

Introduction BSI Prevention QIA Toolkit

In support of the Centers for Medicare & Medicaid Services' (CMS') reduction in healthcare-associated infections (HAIs) initiatives, HSAG: ESRD Network 7 (the Network) is conducting an infection prevention quality improvement activity (QIA) with the goal of reducing bloodstream infection (BSI) rates. Your facility was selected to participate in this QIA by the Network. Participating facilities were identified by analysis of BSI data from the National Healthcare Safety Network (NHSN) for the period of January through June 2016 for all vascular access types.

Objectives

The BSI Prevention QIA is intended to:

- Improve facility infection control processes.
- Promote the use of the Centers for Disease Control and Prevention's (CDC's) recommended infection prevention practices and observation tools.
- Engage patients by educating them regarding infection prevention practices, so they feel empowered to speak up about ensuring a safe dialysis environment.
- Improve patient quality of life.
- Reduce hospitalizations due to BSIs.
- Spread best practices and lessons learned statewide.
- Promote antibiotic stewardship.

QIA Focus

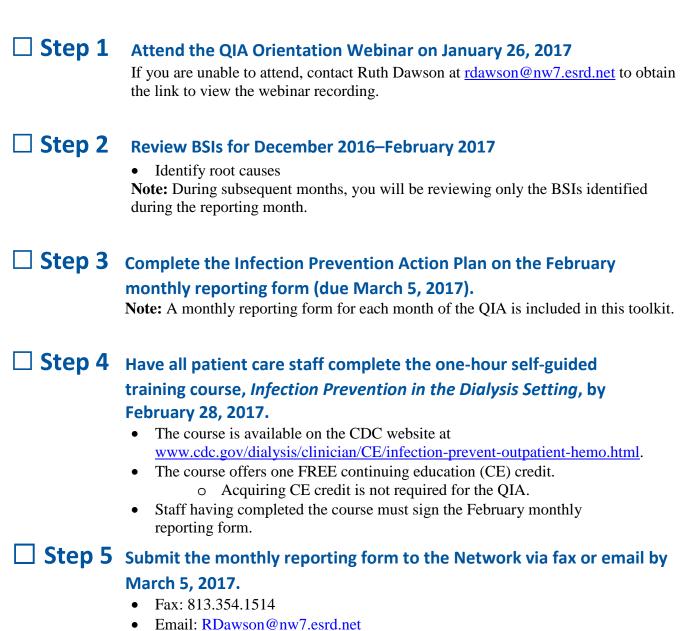
Participating facilities will focus on:

- Performing audits using the CDC BSI prevention audit tools, including:
 - o Hand Hygiene.
 - o Catheter Connection/Disconnection and Fistula/Graft Cannulation.
 - o Dialysis Station Disinfection.
 - Accurate and Timely NHSN Reporting.
- Using CDC and Agency for Healthcare Research and Quality (AHRQ) quality improvement tools.
- Educating patients regarding infection prevention practices, culminating with a signed patient pledge to join the fight against HAIs.
- Engaging patients in their own infection prevention practices by encouraging them to complete CDC audits for hand hygiene compliance.
- Reporting monthly to NHSN and the Network regarding:
 - o Dialysis events.
 - o Completion of patient education and CDC BSI prevention audits.



Instructions and Completion Checklist BSI Prevention QIA Toolkit

The following instructions are your guide to completing the BSI Infection Prevention QIA interventions found in this BSI toolkit:





- ☐ Step 6 Have all patient care staff review the enclosed CDC audit instructions and begin audits by March 1, 2017; audits are to be completed on a monthly basis.
 - 7 CDC AV Fistula Graft Cannulation Observation audits
 - 7 CDC Catheter Connection and Disconnection Observation audits
 - 7 CDC Dialysis Station Disinfection Observation audits
 - 13 CDC Hemodialysis Hand Hygiene Observation audits
 - 5 CDC Hemodialysis Hand Hygiene Observation audits
 - o Audits completed by patients
- Step 7 Enter dialysis facility events into NHSN monthly and submit the Network monthly reporting form by the 5th of the following month.
 - Facility infection data and the results of CDC audits are required to be reviewed with the facility's Medical Director during Quality Assurance and Performance Improvement (QAPI) meetings.
- ☐ Step 8 Disseminate the patient resources included in this toolkit and have patients sign the Infection Prevention Pledge, beginning March 2017.
 - Report the number of patients provided with resources and the number of patients that signed pledges each month on the monthly reporting form.
- ☐ Step 9 Complete the QIA evaluation that will be provided in October 2017.

Additional Resources

These additional resources are available to assist you in completing your BSI QIA:

- Best Practices Video Covers hand hygiene, catheter connection/disconnection, and fistula/graft cannulation: www.cdc.gov/dialysis/prevention-tools/training-video.html
- Catheter Scrub-the-hub Protocol: www.cdc.gov/dialysis/PDFs/collaborative/Hemodialysis-Central-Venous-Catheter-STH-Protocol.pdf
- Checklist tools: www.cdc.gov/dialysis/prevention-tools/index.html
- Hand hygiene, catheter connection/disconnection, and fistula/graft cannulation audit tool: www.cdc.gov/dialysis/prevention-tools/index.html
- Agency for Healthcare Research and Quality (AHRQ) Safety Program for End Stage Renal Disease Facilities Toolkit: www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/index.html



2017 BSI Prevention QIA

Ruth Dawson, RN, CNN

Nephrology Nurse Network 7 Quality Improvement Team

January 26, 2017

Orientation Webinar Attendance

To verify facility attendance, please message the host via the chat function, or send an email after the call, with the name of the facility and attendees to Ruth Dawson at:

RDawson@nw7.esrd.net.



Webinar Agenda

- Introduction to the 2017 Healthcare-Associated Infection (HAI) Quality Improvement Activity (QIA)
- QIA Interventions
- Bloodstream Infection (BSI) QIA Reporting
- 2016 BSI QIA Best Practices
- Trainings, Toolkits, and Other Resources From the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Disease Control and Prevention (CDC)
- Steps for Success
- Questions?

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Introduction to the 2017 BSI Prevention QIA



HAIs in the ESRD Population

- The end stage renal disease (ESRD) population is at a higher risk for HAIs than the general population:
 - Incidence of HAIs can be up to 100 times higher
 - Rate of mortality due to HAIs is 43% higher
- Violations in infection prevention protocols were the most cited violations in dialysis facilities by the Florida State Survey Agency for 2014–2016

Source: National Action Plan to Prevent Healthcare-Associated Infections

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BSI QIA Goals

The goals of the Network 7 BSI QIA are to:

- Demonstrate a 5% relative reduction in the pooled mean rate of BSIs in the targeted QIA facilities
- Promote patient, family, and caregiver engagement within the facilities
 - Allow patients the ability to impact their own care and engage in monitoring infection prevention opportunities



Facility Inclusion Criteria

The BSI QIA will include facilities:

- With BSI rates from the first and second quarter of 2016 that were above the Network average of 0.64
 - The baseline Focus Group aggregate BSI rate is 1.33
 - The Focus Group aggregate BSI rate goal is 1.26
- That received citations from the State Survey Agency (SSA) for infection prevention procedures in 2016

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BSI QIA Interventions



BSI QIA Interventions

Network 7 interventions will include the implementation of:

- The Plan-Do-Study-Act (PDSA) improvement model
- The BSI Prevention QIA Toolkit
- Staff education
- Use of CDC audit tools for:
 - Hand hygiene
 - Catheter connection/disconnection
 - Fistula/graft cannulation
 - Dialysis station disinfection
- Patient engagement as partners in infection prevention through:
 - Patient education
 - Patient action
 - · Patient pledge
 - · Patient-completed audits
- CDC Core Elements of Antibiotic Stewardship
- Additional interventions identified by facility

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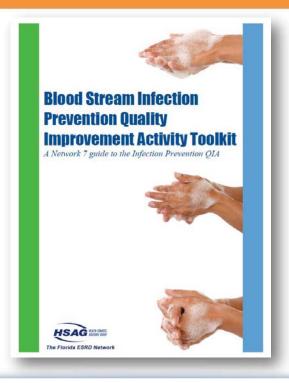


PDSA Cycle Improvement Model





2017 BSI QIA Toolkit



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QIA Interventions: Staff Education

Staff education for February 2017 must include:

- Completion of the one-hour self-guided training course, Infection Prevention in the Dialysis Setting, by all QIA facility patient care staff. The training course is available on the CDC website at:
 - <u>www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html</u>.
- Completion of the annual online NHSN Dialysis Event Surveillance Training by all QIA facility National Healthcare Safety Network (NHSN) users. The training is available at:
 - https://nhsn.cdc.gov/nhsntraining/courses/2016/C18/.
- Review of the CDC Recommended Interventions for Dialysis BSI Prevention by all facilities. The document is available at:
 - www.cdc.gov/dialysis/prevention-tools/core-interventions.html.



QIA Interventions: CDC Audit Tools

- For the period of March–September 2017, all QIA facilities must complete the following monthly audits:
 - ≥ 13 hand hygiene observations
 - ≥ 7 catheter connection/disconnection observations
 - ≥ 7 fistula/graft cannulation observations
 - ≥ 7 dialysis station disinfection observations
- The audit tools can be located here:
 - www.cdc.gov/dialysis/prevention-tools/index.html
- Facility staff should watch the CDC best practices video found at: www.cdc.gov/dialysis/prevention-tools/training-video.html, which covers:
 - Hand hygiene
 - Catheter connection/disconnection
 - Fistula/graft cannulation

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CDC Audit Tools: Hand Hygiene Observations

Facilities must:

- Utilize the hand hygiene audit tool to collect a minimum of 13 observations per month
- Tally the numerator/denominator
- Submit audit results via the Network monthly report by the **5th of the following month**:
 - Numerator = Number of successful hand hygiene opportunities observed
 - Denominator = Total number of hand hygiene opportunities observed during audit



CDC Audit Tools: Catheter Connection/Disconnection Observations

Facilities must:

- Utilize the catheter connection/disconnection audit tool to collect a minimum of 7 observations per month
- Tally the numerator/denominator
- Submit audit results via the Network monthly report by the **5th of the following month**:
 - Numerator = Number of procedures performed correctly
 - Denominator = Total number of procedures observed during audit

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QIA CDC Audit Tools: Fistula/Graft Cannulation Observations

Facilities must:

- Utilize the fistula/graft cannulation audit tool to collect a minimum of **7 observations** per month
- Tally numerator/denominator
- Submit audit results via Network monthly report by the **5th of the following month**:
 - Numerator = Number of procedures performed correctly
 - Denominator = Total number of procedures observed during audit



QIA CDC Audit Tools: Dialysis Station Disinfection Observations

Facilities must:

- Utilize the dialysis station disinfection audit tool to collect a minimum of 7 observations per month
- Tally the numerator/denominator
- Submit audit results via Network monthly report by the **5th of the following month**:
 - Numerator = Number of procedures performed correctly
 - Denominator = Total number of procedures observed during audit

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QIA Interventions: Engaging Patients as Partners—Education

In order to encourage patient and family engagement at the facility level, facilities should provide patient education using the following materials found in the QIA Toolkit:

- A Patient's Guide: Clean Hands Can Save Lives
 - Hand washing
 - Staff hand washing protocol
- Washing Your Vascular Access & Knowing the Signs and Symptoms
 - Washing the dialysis access prior to treatment
 - Signs and symptoms of infection



QIA Interventions: Engaging Patients as Partners—Action

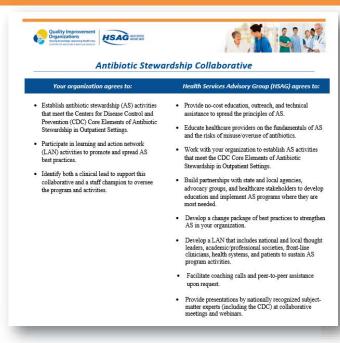
- Once they have been provided with the appropriate educational materials,* patients should be encouraged to:
 - Sign the Patient Infection Prevention Pledge
- Patients selected to participate in the hand hygiene audits should be encourage to:
 - Perform 5 hand hygiene audits per month for the period of March–September 2017
 - Patient audits should be recorded with other hand hygiene audits on the Network monthly report

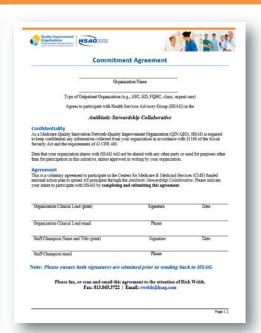
*All patient educational materials can be found in the BSI QIA Toolkit

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Antibiotic Stewardship Collaborative





www.hsag.com/join-as



BSI QIA Reporting



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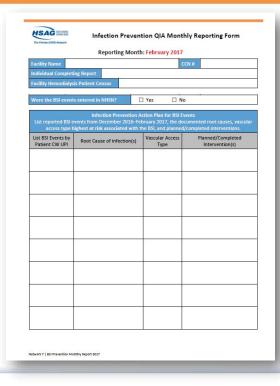
QIA Monthly Reporting

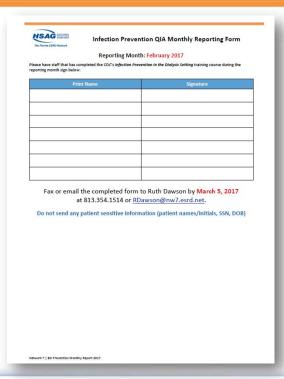
For the period of March–September 2017, QIA facilities must:

- Enter BSI events into NHSN by the end of each month
- Complete the Network monthly reports, including, as applicable:
 - Patient census
 - Number of events, by access
 - Organism identified/sensitivities reviewed with nephrologist
 - Root cause of BSI events and planned/completed interventions
 - Patient education/patient pledges
 - QIA evaluation question
- Return completed monthly reports by the 5th of the following month



February Monthly Reporting Form





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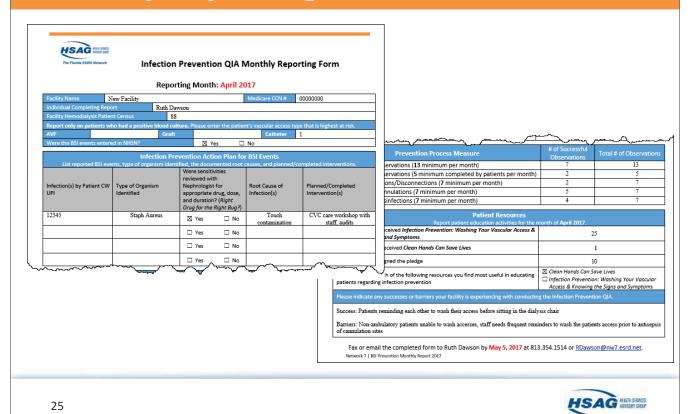


March, May, July, and August Monthly Reporting Forms

The Florida ESRD Network	00000000000000000000000000000000000000				ser - serio condit
		ing Month	: March 20		20000
Facility Name No.	ew Facility Cort Ruth Da	naon.		Medicare CCN # 00	00000
acility Hemodialysis Pati		Water			
Report only on patients \		d culture. Ple	ase enter the	patient's vascular ac	cess type that is highest
at risk.	The state of the s				36" 978
AVF 1 Were the BSI events ente	Graft		Catheter ☑ Yes □ No		
were the BSI events ente	red in NHSN?	N N	res L	I NO	
			ion Action F		
List reported BSI events,	type of organism identif			causes, and planned/	completed intervention:
Infection(s) by Patient CW UPI	Type of Organism Identified	Were sensitivities reviewed with Nephrologist for appropriate drug, dose, and duration? (Right Drug for the Right Bug?)		Root Cause of Infection(s)	Planned/Completed Intervention(s)
11111	Pseudomonas	⊠ Yes	□ No	Contamination staff not following buttonhole policy	Buttonhole cannulation workshop, audits
		☐ Yes	□ No	35 31 1	
		☐ Yes	□ No		
		☐ Yes	□ No		
Prevention Process Measure				# of Successful Observations	Total # of Observations
Hand Hygiene Observations (13 minimum per month)				10	13
Hand Hygiene Observatio					5
Catheter Connections/Disconnections (7 minimum per month)				6	7
Fistula or Graft Cannulations (7 minimum per month) Dialysis Station Disinfections (7 minimum per month)				6	7
July is Station Dismiceti		Patient Re		month of March 2017	
# of patients who received Infection Prevention: Washing Your Vascular Access & Knowing the Signs and Symptoms				15	
# of patients who received Clean Hands Can Save Lives				5	
# of patients who signed the pledge				10	



April, June, and September Monthly Reporting Forms



2016 BSI QIA Best Practices



2016 BSI QIA Best Practices

The following best practices for HAI reduction at the facility level were identified during QIA activities for 2016:

- Include all staff members in monthly audit completion to improve infection control practices
- Conduct targeted auditing during turnover to identify the need to adjust patient schedules to allow for proper infection control technique
- Identify staff in need of additional education on cannulation and central venous line catheter care infection control procedures
- Conduct infection control-specific staff meetings and inservices to focus staff on following protocols

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2016 BSI QIA Best Practices (cont.)

- Prompt physicians and nurse practitioners to practice hand hygiene between patients when rounding
- Identify and correct improper mask placement during catheter care
- Include patients in hand hygiene audits to encourage more patient participation and better staff-to-patient communication regarding infection control protocols
- Engage patients through use of Network educational materials to support infection prevention interventions by staff
- Conduct infection control lobby days targeting hand hygiene, vascular access care, and CVC reduction to foster patient and family/caregiver awareness of infection control practices



Trainings, Toolkits, and Other Resources From AHRQ and CDC



Comprehensive Unit-Based Safety Program (CUSP) Toolkit

The AHRQ CUSP Toolkit:

- Includes training tools to make care safer by improving the foundation of how physicians nurses, and other clinical team members work together
- Builds the capacity to address safety issues by combining clinical best practices and the science of safety
- Was created for clinicians by clinicians
- Can be found at: <u>www.ahrq.gov/professionals/education/curriculum-tools/cusptoolkit/index.html</u>



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CUSP Toolkit (cont.)

- Is modular and modifiable to meet individual unit needs
- Includes teaching tools and resources to support change at the unit level, presented through facilitator notes that take you step-by-step through the modules, presentation slides, tools, and videos
- Includes the following modules:
 - Learn about CUSP
 - Assemble the Team
 - Engage the Senior Executive
 - Understand the Science of Safety
 - Identify Defects Through Sensemaking
 - Implement Teamwork and Communication
 - Apply CUSP
 - The Role of the Nurse Manager
 - Spread

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Patient and Family Engagement



AHRQ ESRD Toolkit Modules

Each module includes teaching tools and resources to support change at the unit level, including:

- Creating a Culture of Safety
- Clinical Care
- Using Checklists and Audit Tools
- Patient and Family Engagement

www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/index.html



CDC Dialysis BSI Prevention Collaborative

The CDC Dialysis BSI Prevention Collaborative:

 Is a partnership aimed at preventing BSIs in hemodialysis patients



- Is open to freestanding and hospital-based outpatient dialysis facilities across the country
- Has participating facilities measure BSIs, using the dialysis event surveillance module in the NHSN, and a package of evidence-based practices to prevent these devastating infections

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Dialysis BSI Prevention Collaborative Topics

- About the Collaborative
 - Approach
 - Benefits of Joining
- Core Interventions
 - Bloodstream
 - Staff Education
 - Catheter
- News and Reports
 - Collaborative & Dialysis News
- Audit Tools, Protocols & Checklists
 - Toolkits, Forms, Training, Protocols



CDC Resources

- Catheter Scrub-the-Hub Protocol
 - Key steps in catheter connection/disconnection
 www.cdc.gov/dialysis/PDFs/collaborative/Hemodialysis-Central-Venous-Catheter-STH-Protocol.pdf
- Checklist tools
 <u>www.cdc.gov/dialysis/prevention-tools/index.html</u>
- Hand Hygiene Observation Protocol <u>www.cdc.gov/dialysis/prevention-tools/Protocol-hand-</u> hygiene-glove-observations.html

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Quality Assessment and Performance Improvement (QAPI)

- Review QIA outcomes in facility QAPI meetings, including:
 - Monthly audit results
 - Patient engagement in QIA
- Document participation in the Network 7 QIA in QAPI meeting minutes



Steps to Success

Follow these steps to success for the Network 7 BSI QIA:

- Educate staff
- Complete CDC audits monthly, including patient participation in the process
- Utilize materials to educate patients
 - Have patients sign pledges once education is complete
- Submit monthly report to the Network by the 5th of each following month
- Notify Network 7 of any management changes
- Never email patient information to Network 7

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Questions





Reminder: Orientation Webinar Attendance Verification

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Thank you!

Network 7 Quality Improvement Team

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