# Quality Insights Renal Network 4

April 9, 2015

Healthcare Associated Infections
Quality Improvement Activity
Webinar
Presented by Network 4

# Aim 1: Better Care for the Individual through Patient and Family Centered Care

 Quality Insights Renal Network 4 (QIRN 4), under the direction of the Centers for Medicare & Medicaid Services (CMS), shall promote the use of CDC BSI prevention tools.

## Aim of the 2015 HAI QIA



- Overarching goal the reduction and ultimate elimination of bloodstream infections
- CMS Network goals
  - Auditing CDC Recommended Infection Prevention
     Practices through observation
  - Accurate reporting of the audited observations into NHSN
- 100% adherence to reporting the minimum # of observations

## The Value of Auditing CDC Recommended Infection Prevention Practices

- Promotes and reinforces recommended practices among staff.
- Ensures complete and correct implementation
- Increased adherence to CDC recommended practices can prevent infections
- Outpatient hemodialysis facilities that implemented the package of CDC recommended practices saw a 32% reduction in BSIs and a 54% reduction in accessrelated BSIs [Am. J Kidney Dis. August 2013, 62(2): 322-330]

## Required Elements of the QIA

- Observations/Audits
  - A minimum of 30 Hand Hygiene opportunities
  - A minimum of 10 Catheter Connection/
     Disconnection observations any combination
  - A minimum of 10 AVG/AVF Cannulation observations. Decannulation is NOT included in this project
- Reporting Numerators and Denominators to NHSN monthly

## **Timeframe to Conduct QIA**

April 1, 2015 through September 31, 2015



## Where to Begin

## **Training**

- 2 Required Training Courses for Staff Performing Observations and Audits
  - Learn about CDC Infection Prevention
    - CDC Infection Prevention in Dialysis Settings.
      - o This is a 1 hour online training course and provides 1.0 CE
      - o Information on how to obtain the CE is listed on this webpage

http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html

- Learn the recommended CDC practices and identify discrepancies between current practices and recommended practices by completing:
  - Preventing Bloodstream Infection in Outpatient Hemodialysis
    Patients: Best Practices for Dialysis Staff

http://www.cdc.gov/dialysis/prevention-tools/training-video.html

## Training (cont'd)

## 1 Required Training Course for Personnel Entering Data into NHSN

- Dialysis Event (DE) Surveillance Training
  - Required annually for all users participating in Dialysis Event surveillance and INCLUDES reading the <u>Dialysis Event Protocol</u>
  - This is a 1 hour online training course and provides 1.0 CE
  - Information on how to obtain the CE is listed on this webpage

http://www.cdc.gov/nhsn/Training/dialysis

## Training (cont'd)

### Attestation

- Once the training is completed each staff member <u>must</u> complete an attestation in Survey Monkey entitled –
  - HAI QIA CDC Training Attestation 4/09/2015
- Attestation must be completed no later than:
  - Friday, April 17<sup>th</sup>
- A Survey Monkey link will be sent to you in an email

 Consider having more than one person responsible for all of the observations





## Consider recruiting patients, family and caregivers to participate in the Hand Hygiene observations

## What are the Benefits of Patient and Family Engagement?

- Increased resources to perform the observations and audits - #1 barrier identified in 2014 HAI QIA was 'not enough staff'
- Gain knowledge of the best practices
- Provide valuable feedback on a topic that directly affects them
- Objective

## Selection of Patient, Family and Caregiver for Hand Hygiene Observations and Audits

- Patient Representatives
- Anyone you believe would be a good fit for this activity
- Try to find at least one person on each shift
- The facility may choose the best method of education/training non-healthcare participants

# **Know Where Resources**Are Located

CDC/ NHSN Websites

### Resources

### CDC Website BSI Main Landing Page

CDC Approach to BSI Prevention in Dialysis Facilities
 http://www.cdc.gov/dialysis/prevention-tools/core-interventions.html

#### 1. Surveillance and feedback using NHSN

Conduct monthly surveillance for BSIs and other dialysis events using CDC's National Healthcare Safety Network (NHSN). Calculate facility rates and compare to rates in other NHSN facilities. Actively share results with front-line clinical staff.

#### 2. Hand hygiene observations

Perform observations of hand hygiene opportunities monthly and share results with clinical staff.

#### 3. Catheter/vascular access care observations

Perform observations of vascular access care and catheter accessing quarterly. Assess staff adherence to aseptic technique when connecting and disconnecting catheters and during dressing changes. Share results with clinical staff.

### 4. Staff education and competency

Train staff on infection control topics, including access care and aseptic technique. Perform competency evaluation for skills such as catheter care and accessing every 6-12 months and upon hire.

#### 5. Patient education/engagement

Provide standardized education to all patients on infection prevention topics including vascular access care, hand hygiene, risks related to catheter use, recognizing signs of infection, and instructions for access management when away from the dialysis unit.

### Resources (cont'd)

CDC Audit Tool and Checklists

http://www.cdc.gov/dialysis/prevention-tools/index.html



	Procedure observed, C=connect =disconnect		Mask worn properly (if required)	Hand hygiene performed	New clean gloves worn	Catheter removed from blood line aseptically (disconnection only)	Catheter hub scrubbed	Hub antiseptic allowed to dry	Catheter connected to blood lines aseptically (connection only)	New caps attached aseptically (after disconnecting)	Gloves removed	Hand hygiene performe
Du	iscipline: <b>P</b> = uration of ob	oservation	period =	n		Number			ned correctly = served during	= g audit =		

× SurveyMonkey - Question ...

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http://www.cdc.gov/dialysis/PDFs/collaborative/Catheter-Connection-Disconnection-O 🔎 🔻 🖰 🚾 CDC - Training video - Pre... 🧟 cdc.gov

Discipline	Site cleaned	Hand	New, clean	Skin antiseptic applied appropriately	Skin antiseptic allowed to dry	No contact with fistula/ graft site (after antisepsis)	Cannulation performed aseptically	Gloves removed	Hand hygiene performed	Comn
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CDC Dialysis Collaborative	Facility Name:	Date:	Start time:	_AM / PM
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**Audit Tool:** Hemodialysis hand hygiene observations (Use a " $\sqrt{}$ " for each 'hand hygiene opportunity' observed. Under 'opportunity successful', use a " $\sqrt{}$ " if successful, and leave blank if not successful)

Discipline	Hand h	ygiene	Describe any missed attempts (e.g., during medication prep,
Discipline	Hand hygiene opportunity	Opportunity successful	between patients, after contamination with blood, etc.):

Discipline: P=physician, N=nurse, T=technician, S=student, D=dietitian, W=social worker, O=other							
Duration of observation period = minutes Number of successful hand hygiene opportunities observed =							
Total number of patients observed during audit = Total number of hand hygiene opportunities observed during audit =							
** See hand hygiene opportunities on back page							

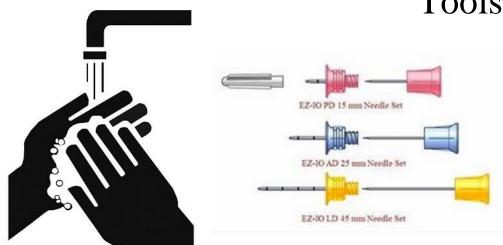


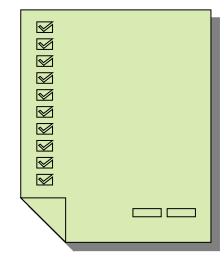
Division of Healthcare Quality Promotion

## **Begin the QIA Process**

Implement the CDC recommended practices Begin observations and document on the Audit

**Tools** 





# **Begin Observations and Audits**

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### **How to Use the Audit Tools: Observations**

- Each audit includes multiple observations.
  - An observation is the review of a procedure to indicate which steps were performed correctly or incorrectly.
- If each step of a procedure is observed and correctly performed, the observation is marked a success:

	Audit Tool: Catheter connection and disconnection observations (Use a " $\sqrt{"}$ if action performed correctly, a " $\Phi$ " if not performed. If not observed, leave blank)										
Procedure observed, C=connect D=disconnect		Mask worn properly (if required)	Hand hygiene performed	New clean gloves worn	Catheter removed from blood line aseptically (disconnection only)	Catheter hub scrubbed	Hub antiseptic allowed to dry	Catheter connected to blood lines aseptically (connection only)	New caps attached aseptically (after disconnecting)	Gloves removed	Hand hygiene performed
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### **How to Use the Audit Tools: Tallying Results**

 Once all observations have been completed, add the successful observations and note the total number of observations performed

### **Audit Tool:** Catheter connection and disconnection observations

(Use a " $\sqrt{}$ " if action performed correctly, a " $\Phi$ " if not performed. If not observed, leave blank)

Procedure observed, C=connect D=disconnect	Discipline	Mask worn properly (if required)	Hand hygiene performed	New clean gloves worn	Catheter removed from blood line aseptically (disconnection only)	Catheter hub scrubbed	Hub antiseptic allowed to dry		New caps attached aseptically (after disconnecting)	Gloves removed	Hand hygiene performed
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CDC Dialysis Collaborative	Facility Name:	Date:	Start time:	_AM / PM
Day: M W F Tu Th Sa Shift: 1st 2nd 3rd	4 <sup>th</sup> Observer:	_ Location within ui	nit:	

**Audit Tool:** Hemodialysis hand hygiene observations (Use a " $\sqrt{}$ " for each 'hand hygiene opportunity' observed. Under 'opportunity successful', use a " $\sqrt{}$ " if successful, and leave blank if not successful)

Disability	Hand h	ygiene	Describe any missed attempts (e.g., during medication prep,
Discipline	Hand hygiene opportunity	Opportunity successful	between patients, after contamination with blood, etc.):
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T	<b>✓</b>		Did not wash hands after removing gloves
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## Guide to Hand Hygiene Opportunities in Hemodialysis

### 1. Prior to touching a patient

- Prior to entering station to provide care to patient
- Prior to contact with vascular access site
- Prior to adjusting or removing cannulation needles

### 2. Prior to aseptic procedures

- Prior to cannulation or accessing catheter
- Prior to performing catheter site care
- Prior to parenteral medication preparation
- Prior to administering IV medications or infusions

### 3. After body fluid exposure risk

- After exposure to any blood or body fluids
- After contact with other contaminated fluids (e.g., spent dialysate)
- After handling used dialyzers, blood tubing, or prime buckets
- After performing wound care or dressing changes

### 4. After touching a patient

- When leaving station after performing patient care
- After removing gloves

### 5. After touching patient surroundings

- After touching dialysis machine
- After touching other items within dialysis station
- After using chairside computers for charting
- When leaving station
- After removing gloves

## **Report the Results**

### **Reporting the Results**

### Once the Observations are Completed...

 Calculate the numerator and denominator and enter these numbers into NHSN by the end of each month EXAMPLE

Numerator = 25 correctly performed hand hygiene observations

Denominator = 30 total hand hygiene observations

### **AND**

Record the numerator and denominator of each of the 3 audits in NHSN by the end of each month



## Reporting the Results (cont'd)

### Then....

 Fax the completed audit tools by the end of each month to Network 4

 The Network will validate the accuracy of the numerator and denominator reported to NHSN using the faxed CDC Audit Tools

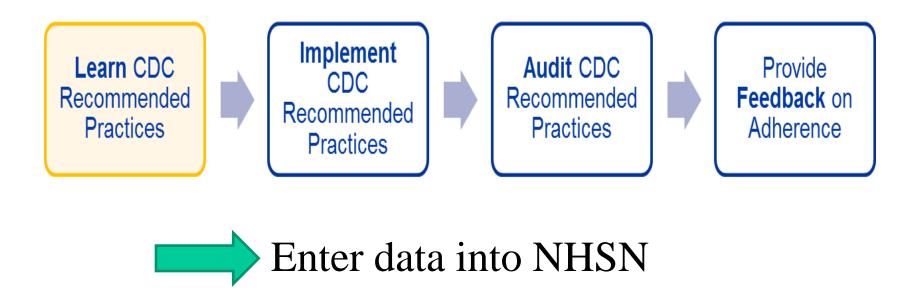
## Last, but not least...

- Provide feedback to staff
  - Identify barriers
  - Identify educational deficits
  - Identify process improvement actions

## Less than 100% Adherence?

- Begin process improvement cycle
  - Identify barriers
  - Develop Plan
  - Implement changes
  - Perform observations/audits and determine if plan was effective
  - Repeat process improvement cycle as needed

## **HAI QIA Process**



# How long do you have to do both processes?

- Until there are 3 consecutive months of:
  - accurately calculated numerators and denominators on the audit tools
     AND
  - Correct data is entered into NHSN (Monthly reporting plan and NUM/DEN for all audits)
- Once this goal is reached, the facility will be contacted to fax audits to the Network on an "as needed" basis

## **Network 4 Role in HAI QIA**

- Provide educational materials/links needed to complete the observations and audits
- Review paper audit tools
- Validate data reported to NHSN
- Contact facilities if recorded or reported data is inaccurate
- Contact facilities as needed
- Provide telephone support throughout the QIA

## Let's Talk About NHSN

# Prevention Process Measures (PPM): HH, AVF/AVG Cannulation, Catheter connection/disconnection

- How to Confer Rights
- Adding PPM to Monthly Reporting Plan
- How to report PPM data to NHSN
- NHSN alerts

## **Confer Rights**

- Each facility must "Confer Rights" to the Network for the PPM
- The "Confer Rights" prompt is located on the Home page
  - This allows the Network to view the data and provide feedback on the accuracy of the data reported to NHSN

## **How to Confer Rights**

- Click on "Not Accepted"
- Select Group name Network 4
- Review the Confer Rights screen
- Click "Accept" at the bottom of the page



## Department of Health and Human Services Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network

| NHSN Home | My Info | Contact us | Help | Log Out



Alerts

Reporting Plan

Patient

Event

Summary Data

Import/Export

Analysis

Surveys

Users

Facility

Group

Log Out

## **NHSN Dialysis Component Home Page**

Use the Navigation bar on the left to access the features of the application.

#### Action items

#### You must complete these items.

- · Confer rights not accepted
- A survey is required for <u>2015</u>

#### <u>Alerts</u>

- You have <u>3</u> missing events
- You have 1 missing summary item



## Department of Health and Human Services Centers for Disease Control and Prevention

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NHSN Home | My Info | Contact us | Help | Log Out



**Alerts** 

Reporting Plan

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**Event** 

**Summary Data** 

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Users

**Facility** 

Group

Log Out

## **Confer Rights Not Accepted List**

Define rights have been changed affecting the Group below. You may accept new rights or leave the group. Click the Group Name to view and accept new rights.



Name 🌲	Group ID	Status	Status Date
Dialysis Group Example	10691	Not Accepted	Feb 2 2015 1:18PM

CDC

NHSN - National Healthcare Safety Network

| NHSN Home | My Info | Contact us | Help | Log Out

Alerts
Reporting Plan
Patient
Event
Summary Data
Import/Export
Analysis
Surveys
Users
Facility
Group

Log Out

THISN Home

Logged into Dialysis Test Facility 3 (ID 10856) as VET2. Facility Dialysis Test Facility 3 (ID 10856) is following the DIAL component.

**Confer Rights-Dialysis** 

- ! Please review the data rights that "Dialysis Group Example" is requesting from your facility:
  - Verify locations
- Press "accept" button to confer rights or review current rights before accepting new rights

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## Reporting to NHSN

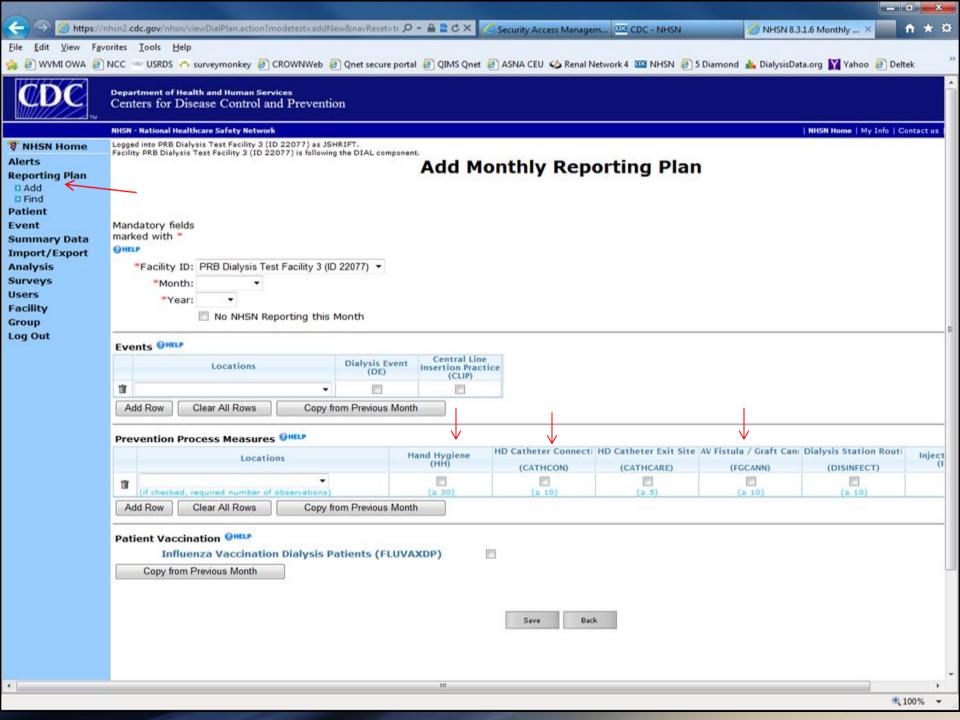
 Facilities <u>must</u> choose to ADD a Reporting Plan for each month

#### **AND**

Report Summary Data each month

# How To Create Monthly Reporting Plan

- You must ADD a Reporting Plan for each month April through September
- Select the Reporting Plan at the Left side of the page select "ADD" if needed
- Indicate which audits will be performed during the month by checking the boxes :
  - Hand Hygiene
  - HD Catheter Connection/Disconnection
  - AV Fistula/Graft Cannulation/Decannulation



## Monthly Reporting Plan (cont'd)

- Only check the boxes you intend to enter data for
- For Example: You may choose to check the box for Catheter site care, but then you will be required to report on this measure IN ADDITION to the 3 QIA measures
- NHSN creates alerts for each of the measures you check the box for if you fail to report the required data

# Reporting Summary Data Each Month

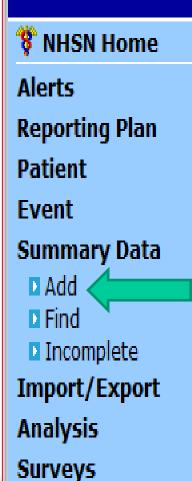
- Navigate to the Summary Data tab, then select ADD
- Select "Prevention Process Measures" from the menu
- Click "Continue"
- Enter the Numerator and Denominator for each PPM



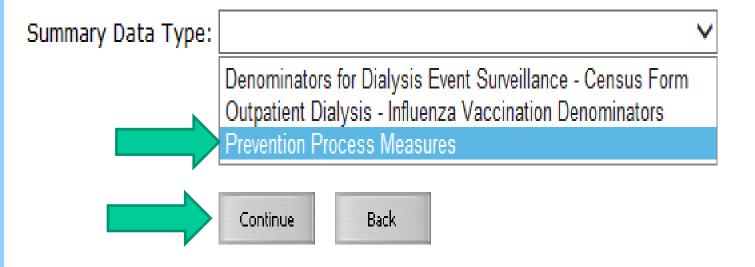
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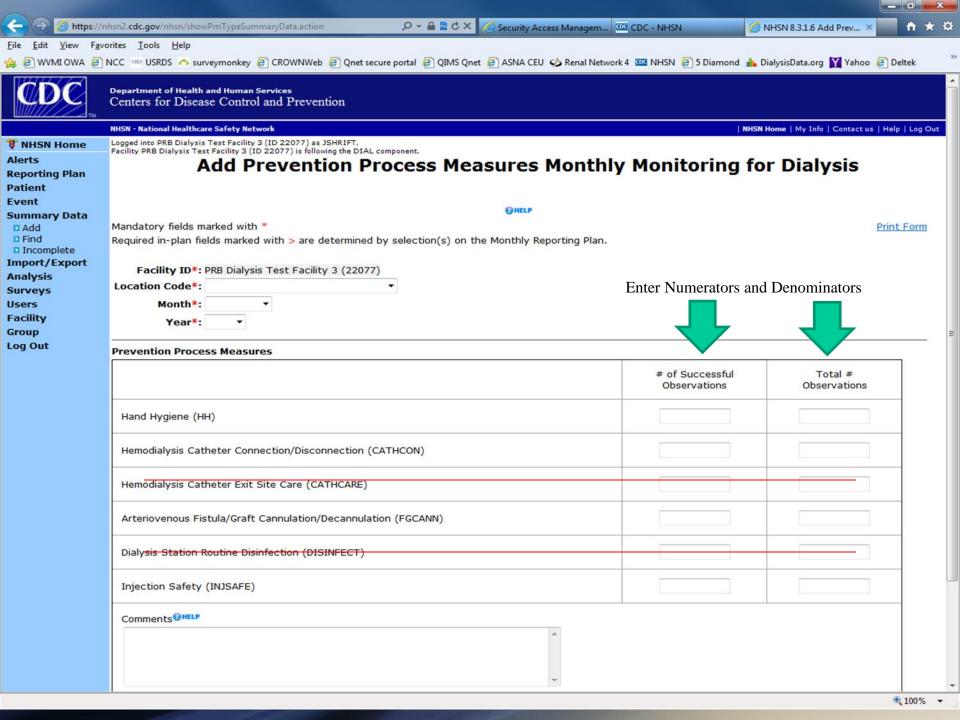
NHSN - National Healthcare Safety Network

NHSN Home | My Info | Contact us | Help | Log Out



## **Add Dialysis Summary Data**





### Example of Reporting Audit Results to NHSN

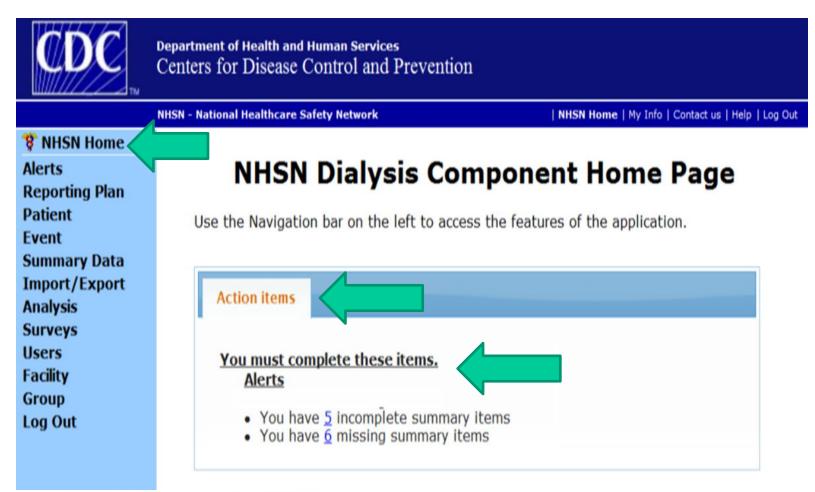
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Discipline: P=physician, N=nurse, T=technician, S=student, O=other										
Duration of observation period =minutes										
Total number of procedures observed during audit =										

Month*:	~
Year*:	~

#### **Prevention Process Measures**

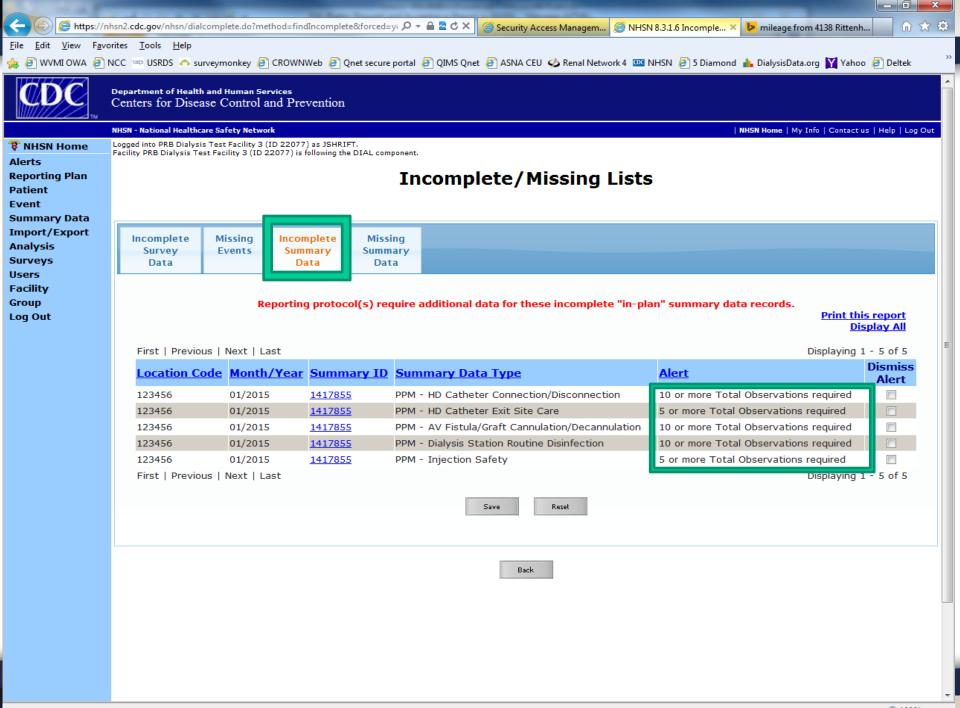
	# of Successful Observations	Total # Observations
Hand Hygiene (HH)		
Hemodialysis Catheter Connection/Disconnection (CATHCON)	5	7
Hemodialysis Catheter Exit Site Care (CATHCARE)		
Arteriovenous Fistula/Graft Cannulation/Decannulation (FGCANN)		
Dialysis Station Routine Disinfection (DISINFECT)		
Injection Safety (INJSAFE)		

### **NHSN Action Items and Alerts**



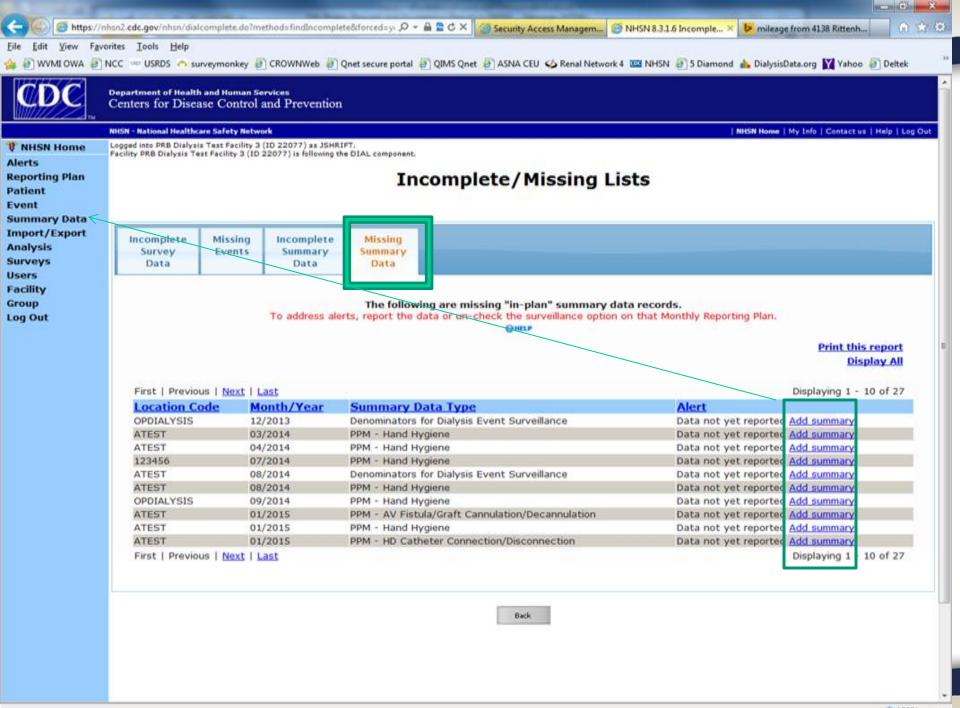
# NHSN Action Items and Alerts – Incomplete Summary Data

■ If you do <u>not report the minimum number of</u> observations for at least 1 measure - NHSN will show an Incomplete Summary Data alert



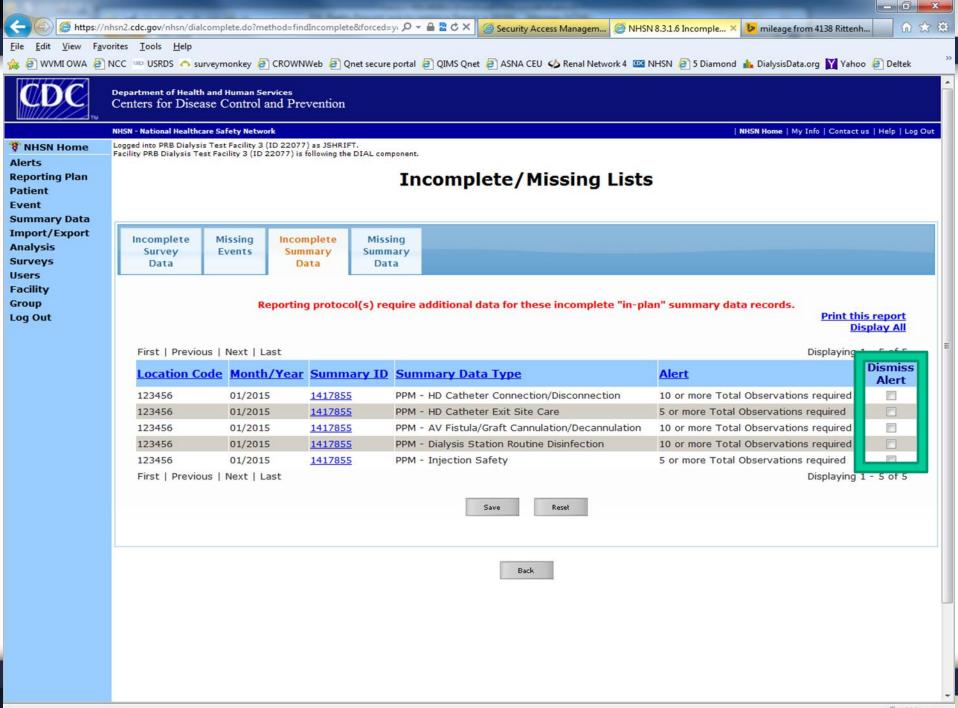
# NHSN Action Items and Alerts - Missing Summary Data

 If you do not report any data for any month -NHSN will show a Missing Summary Data alert



## **Dismissing Alerts**

- Current Month Data Collection: Alerts can be dismissed by reporting the additional data required by the Protocol
- Previous Month Data Too few observations were collected and the month has passed, incomplete alerts can be dismissed by checking the Dismiss Alert box



## **Polling Question**

Would you be interested in having an HAI QIA Q&A Webinar in 2 weeks?

## **Summary**

- Prepare for implementation of audit tools
  - Become familiarized with CDC's Recommended Practices and checklists
- 3 Audit Tools:
  - Hand Hygiene
  - Hemodialysis Catheter Connection/Disconnection
  - Arteriovenous Fistula/Graft Cannulation
- An observation monitors <u>all</u> steps of the recommended practice
- All steps must be observed AND be performed correctly for the observation to be marked a "success"

## Summary (continued)

- "Confer Rights" to share data
- Monthly Reporting Plans are created for each measure for April through September
- Audit tool summary results (number of successful observations and the total number of observations) are reported to the Prevention Process Measures (PPM) module under Report under "Summary Data"
- Watch for Action Items on the Home Page and address data requirement issues
- Contact the Network with any questions or concerns

### **Network Contact Information**

- Kou Kha-Moua, QID ext. 2820
  - kkha-moua@nw4.esrd.net
- Jeannette Shrift, QIC ext. 2821
  - jshrift@nw4.esrd.net

Quality Insights Renal Network 4
630 Freedom Business Center, Suite 116
King of Prussia, Pa 19406

Phone: (610-265-2418); Fax: (610-783-0374)

### **Resources for Facilities**

- Required Training for Staff Performing Observations and Audits: CDC Infection Prevention in Dialysis Settings Continuing Education <a href="http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html">http://www.cdc.gov/dialysis/clinician/CE/infection-prevent-outpatient-hemo.html</a>
- Required Training for Staff Performing Observations and Audits: Preventing Bloodstream Infections in Outpatient Hemodialysis Patients: Best Practices for Dialysis Staff <a href="http://www.cdc.gov/dialysis/prevention-tools/training-video.html">http://www.cdc.gov/dialysis/prevention-tools/training-video.html</a>
- Required Training for Staff Entering Data into NHSN: National Healthcare Safety Network (NHSN) Dialysis Event (DE) Surveillance Training <a href="http://www.cdc.gov/nhsn/Training/dialysis">http://www.cdc.gov/nhsn/Training/dialysis</a>
- Dialysis Safety Infection Prevention Tools
   <a href="http://www.cdc.gov/dialysis/prevention-tools/index.html">http://www.cdc.gov/dialysis/prevention-tools/index.html</a>
- NHSN -Tracking Infections in Outpatient Dialysis Facilities http://www.cdc.gov/nhsn/dialysis/index.html

### Resources for Facilities (cont'd)

 NHSN instructions for facilities to report audit information in Prevention Process Measure (PPM) module

http://www.cdc.gov/nhsn/dialysis/prevention-process-measures.html.

#### This site includes links for:

- PPM in Outpatient Dialysis Facilities Training
- Other Dialysis PPM Tools including:
  - Scrub the Hub Protocol
  - PPM Hemodialysis hand hygiene Protocol
  - Hemodialysis hand hygiene Observations Tool
  - Arteriovenous fistula/graft cannulation and decannulation Observation Tool Please note: This project does NOT include decannulation
  - Catheter Connection/ Disconnection Observation Tool
  - Check list for Hemodialysis Catheter Connection
  - Check list for Hemodialysis Catheter Disconnection
  - Check List for Fistula/Graft Cannulation

# Resources for Patients, Families and Caregivers

- Video <u>Dialysis Patients Speak: Preventing Infections</u>
- Video <u>Dialysis Patients Speak: a Conversation about the Importance of AV</u>
   <u>Fistulas.</u>
- Training Video and Print Resources: <a href="http://www.cdc.gov/dialysis/prevention-tools/training-video.html#guide">http://www.cdc.gov/dialysis/prevention-tools/training-video.html#guide</a>
- CDC Patient Pocket Guide: 6 Tips to Prevent Dialysis Infections
  - English: http://www.cdc.gov/dialysis/PDFs/Dialysis-Patient-PocketGuide.pdf
  - Spanish: <a href="http://www.cdc.gov/dialysis/PDFs/Spanish-Dialysis-Patient-PocketGuide.pdf">http://www.cdc.gov/dialysis/PDFs/Spanish-Dialysis-Patient-PocketGuide.pdf</a>

### **Collaborative Reports: Strategies, Challenges**

- Lindberg C, Downham G, Buscell P, Jones E, Peterson P, Krebs V. Embracing collaboration: A novel strategy for reducing bloodstream infections in outpatient hemodialysis centers. American Journal of Infection Control 2013,41(6):513-519.
- Hess S, Kemper Alston W, Bushey M, Rimmer J. A Four Year Experience with a Central Line Access-Related Bloodstream Infection (CL-ARB) Prevention Program in Six Outpatient Hemodialysis (HD) Centers. Presented at ID Week 2012. San Diego, CA. Saturday, October 20, 2012.
- Centers for Disease Control and Prevention (CDC). Reducing bloodstream infections in an outpatient hemodialysis center. Morbidity and Mortality Weekly Report 2012, 16(61): 169-173.
- Kallen AJ, Patel PR, Hess S. Intolerance of chlorhexidine as a skin antiseptic in patients undergoing hemodialysis. Infection Control and Hospital Epidemiology 2011, 32(11):1144-1146.
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- See I, Shugart A, Lamb C, Kallen AJ, Patel PR, Sinkowitz-Cochran RL. Infection control and bloodstream infection prevention: the perspective of patients receiving hemodialysis. Nephrology Nursing Journal 2014, 41(1):37-39.