Network 8 HAI LAN — Healthcare Associated Infections Learning & Action Network — On the road to reduction

HAI QIA Update

Network 8 initiated the Healthcare Associated Infection Learning and Action Network (HAI LAN) Quality Improvement Activity (QIA) in April. Eighty-six facilities were chosen to participate in the QIA, and the selection was based on bloodstream infection (BSI) data, as reported to the National Healthcare Safety Network (NHSN). QIA facilities are required to conduct monthly hand hygiene observations, catheter connection/disconnection observations, and fistula/graft cannulation observations, using the Centers for Disease Control and Prevention (CDC) audit tools. The summary results of these audits are reported by facilities via NHSN, and the Network then reports the results to the Centers for Medicare and Medicaid Services (CMS). Training was held, via webinar, for all QIA facilities on April 1. The CDC provided guidance on performing the CDC audits, as well as, entering the audit summary results into NHSN.

On a monthly basis, CMS receives a summary of the percentage of facilities that have successfully completed the minimum number of required audits. Summary results are as follows:

	April	May	June	July
Hand Hygiene Observations (minimum of 30)	83.7%	87.2%	89.5%	95.3%
Catheter Connection/Disconnection Observations (minimum of 10)	83.7%	87.2%	86.0%	95.3%
Fistula/Graft Cannulation Observations (minimum of 10)	82.6%	87.2%	84.9%	95.3%

As a reminder, if your facility is a required participant in the HAI QIA, we ask that audit results are reported in a timely manner to NHSN. If you are having trouble accessing NHSN, please contact Kristi Durham at 601-936-9260 or kdurham@nw8.esrd.net.

NHSN Updates

Bi-annual Surveillance Review

Bi-annual surveillance reviews were conducted throughout the month of May. Twenty facilities (10 with high BSI rates and 10 with low BSI rates) participated in phone interviews. Facilities were assessed on their knowledge of NHSN data collection and reporting protocols. A need for further education on the following NHSN topics was identified for all facilities:

- Event Definitions and Key Terms
- Vascular Access Types
- Denominator Reporting Instructions

The next bi-annual review will be held with 20 new facilities in October.

Monthly NHSN Data Quality Checks

Why is the Network reviewing your facility's data?
ESRD Networks have partnered with CDC to improve NHSN Dialysis Event Surveillance data quality. NHSN data needs to be completely and accurately reported, according to the Dialysis Event Protocol, to make meaningful comparisons across facilities, and to inform infection prevention activities.

What is the Network looking for when reviewing facility data?
Network 8 uses NHSN reports to look

NHSN Updates *continued*

for "red flags", outliers or unusual trends, which may indicate data quality issues. Since we cannot determine whether the data entered by your facility are correct or complete, we will reach out to your facility to verify what has been reported.

What should you do if you receive one of the following messages from Network 8?

1. **"Your facility has been identified as having unusual changes in patient census (denominators) from one month to the next."**
   - Run the "**Line Listing-All DE Denominators**" report, and compare the report to your facility records.
2. **"Your facility has been identified as reporting unusual vascular access data."**
   - Run the **"Line Listing-ALL DE Denominators"** report, and check the vascular access type on this report with your facility records.
3. **"Your facility has not reported any dialysis events for ≥ 3 consecutive months."**
   - Run the **"Line Listing-Frequency of Dialysis Events**" report and check to see if there are months when "0" dialysis events were reported by your facility and, compare the report to your facility records. Check to see if any Dialysis Events (IV antimicrobial starts; pus, redness, or increased swelling at the vascular site; positive blood cultures) were missed.
4. **"Your facility has been identified as not reporting any bloodstream infections for ≥ 3 consecutive months."**

- Run the **"Line Listing-Frequency of Dialysis Events"** report, and check to see if there are months when "0" positive blood cultures were reported by your facility. Compare the report to your facility records to verify if any positive blood cultures were missed.

If you receive an email with any of the above statements, log into NHSN and check to see if your data is correct. Please respond back to the email, and let us know if 1) the data was incorrect, and corrections were made, or 2) the data is correct, and no corrections are needed. It is important to note that facility response rates are tracked and are reportable to CMS.

New NHSN Reporting Measure!!! – Healthcare Personnel Influenza Vaccination

Get ready! Beginning October 1, 2015, facilities will be required to collect Healthcare Personnel (HCP) Influenza Vaccination summary data to report to the NHSN Healthcare Personnel Safety (HPS) Component for the 2015/2016 flu season by May 15, 2016. For more information on NHSN HCP Influenza Vaccination reporting, visit http://www.cdc.gov/nhsn/dialysis/hcp-vaccination/index.html.

To get started, your facility's NHSN Healthcare Personnel Safety Component needs to be active. For information about how to activate the HPS Component please refer to the link above for illustrated instructions.

More detailed information will be provided to all dialysis facilities in September.

HAI LAN Activities

CDC Video
On March 26, all facilities were emailed the link to the CDC video, Preventing Bloodstream Infections in Outpatient Hemodialysis Patients: Best Practices for Dialysis Staff. It was recommended that facilities view the video with their staff in order to serve as a reminder of proper infection prevention protocols and to analyze any possible gaps in infection control practices at the facility. Facilities that participated were sent a survey to assess 1) if the material was beneficial, and 2) if any practice changes were made. One hundred percent of facilities stated that the information provided in the video was beneficial to staff, and 20% stated that practice changes were made, based on the contents of the video.

If your facility did not previously participate in this HAI LAN activity, you can view the video at the following link: http://www.cdc.gov/dialysis/prevention-tools/training-video.html.

CDC Continuing Education Course

In May, all dialysis facilities were provided with information regarding the CDC's Continuing Education (CE) Course, "Infection Prevention in Dialysis Settings". During the months of May-September, facility managers will receive, by email, power point slides for each lesson contained in the CDC CE course. Facility managers are asked to review the course content with their staff during monthly staff meetings. Upon review of all course content, staff should be able to 1) list three ways to prevent catheter infection in hemodialysis patients, 2) describe how to safely carry medications, and 3) describe how to effectively perform hand hygiene. At the conclusion of the course review, if staff wish to receive CEs for completing the course, a course assessment and evaluation must be completed, using the CDC Training and Continuing Education Online (TCEOnline) system. The TCEOnline system can be accessed at the following link: www.cdc.gov/TCEOnline.

More information about the CDC CE course can be found here: http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html.

Webinar

On July 7, Dr. Rathel "Skip" Nolan, Professor of Medicine and Director of the Division of Infectious Diseases at University of Mississippi Medical Center, presented a webinar on antibiotic resistant bacteria. The webinar covered antibiotic resistant bacteria, to include MRSA, *Clostridium difficile*-associated diarrhea, and carbapenem-resistant Enterobacteriaceae.

George the Germ

George the Germ, the HAI LAN mascot, was developed to add a fun way to convey infection control messages to patients. George will be used to deliver messages about the importance of hand hygiene as well as all infection control polices in fighting germs and reducing infections in the dialysis facility. George was introduced to patients in the July HAI LAN Patient Activity. Be on the lookout for George updates in the near future.
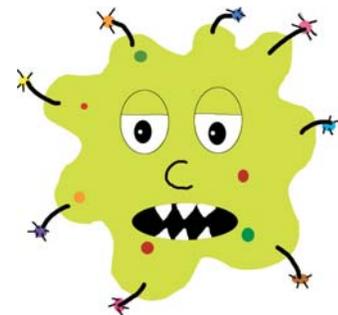
Patient Activity

On July 24, facilities were emailed a patient activity to print and distribute to all dialysis patients. The activity introduced George the Germ, contained information on infection, and included a hand hygiene word search. The patient activity can be found on our HAI web page under Patient Education: http://www.esrdnetwork8.org/dialysis-transplant-providers/quality-improvement/HAI-LAN.asp.

If you were unable to attend the webinar, you may view it on our web page at the following link: http://www.esrdnetwork8.org/dialysis-transplant-providers/quality-improvement/HAI-LAN.asp.

Facility Spotlight: Root Cause Analysis Anyone Can Do

This month's facility spotlight focuses on Kidney Center of Cleveland, Tennessee. Kidney Center of Cleveland continues to maintain low BSI rates and Lloyd Smith, Head Nurse, says conducting routine root cause analyses is a contributing factor. His article describes Kidney Center of Cleveland's process.

Root cause analysis (RCA) is a popular and often-used technique that helps people answer the question of why the problem occurred in the first place. It seeks to identify the origin of a problem using a specific set of steps, with associated tools, to find the primary cause of the problem, and determine:

1. What happened,
2. Why it happened, and
3. Figure out what to do to reduce the likelihood that it will happen again.

Facility Spotlight *continued*

RCA assumes that systems and events are interrelated. An action in one area triggers an action in another, and another, and so on. By tracing back these actions, you can discover where the problem started and how it grew into the symptom you're now facing.

You'll usually find three basic types of causes:

1. **Physical causes** – Tangible, material items failed in some way (a needle was contaminated from a manufacturer).
2. **Human causes** – People did something wrong, or did not do something that was needed. Human causes typically lead to physical causes (employee is not cannulating patients using proper technique).
3. **Organizational causes** – A system, process, or policy that people use to make decisions or do their work is faulty (for example, no one person was responsible for cleaning machines post treatments, and everyone assumed someone else had cleaned machines).

Here are the steps used to find the RCA of infections at my facility.

1. Identify patients that had active infections for the month, and report the findings to NHSN as dialysis events using their criteria.
2. Out of those patients that had infections, group those that were dialysis related or non-dialysis related events.
3. Those that were non-dialysis related have a separate RCA than those that are dialysis related.
4. Dialysis-related infections are then categorized based upon their access catheter, fistula, or graft.
5. Take each separate event and place in an algorithm that asks the famous "why" question until a root cause is found for this event. Based upon the findings, the event is then placed in one of the three causes above.
6. Looking at those causes, find the problem and change the practice that is causing the problem. Most times, reeducation is the key to most problems found (having patient clean access on arrival to dialysis clinic), (not removing cover over catheter).
7. Assess how well the solution is working, and share all findings with staff.

Why Infections are "Bad" in the Dialysis Setting

Obtained from CDC Staphylococcus aureus in Healthcare Settings

Staphylococcus aureus (staph) is a type of bacteria that about 30% of people carry in their noses. Most of the time, staph does not cause any harm; however, sometimes staph causes infections. In healthcare settings, these infections can be serious or fatal, including:

- Bacteremia, or sepsis, when bacteria spread to the bloodstream.
- Pneumonia, which predominantly affects people with underlying lung disease, including those on mechanical ventilators.
- Endocarditis, infection of the heart valves, which can lead to heart failure or stroke.

Staph bacteria can also become resistant to certain antibiotics. These drug-resistant staph infections include: methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-intermediate *Staphylococcus aureus* (VISA), and vancomycin-resistant *Staphylococcus aureus (*VRSA).

To obtain more information on drug-resistant staph infections, you may visit the following links:

- Methicillin-resistant *Staphylococcus aureus* (MRSA)
- Vancomycin-intermediate *Staphylococcus aureus* (VISA)
- Vancomycin-resistant *Staphylococcus aureus* (VRSA)