what to do next. Will you adapt, adopt or abandon?</p>			

Partially Prefilled  
-Handout





## NEXT Try using the Model for Improvement<sup>2</sup> and the Plan-do-Study-Act (PDSA) Cycle.

**Aim:** What are you trying to accomplish? What is your SMART Objective? (Specific, Measurable, Achievable, Relevant, Time-bound)

**Measure:** How will you know a change is an improvement? Describe the measurable outcome(s) you want to see.

**Change:** What change can you make that will result in an improvement?

### Act and decide what to do next. You can:

**Adapt:** Modify the changes and do another PDSA cycle.

**Adopt:** Continue or expand the change in your organization.

**Abandon:** Abandon this change and select a different change to test in the next cycle.

Document and describe what changes to make for the next cycle based on what you learned.

### Study the change you made.

Study and analyze the data you collected. Document how the measured results compare to the predictions. What did you learn? Did the change result in the expected outcome? Were there any surprises, successes, failures, unintended consequences? What would you do different in another test?



### Plan a test of your change.

Document the steps that you are going to do. What is your timeline? Who will be involved? When and how will the change happen? What resources will you need? What do you think will happen when you make the change? What data do you need to collect? How will you collect it? When will you have the data?

### Do (implement) the plan.

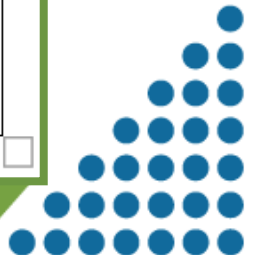
Carry out the plan on a small scale to begin with. Document your steps and observations, including any problems and unexpected findings or events. Collect the data you need, per your plan. Describe what happened when you ran the test.

## CONTINUE Plan-Do-Study-Act Cycles based on what you learn in order to achieve improvement.



# Filling out the PDSA

make the change?	increased knowledge and competency, and apply the information to their work.			
<b>Plan:</b> 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
<b>Do:</b> Implement your plan. Describe what happened.				
<b>Study:</b> Study and analyze the data you collected. What did you learn?				
<b>Act:</b> Decide what to do next. Will you adapt, adopt or abandon?				





# How to Collect and Submit Monthly Data

- Data you will need to collect:
  - Number of individuals with any UTI, Level I UTI, Level II UTI, and multiple UTI.
  - Number of Level I, Level II serious incidents, and total serious incidents (regardless of individual).
- How to submit it:
  - <https://forms.office.com/g/zKqTqW6Rqm>

	Call: Last Thursday of the Month	Data: First Friday of Following Month
Meeting one – In person	Thursday March 28, 2024, 10:00 am – 11:30 AM	Friday April 5 (still baseline – practice run)
Meeting two: Virtual/Call	Thursday April 25, 2024, 10:00 am – 11:30 AM	Friday May 3, 2024 [data for handwashing month/April]
Meeting three: Virtual/Call	Thursday May 30, 2024, 10:00 am – 11:30 AM	Friday June 7, 2024 [data for May]
Meeting four: Virtual/Call	Thursday June 27, 2024, 10:00 am – 11:30 AM	Friday July 5, 2024 (Or next business day due to July 4th Holiday) [data for June]
Meeting five Virtual/Call: Final call	Thursday July 25, 2024, 10:00 am – 11:30 AM	Friday August 2, 2024 [data for July]
BONUS Month: Monitoring	--	Friday September 6, 2024 [data for August]





# Learning Collaborative Online Tools

- Resources will be housed here:  
<https://dbhds.virginia.gov/clinical-and-quality-management/office-of-community-quality-management/>
  - PowerPoint slides
  - Handouts
  - PDSA Forms
- Monthly data reporting here: <https://forms.office.com/g/zKqTqW6Rqm>  
Schedule:
  - Report on March data: April 5, 2024
  - Report on April data: May 3, 2024
  - Report on May data: June 7, 2024
  - Report on June data: July 5, 2024, or next business day
  - Report on July data: August 2, 2024





## To-Do List

- Bring new tools/resource back to your organization re: handwashing
- Make a plan to train your staff and team members on handwashing and evaluate their learning.
  - Use the PDSA Worksheet!
- Submit first data report on April 5, 2024 (Trial run!)
- Need help? Reach out to Mary Beth or Pebbles!
  - [Pebbles.Brown@dbhds.virginia.gov](mailto:Pebbles.Brown@dbhds.virginia.gov) Quality Improvement Specialist, Region 4  
DBHDS Office of Community Quality Management (OCQM)  
(804) 314-2065
  - [MaryBeth.Cox@dbhds.virginia.gov](mailto:MaryBeth.Cox@dbhds.virginia.gov) , QI Coordinator, OCQM  
(802) 709-9225





**Next Meeting:  
Thursday April 25, 2024,  
10:00 am – 11:30 AM**

**Questions?**

**Comments?**

**Concerns?**

**Thank You!**





# References

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