Bloodstream Infection (BSI) Reduction Quality Improvement Activity (QIA)

Robert Peck, RN, Nephrology Nurse
Health Services Advisory Group (HSAG): End Stage Renal Disease (ESRD) Network 7
January 9, 2020
Webinar Attendance

To verify facility attendance:

• Message the host via the chat function with the name of the facility and attendees.

Or

• Send an email after the call with the name of the facility and attendees to Rpeck@hsag.com.
Agenda

• Introduction
• Inclusion criteria
• QIA goals
• QIA interventions and activities
• QIA reporting dates and information
• Quality Assessment and Performance Improvement (QAPI) involvement requirements
• Health Information Exchange (HIE) review
• Facility Patient Representative (FPR) program overview
• BSI QIA best practices and tools
• Questions
BSI QIA Introduction
Introduction

The Centers for Medicare & Medicaid Services (CMS) and the Network have a goal to reduce BSI because:

• ESRD patients are at a higher risk for BSIs than the general population:
  – Incidence of healthcare-associated infections (HAIs) can be up to 100 times higher.
  – The rate of mortality due to HAIs is 43 percent higher.

• Violations in infection prevention protocols (Vtag 0122) were the most cited survey violations in Network 7 facilities in 2018.

Source: National Action Plan to Prevent Healthcare-Associated Infections
BSI QIA Inclusion Criteria
QIA Inclusion Criteria

• Facilities selected for this QIA have:
  – A BSI rate among the top 20 percent of facilities in the Network service area with the highest rates of infection.
    ▪ The BSI data is based on National Healthcare Safety Network (NHSN) January–June 2019 data.
    ▪ A facility census greater than 25 patients.

Data source: NHSN January-June 2019
BSI QIA Goals
BSI QIA Goals

• Demonstrate a **20 percent relative reduction** in the rate of BSIs.
• Report dialysis events in NHSN with 100% accuracy.
• Identify at least 1 FPR to participate in the QIA interventions.
• Sustain quality improvement practices to reduce BSI rates in the facility.
• Participate in an HIE or other highly effective facility process to obtain blood culture results and hospitalization records.
BSI QIA Goals (cont.)

- Attend the bi-monthly (every other month) BSI QIA Learning and Action Network (LAN) webinars at [https://www.esrdncc.org/en/qia/](https://www.esrdncc.org/en/qia/).
  - Implement at least 2 best practices identified from the BSI QIA LAN webinars by the end of the QIA.
BSI QIA
Interventions and Activities
BSI QIA Interventions (Pt. 1)

• Completing monthly reporting to the Network via SurveyMonkey.
• Attending bi-monthly LAN webinars and implementing LAN activities.
• Building relationships and collaborating with hospitals and nephrologists.
• Re-educating patients and staff about BSI prevention topics on a monthly basis.
• Auditing BSI events data in NHSN to ensure data accuracy and completion.
• Reviewing BSI QIA progress, trends, and barriers each month in QAPI meetings.
BSI QIA Interventions (Pt. 2)

BSI QIA interventions include:


- Ensuring staff watch the video entitled, *Preventing Bloodstream Infections in Outpatient Hemodialysis Patients* at [https://www.youtube.com/watch?v=0zhY0JMGCA&feature=youtu.be](https://www.youtube.com/watch?v=0zhY0JMGCA&feature=youtu.be)

- Completing the NHSN Annual Dialysis Event Surveillance Training by **March 31, 2020** at [https://www.train.org/cdctrain/welcome](https://www.train.org/cdctrain/welcome).

Using the CDC audit tools to perform the audits in the table below. Selecting 5 different patients each month to conduct at least 1 Hemodialysis Hand Hygiene Observations Audit at https://www.cdc.gov/dialysis/PDFs/collaborative/Hemodialysis-Hand-Hygiene-Observations.pdf.

<table>
<thead>
<tr>
<th>Type of Audit</th>
<th>Number of Audits Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catheter connection/disconnection</td>
<td>≥ 7 observations per month</td>
</tr>
<tr>
<td>Fistula/graft cannulations</td>
<td>≥ 7 observations per month</td>
</tr>
<tr>
<td>Catheter Disinfection Exit Site</td>
<td>≥ 7 observations per month</td>
</tr>
<tr>
<td>Hand Hygiene for Staff</td>
<td>≥ 13 observations per month</td>
</tr>
<tr>
<td>Hand Hygiene for Patients</td>
<td>≥ 5 observations per month</td>
</tr>
</tbody>
</table>
The 9 CDC Core Interventions for Dialysis BSI Prevention

Facilities are required to implement the following Nine CDC Core Interventions for BSI Prevention ([https://www.cdc.gov/dialysis/PDFs/Dialysis-Core-Interventions-5_10_13.pdf](https://www.cdc.gov/dialysis/PDFs/Dialysis-Core-Interventions-5_10_13.pdf)):

1. Surveillance and feedback using NHSN
2. Hand hygiene observations
3. Catheter/vascular access care observations
4. Staff education and competency
5. Patient education/engagement
6. Catheter reduction
7. Chlorhexidine for skin antisepsis
8. Catheter hub disinfection
9. Antimicrobial ointment
BSI QIA Reporting Dates and Information
BSI QIA Reporting Dates

• Submit monthly QIA reporting to the Network via SurveyMonkey link by the **5th of each month**.  
  – A new SurveyMonkey link will be emailed approximately two weeks before the monthly submission due date (i.e., the 5th of the month).  
  – The first monthly reporting via SurveyMonkey link will be **February 5, 2020**.  
• Submit all BSI event data to NHSN by the last day of the month.
BSI QIA QAPI Requirements
QAPI Meetings

• Facilities are required to review the BSI QIA in monthly QAPI meetings.
• The following topics should be reviewed in QAPI by the interdisciplinary team:
  — Implementation of the 9 CDC Core Interventions
  — Monthly audit results.
  — BSI QIA interventions and progress toward goals.
  — Barriers to BSI reduction.
  — FPR involvement in the QIA.
  — Facility participation in an HIE or other effective process to obtain hospitalization records and blood cultures.
QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT (QAPI) QUALITY IMPROVEMENT ACTIVITY (QIA) MONITORING FORM

Reducing Bloodstream Infections (BSIs)

Date of QAPI Meeting: ___________________________

Facility QIA Baseline: ___________________________  Facility QIA Goal: ___________________________

Goal Met:  □ Yes  □ No  Facility Patient Representative Present:  □ Yes  □ No

<table>
<thead>
<tr>
<th>Monitoring Metrics</th>
<th>Number of Patients by Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>A BSI</td>
<td></td>
</tr>
<tr>
<td>A vascular access related BSI</td>
<td></td>
</tr>
<tr>
<td>A central venous catheter (CVC) related BSI</td>
<td></td>
</tr>
<tr>
<td>Two or more BSIs within 12-months</td>
<td></td>
</tr>
<tr>
<td>A BSI this month who received education on BSI prevention</td>
<td></td>
</tr>
</tbody>
</table>
What QIA interventions have been implemented at the facility this month? (including recommendations from the Learning and Action Network (LAN) calls)

What interventions were successful?

After implementing the interventions, what barriers remain for reducing BSIs?

What is the facility’s BSI reduction plan for the next month?

Does the facility participate in a Health Information Exchange (HIE)? If no, what is the facility’s process to effectively obtain blood culture results and hospitalization records?

Has the facility discussed the 9 CDC core interventions in QAPI? If no, what is the facility plan to so?

________________________________________________________________________

Facility Administrator/Date

________________________________________________________________________

Facility Medical Director/Date
Health Information Exchange (HIE)
HIE Participation

• An HIE is a system to share clinical information, including hospitalization records and blood cultures, between outpatient dialysis providers and hospitals and other healthcare providers.

• BSI QIA facilities are required to participate in an HIE or demonstrate another highly effective facility process to obtain blood culture results and hospitalization records.

• Facilities that do not participate in an HIE are required to demonstrate an effective process to transfer and obtain medical records information, such as hospitalization records and blood cultures.
HIE Participation (cont.)

• Examples of information transfers include, but are not limited to:
  – Encrypted email.
  – Encrypted text messaging.
  – An effective process to obtain records via fax.
  – Direct log-in access to a hospital medical records system.
FPR Program
The FPR Program

• The FPR program is a patient-centered approach to spread educational information to patients, provide peer-to-peer support, and provide additional support for staff at the dialysis facility.

• An FPR can be:
  – A patient currently on dialysis.
  – A patient who has had a kidney transplant.
  – A dialysis patient caregiver.
  – A volunteer at his/her dialysis facility or another facility in his/her area.
What Is the FPR Role

• FPRs may:
  – Act as the “patient voice” by addressing patient interests and concerns, and by providing new ideas and QIA feedback during monthly QAPI meetings.
  – Hand out the Network 7 Patient Newsletter or other educational materials to patients.
  – Distribute QIA educational materials and ensure that patient feedback forms are collected and forwarded to the Network.
  – Act as a greeter for newly admitted patients.
  – Act as a peer mentor to support patients on ways to prevent infection and pursue permanent access placement.
  – Assist the facility with specific needs related to the QIA or outside of the QIA requirements.
FPR Program Resources

• The FPR Guide explains the role of an FPR, including FPR selection criteria, how FPRs can assist the Network, what is expected of an FPR, and more.
  – https://www.hsag.com/contentassets/57fa392060b1488fabfda0bd076319dc/nw17nprguidefinal508.pdf.

• The FPR Recruitment Flyer
  – https://www.hsag.com/contentassets/57fa392060b1488fabfda0bd076319dc/nw17nprflyerfinal508.pdf

• The FPR Agreement Form
  – https://www.hsag.com/contentassets/57fa392060b1488fabfda0bd076319dc/2019nw17npragrmntformqiafnl508.pdf
BSI QIA Best Practices
BSI QIA Best Practices

Best practices for successful completion of the BSI QIA include:

• Implementing all 9 CDC core interventions.
• Involving patients and staff in conducting monthly audits to help identify strategies to improve infection control practices.
• Providing monthly patient and staff education on infection control policies and procedures.
• Conducting infection control-specific staff meetings, in-services, and huddles.
• Posting educational bulletin boards and hosting infection prevention Lobby Days.
• Identifying at least one QIA lead person.
• Incorporating the FPR in BSI QIA interventions.
BSI QIA Resources and Tools
BSI Resources and Tools

The Network will distribute these BSI QIA resources and tools to support your success throughout QIA:

- **CDC Approach to BSI Prevention in Dialysis Facilities** (i.e., 9 CDC Core Interventions)

- **CDC Audit Tools and Checklists**

- **Days Since Last BSI**
  - [https://www.cdc.gov/dialysis/pdfs/Days-since-infection-poster_8.5x11_fillable_508.pdf](https://www.cdc.gov/dialysis/pdfs/Days-since-infection-poster_8.5x11_fillable_508.pdf)

- **Preventing Bloodstream Infections in Outpatient Hemodialysis Patients** (11 minute video for staff)
  - [https://www.youtube.com/watch?v=_0zhY0JMGCA&feature=youtu.be](https://www.youtube.com/watch?v=_0zhY0JMGCA&feature=youtu.be)

- **Test Your Hand Hygiene Knowledge** (6-minute video for patients)
  - [https://fmqaimedia.com/demo/handwashing/](https://fmqaimedia.com/demo/handwashing/)

- **Infection Prevention: Washing Your Vascular Access**
  - [https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7_infection-prevention-washingknowing-signs_final_508.pdfs](https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7_infection-prevention-washingknowing-signs_final_508.pdfs)

- **Clean Hands Save Lives**
  - [https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7_clean-hands-can-save-lives-2017_final_508.pdf](https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7_clean-hands-can-save-lives-2017_final_508.pdf)

- **Six Tips to Prevent Dialysis Infections**
  - [https://www.cdc.gov/dialysis/PDFs/Dialysis-Patient-PocketGuide.pdf](https://www.cdc.gov/dialysis/PDFs/Dialysis-Patient-PocketGuide.pdf)

- **Clean Hands Count Campaign**
  - [https://www.cdc.gov/handhygiene/campaign/promotional.html#anchor_1555103350](https://www.cdc.gov/handhygiene/campaign/promotional.html#anchor_1555103350)

BSI Resources and Tools (cont.)

• **Patient Handwashing Pledge** (page 5 of the PDF)
  – [https://www.hsag.com/contentassets/2df2b274bf7b48239aa20412757d7ef6/c.-nw7_bsi-toolkit_patient-resources_508.pdf](https://www.hsag.com/contentassets/2df2b274bf7b48239aa20412757d7ef6/c.-nw7_bsi-toolkit_patient-resources_508.pdf)

• **Sepsis Zone Tool**
  – [https://www.hsag.com/contentassets/530f076546974940b86cf0c04ad5dd8d/zonetoolsepsis508.pdf](https://www.hsag.com/contentassets/530f076546974940b86cf0c04ad5dd8d/zonetoolsepsis508.pdf)

• **BSI QIA QAPI Form**
  – [https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7bsimonthlyqapireview508-1.pdf](https://www.hsag.com/contentassets/541d78ee61774570949b2dd04705ecef/nw7bsimonthlyqapireview508-1.pdf)

• **Medical Records Request Form**
  – [https://www.hsag.com/contentassets/0860b71f1b1e417fa1c9a2b07116c8cb/medicalrecordsrequestform508fillable.pdf](https://www.hsag.com/contentassets/0860b71f1b1e417fa1c9a2b07116c8cb/medicalrecordsrequestform508fillable.pdf)

• CDC Making Dialysis Safer for Patients Coalition Resource Center

• Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol

• Recommended Antiseptics & Antimicrobials by Catheter Type

• CDC Guidelines, Recommendations, and Resources: Dialysis Wall Boxes and Drains
Reminder: Webinar Attendance

To verify facility attendance:

• Message the host via the chat function with the name of the facility and attendees.

Or

• Send an email after the call with the name of the facility and attendees to Rpeck@hsag.com.
Network 7
Quality Improvement Contacts

Robert Peck, RN
Quality Improvement
Nephrology Nurse
Network 7
813.865.3474
Rpeck@hsag.com

Donna DeBello, RN
Quality Improvement
Director
Network 7
813.865.3363
DDeBello@hsag.com
Questions
Thank you!

Network 7 Quality Improvement Team