IPRO ESRD Network of New York
Exploring Sustainable Approaches to Infection Prevention

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ANNA Long Island Chapter – Spring Conference
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Agenda

• Overview of IPRO ESRD Network Program
• A Team Approach: Infection and Dialysis
• Our Roles in Infection Prevention
• Infection Control Best Practice Measures
• Integrating Patients into Infection Prevention Team
• Sustainable Strategies to Infection Prevention
• Available Educational Resources
• Open Forum Q&A
IPRO ESRD Network
Program Overview
Island Peer Review Organization (IPRO)

• Founded in 1984, IPRO, a national independent, not-for-profit organization, holds contracts with federal, state and local government agencies as well as private-sector clients nationwide.

• Provides a full spectrum of healthcare assessment and improvement services that enhance healthcare quality to achieve better patient outcomes and foster more efficient use of resources.

• Headquartered in Lake Success, NY and also has offices in Albany, NY; Hamden, CT; Camp Hill, PA; Morrisville, NC; Princeton, NJ; San Francisco, CA and Beachwood, Ohio.
ESRD Program National Level

- **18 ESRD Networks**
  - 50 States and Territories
- **Centers for Medicare & Medicaid Services (CMS)**
  - Contracted ESRD Network Statement of Work (SOW)
- **ESRD National Coordinating Center**
  - Bi-Monthly Learning and Action Network (LAN) Calls
  - Collaboration with Large Dialysis Organizations (LDO) Data Collection

Quality Improvement Activities in ALL Medicare Certified Dialysis Facilities
National ESRD Network Program
## Service Area Facility Breakdown

<table>
<thead>
<tr>
<th>Ownership</th>
<th>ESRD Patient Census</th>
<th># of Dialysis Facilities</th>
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<tr>
<td>FKC</td>
<td>7,013</td>
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<td>DaVita</td>
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The Mission of the IPRO End Stage Renal Disease (ESRD) Network Program is to promote health care for all ESRD patients that is safe, effective, efficient, patient-centered, timely, and equitable.
ESRD Network Role/Responsibilities

- Improve quality of care for ESRD patients
- Promote patient engagement/patient experience of care
- Provide technical assistance to ESRD patients and providers
- Evaluate and resolve patient grievances
- Assist facilities to enroll in a HIE or another evidenced-based highly effective information transfer system
- Support ESRD data systems and data collection, analysis and monitoring for improvement
- Support emergency preparedness and disaster response
- Implement Quality Improvement Activities to improve ESRD QIP quality measures and facility performance
A Team Approach:
Infection Prevention
Infection and Dialysis

- Patients who undergo hemodialysis (HD) treatment have an increased risk for getting an infection.
- HD patients are at a high risk for infection because the process of HD requires frequent use of catheters or insertion needles to access the bloodstream.
- HD patients have weakened immune systems which increase their risk for infection.
- HD patients require frequent hospitalizations and surgery where they might acquire an infection.
Why is Infection Prevention Important?

- Infections are the second leading cause of death in patients with ESRD
  - CMS National initiative to reduce the rate of bloodstream infections (BSIs) by 50% over the next five years (2023)
- CDC estimated that 37,000 bloodstream infections (BSIs) occurred among HD patients with central lines in 2008
  - One in four of these affected patients may have died as a result of the infection
- Since 1993, hospitalization rates among HD patients have increased 47% for bloodstream infection and 87% for vascular access infection
  - Central lines have the highest infection risk
- Whenever possible, AV fistulas are the preferred way to receive dialysis because they have the lowest risk of infection

(CDC.gov, 2015)
Our Role in Infection Prevention
Role of an Infection Control Coach

• Ensures that all staff members are wearing the appropriate Personal Protective Equipment (PPE)
• Ensure that staff and patients are maintaining a clean working environment
• Ensure that staff members are following policies and procedures for cleaning workstations, including needle buckets
• Utilize CDC checklists and audit tools to identify break in the infection chain and provide needed training
Responsibilities of an Infection Control Coach

• Ensures that clean and dirty stations are properly labelled
• Ensures that both staff and patients are practicing proper handwashing techniques
• Ensures that patients’ AVF/AVG are washed, cleaned and dried using the appropriate cleaners and proper procedures
• Ensures that staff members sign an Infection Prevention Pledge and are held accountable for safe infection prevention practices
Responsibilities of an Infection Control Coach

• Ensures that “Education Station” is implemented and maintained with up-to-date resources

• Ensures that new staff members are trained utilizing the provided CDC and Network resources and more experienced staff are maintaining best practice measures
Our Roles in Infection Prevention

• Use evidence-based recommendations and guidelines
• Infection Prevention is everyone’s responsibility
• Hold teammates accountable for practicing infection control measures at all times, to all patients
• Conduct Staff Competency Assessments and Training In-Services
• Review policies and procedures frequently
• Provide on-going and regular patient and caregiver education
• Involve patients in the process of infection prevention and control
Infection Control Best Practices
Best Practices from the Field

• Wash hands before and after each patient care
• Wash hands before and after wearing gloves
• Escort patients to sink prior to them being cannulated
• Create a “Safe Zone” between patients
• Use the CDC checklists and audit tools to monitor proper techniques and provide education where needed
• Provide monthly education to both patients and staff
• Implement staff “huddles” prior to treatment start to review infection control and best practice measures
Best Practices from the Field

• Involve patients and caregivers in the infection prevention practices, educate on the importance of awareness
• Use incentive/reward methods to encourage patients and staff to practice infection control e.g. Kudos “chips,” recognition in staff “huddles,” recognition of patients in treatment center (be creative)
• HD related Central Line-Associated Bloodstream Infections (CLABSIs) can be reduced by avoiding the use of a CVC in favor of an AVF or an AVG, and by improving adherence to best practices for maintaining central lines in HD patients (CDC.gov/mmwr, 2011)
Root Cause Barriers Driving Interventions

Facilities report infections were staff protocol related

- Increase awareness CDC Core Interventions
- Utilize CDC training modules, request Network in-services

Facilities report access appointment delays

- Vascular Access Reduction Toolkit, Monthly Catheter Tracking Tool

Facilities report that patients refused a different access type

- ESRD Forum Refusal Form and Tools
Root Cause Barriers Driving Interventions

Facilities report lack of patient knowledge/education

• Develop *Education Station*
  - Utilize Network-compiled Resource Toolkit with CDC Materials
  - Mitigating patient fears/apprehensions through Coaches and Peer Mentors

Facilities report poor patient Hand Hygiene/poor hygiene

• Promote use of patient infection prevention pocket guide
  - Use AAKP/CDC Making Dialysis Safer Coalition Conversation Starter
  - CDC Clean Hands Count for patients and visitors factsheet and brochure
Integrating Patients into Team
Peer Mentoring

- A peer mentor empowers fellow patients to move forward with their lives after being diagnosed with ESRD
- Peer mentoring provides support and increases the confidence that many new patients need
- Offers patients access to someone who has been through the similar experiences and can understand their concerns
Role of Peer Mentoring

- Providing information
- Listening to concerns
- Sharing experiences
- Promoting positive behavior
- Offering encouragement, and
- Relieving anxiety

Learn more about IPRO’s E-University, Peer Mentoring Platform at https://esrdlms.ipro.org/
Guidelines for Peer Mentors

• Peer mentors should wait for a patient’s consent before approaching them as a mentor
• Peer mentors should not provide medical advice. If a Peer Mentor is asked for medical advice, he/she should refer the patient to the dialysis staff or Nephrologist
• If a patient shares a complaint with a peer mentor, the patient should be encouraged to use the facility’s grievance procedure
Guidelines for Peer Mentors

• The dialysis facility Coach/Lead serves as a patient advocate and can help with patient complaints.
• Peer mentors should always get permission from the patient before approaching a staff member about a patient’s concerns and/or sharing any information obtained in the role of a peer mentor.

Key Points for Talking with Facility Leaders

Need for a Peer Mentoring Program

Use this tip sheet to introduce and build support for the Peer Mentorship program with your administrator, medical director, board of directors, or other leadership members.
ESRD E-University Course Tracks

Select your specific course track below.
If you are interested in becoming a peer mentor for ESRD patients, choose the 'Patient Training' option.
If you are interested in earning CE credit, choose the 'Professional Training' option.

How Do I Create an Account?
Each person should create their own unique account. Facility staff may assist patients with registering for their own personal account, however sharing user account information is strongly discouraged.

1. Click "Register" from the login screen

2. To create an account, you will need to enter the following information:
   a. Username (recommend this being the same as your email address)
   b. Email Address
   c. Choose a Password
   d. Confirm Password
   e. First Name
   f. Last Name
   g. Job Title
   h. ESRD Network
   i. ESRD Network CCN/Facility Name
      (This field will appear after you have selected your Network number. The CCN is the Medicare Provider Number. Your facility can give you the number and name of your facility as it is listed in the Medicare Database.)

https://esrdlms.ipro.org/
Sustainability
Successful Strategies
Sustainability Strategies

Institute for Healthcare Improvement’s (IHI) Model of Sustainability

1. Robust, Transparent Feedback Systems
2. Supportive Management Structure
3. Structure to ‘Foolproof’ Change
4. Shared Sense of the Systems to be Improved
5. Culture of Involvement and Deeply Engaged Staff
6. Formal Capacity-Building Activities
Quality/Performance Improvement

• Visual Management System
• Monitor Key Process Indicators
• Rapid Cycle Improvement
• Staff Check-ins/Huddles
  • Project Management
  • Celebrate Successes
  • Discuss Barriers
How to Implement a Staff “Huddle”

• A Staff Huddle is a daily meeting of staff members prior to start of 1st treatment to reinforce/educate staff members on policies and procedures, best practice measures, and update staff on relevant information relating to patient care

• A Staff “Huddle” needs to have an Agenda to ensure that discussion topics and reminders are kept on target and there are no deviations

• Staff “Huddles” are short 15-20 minutes discussions, no more than 30 minutes, therefore, topics need to be specific, relevant and realistic
Purposes of a Staff Huddle

- Staff Huddles are intended to improve quality of patient care, encourage staff input, and boost staff morale.
- Staff Huddles also bring awareness to practices that are unsafe without singling out individuals.
- Staff Huddles recognize staff and/or patients who are making a positive impact in the facility or in the dialysis community.
Educational Resources and Tools
CDC Core Interventions

CDC 9 Core Interventions

- Surveillance and Feedback using NHSN
- Hand Hygiene Observations
- Catheter/Vascular Access Care Observations
- Staff Education and Competency
- Patient Education/Engagement
- Catheter Reduction
- Chlorhexidine for Skin Antisepsis
- Catheter Hub Disinfection
- Antimicrobial Ointment
### CDC Approach to BSI Prevention in Dialysis Facilities

1. **Surveillance and feedback using NHSN**
   - Conduct monthly surveillance for BSI 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 monthly. 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 and access care and assessing every 6-12 months and upon hire.

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

6. **Catheter care reduction**
   - Incorporate efforts (i.e., through patient education, vascular access coordinated care, and addressing barriers to patient vascular access placement and use).

7. **Chlorhexidine for skin antisepsis**
   - Use an alcohol-based chlorhexidine (0.5%) solution as the first line skin antisepsis and dressing changes.*

8. **Catheter hub disinfection**
   - Scrub catheter hubs with an appropriate antisepic after cap is removed and before catheter is accessed or removed.

9. **Antimicrobial ointment**
   - Apply antibiotic ointment or providone iodine ointment to catheter exit sites daily.

* Povidone-iodine (preferably with alcohol) or 70% alcohol are alternatives for patients who are allergic to chlorhexidine.

** See information on selecting an antimicrobial ointment for hemodialysis catheter safety [here](http://www.cdc.gov/dialysis/prevention-tools-core-interventions.html).

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### CDC Dialysis Collaborative

**Discipline:**
- **Physician**
- **Nurse**
- **Other**

**Facility Name:**

**Date:**

### Checklist: Hemodialysis catheter exit site care

- Wear mask (if required) and remove
- Perform hand hygiene
- Put on, new, clean gloves
- Apply skin antisepic
- Allow skin antisepic to dry
- Do not contact exit site (after an insertion)
- Apply antimicrobial ointment*
- Apply dressing aseptically
- Remove gloves
- Perform hand hygiene

* Use an ointment that does not interact with catheter material

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### Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol

**Definition:**
- **Catheter** refers to a central venous catheter (CVC) or a central line.
- **Hub** refers to the end of the CVC that connects to the blood lines or cap.
- **Cap** refers to a device that screws on and occludes the hub.
- **Link** refers to the catheter portion that extends from the patient’s body to the hub.

**Blood lines** refer to the arterial and venous ends of the appropriate circuit that connect the patient’s catheter to the dialyzer.

**Connection Steps:**
1. Perform hand hygiene and don new clean gloves.
2. Clamp the catheter (Note: Always clamp the catheter before disconnecting. Never leave an uncapped catheter unattended).
3. Distill the catheter hub before applying the new cap using an appropriate antiseptic (see note).
4. Always handle the catheter hubs aseptically. Once disconnected, do not allow the catheter hubs to touch nonsterile surfaces. Hold the catheter until the antiseptic has dried.
5. Attach the new sterile cap to the catheter and connect to the Hub.
6. Ensure that the catheter is still clamped.
7. Remove gloves and perform hand hygiene.

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### NCEID CDC Prevention Toolkit Division of Healthcare Quality Promotion

- **For more information about the Core Interventions for Dialysis Bloodstream Infection (BSI) Prevention, please visit** [http://www.cdc.gov/dialysis](http://www.cdc.gov/dialysis)
Patients and Visitors

ASK FOR SAFE CARE
ASK FOR CLEAN HANDS

Put Together the Pieces to Prevent Infections in Dialysis Patients

Engage Patients
Discuss important infection prevention practices like hand hygiene with your patients and their caregivers.

Reduce Catheters
Identify and address barriers to frequent patient and catheter removal.

Perform Hand Hygiene and Change Gloves
Know when it is necessary to perform hand hygiene and change your gloves, put this knowledge into practice.

Catheter Care, Scrub the Hubs
Scrub the catheter

Vaccinate Dialysis Staff and Patients
Make sure staff and patients

Disinfect the Dialysis Station
Ensure the station is

Patients with Catheters

6 Tips to Prevent Dialysis Infections

TIP 1: Catheters have a higher risk of infection. Ask your doctor about getting a fistula or graft instead.

TIP 2: Learn how to take care of the catheter at home. Do not get it wet.

TIP 3: Wash your hands often, especially before and after dialysis treatment.

TIP 4: Know the steps your healthcare providers should take when using the catheter for treatment.

TIP 5: Know the signs and symptoms of infection and what to do if you think you might have an infection.

TIP 6: Know what to do if you have any problem with the catheter.
NHSN: National Healthcare Safety Network

- Healthcare Associated Infection (HAIS) tracking system
- Dialysis Event Surveillance training is required of all hemodialysis facilities
- Monthly NHSN reporting of data is needed to meet QIP requirements
- Complete NHSN Training and Network Attestation Survey
Welcome to IPRO ESRD Network Program E-University

This site provides End Stage Renal Disease training opportunities for patients and professionals that align with the ESRD Network and CMS quality improvement goals. Once you have created a user account through the Log In link, you will be able to access and take training courses, download supporting materials, and obtain a certificate of completion.

If you require assistance, create a support ticket here: http://help.esrd.ipro.org/support/home, select "New support ticket", complete the form and select "Submit". Please reference E-University in the subject line of the form.

Patient Training
LEARN MORE

Professional Training
In Development

https://esrdlms.ipro.org/
Closing Remarks
Questions/Comments?
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Thank You!

Order Printed Educational Resources
www.surveymonkey.com/r/NW2QIAResources

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