COVID-19 and HAI Updates and Q&A Webinars for Long-Term Care and Congregate Residential Settings

December 15th , 2023

Housekeeping

- All attendees in listen-only mode
- Submit questions via Q&A pod to **All Panelists**
- Slides and recording will be made available later
- For continuing education credit, complete evaluation survey upon end of webinar
  - Must be registered individually to receive credit

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Illinois Department of Public Health

Agenda

- Upcoming Webinars
- Dialysis ICAR Updates
- Infection Prevention: Nursing Homes and the ESRD Population
- Open Q & A

Slides and recording will be made available after the session.

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Upcoming Infection Prevention and Control Q&A

1:00 pm - 2:00 pm

Date	Infection Control Topic	Registration Link
Friday, January 5th	Candida auris: Not Your Grandmother's Yeast	https://illinois.webex.com/weblink/register/rf1a1f934aca5d5c9fb144072d42124be
Friday, January 19th	Hot Topics: Bloodborne Pathogen Standard: Biohazard waste management, Hepatitis B	https://illinois.webex.com/weblink/register/r7b1c42d0146e779082e1816279d9ec06
Friday, February 9th	Falls and Antimicrobial Use	https://illinois.webex.com/weblink/register/r1e93656bd36dabb16006c1f7201015cc
Friday, February 23rd	Urinary Tract Infections	https://illinois.webex.com/weblink/register/r59f9d827f42f61e76cdb9d6e00c3a8df

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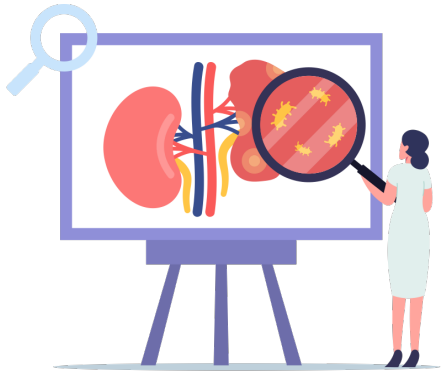
Dialysis Provider Updates

December 15th, 2023

Alison VanDine, MPH, CIC
Valbona Cela, MPH

Dialysis Updates



2023-2024 Dialysis Outreach

- Partner with QSource, the Illinois End-Stage Renal Disease (ESRD) Network 10
- Conduct 90 Infection Control Assessment and Responses (ICARs)
- Perform landscape analysis of Illinois outpatient dialysis facilities
  - REDCap survey to assess current IPC infrastructure and needs
  - Survey link: : https://redcap.link/ILdialysis

Your IDPH Team

- *Infection Preventionist, Dialysis Lead*: Alison VanDine, MPH, CIC
- *Infection Preventionist:* Valbona Cela, MPH
- Division of Patient Safety and Quality, Dialysis Team Contact Information
  - Email: dph.dialysis@illinois.gov

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Infection Control Assessment and Response (ICAR)

What is an ICAR?

- A CDC tool to assist in the assessment of infection control programs and practices in dialysis facilities
- A non-regulatory, onsite evaluation with four components:
  - Facility Demographics
  - Infection Control Program and Infrastructure Section
  - Direct Observation of Facility Practices Section
  - Infection Control Guidelines and Other Resources

What happens during an ICAR?

- An IP Specialist from IDPH will contact your facility in advance to coordinate an ICAR
  - We will meet with your clinic manager and the team in charge of infection control
- This visit, utilizing the CDC's established ICAR tool, will take a few hours to complete
- We will provide your facility with a copy of the completed ICAR along with our recommendations

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Infection Prevention and Control Assessment Tool for Hemodialysis Facilities

This tool is intended to assist in the assessment of infection control programs and practices in dialysis facilities. In order to complete the assessment, direct observation of infection control practices will be necessary. To facilitate the assessment, health departments are encouraged to share this tool with facilities in advance of their visit.

Dialysis facilities that report to NHSN complete an *Outpatient Dialysis Center Practices Survey* each year. The survey responses can be accessed in NHSN or the facility can be asked to retrieve and print their completed NHSN survey in advance of the site visit. The elements included on this assessment tool are intended to complement the NHSN survey. For facilities that do not report to NHSN, consider asking the facility to complete the practice elements of the survey.

Overview

Section 1: Facility Demographics

Section 2: Infection Control Program and Infrastructure

Section 3: Direct Observation of Facility Practices

Section 4: Infection Control Guidelines and Other Resources

Infection Control Domains for Gap Assessment

I. Infection Control Program and Infrastructure

II. Infection Control Training, Competency, and Audits

III. Healthcare Personnel (HCP) Safety

IV. Surveillance and Disease Reporting

V. Respiratory Hygiene/Cough Etiquette

VI. Personal Protective Equipment (PPE)

VII. Environmental Cleaning

VIII. Dialyzer Reuse and (if applicable) Reprocessing

IX. Hand Hygiene

Section 1: Facility Demographics	
Facility Name (for health department use only)	
NHSN Facility Organization ID (for health department use only)	☐ N/A because not CMS-certified or other reason, specify:
State-assigned Unique ID	
Date of Assessment	
Type of Assessment	☐ On-site ☐ Other (specify):
Rationale for Assessment (Select all that apply)	☐ Outbreak ☐ Input from ESRD Network or state survey agency ☐ NHSN data Specify: ☐ BSI ☐ Other NHSN data, specify: ☐ Other reason (specify):
Is the facility affiliated with a hospital?	☐ Yes (specify): (for health department use only) ☐ No If yes, who provides staffing for the facility? ☐ Hospital staff ☐ Contract with a dialysis company ☐ Other (specify):
Does the facility belong to a dialysis chain?	☐ Yes (specify chain below) ☐ DaVita ☐ Fresenius Medical Care ☐ Dialysis Clinic, Inc. (DCI) ☐ Other (specify): ☐ No
What services are offered at the facility? (Select all that apply)	☐ Adult in-center hemodialysis ☐ Pediatric in-center hemodialysis ☐ Home hemodialysis ☐ Nocturnal hemodialysis ☐ Peritoneal dialysis ☐ Inpatient hemodialysis (in addition to outpatient hemodialysis)
What is the typical patient	

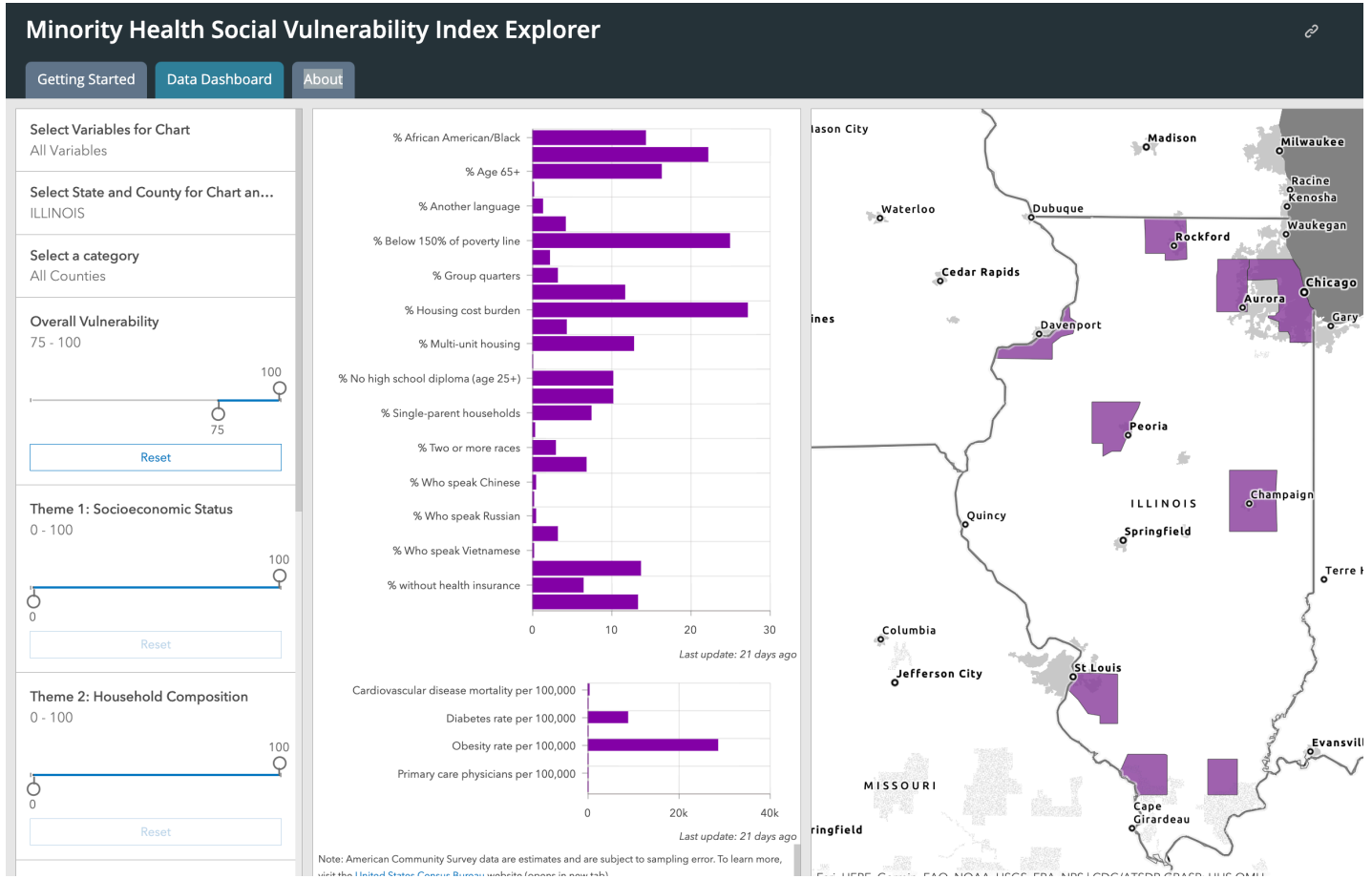
Section 2: Infection Control Program and Infrastructure

I. Infection Control Policies and Infrastructure		
Elements to be assessed	**Assessment**	**Notes/Areas for Improvement**
1. What training does the person in charge of infection control *at the facility* have? *Select the best answer*	○ Certified in Infection Control (CIC) ○ Other training in infection control (specify): ○ No specific training in infection control ○ Not Applicable (no person in charge of infection control at the facility)	
2. Is the facility participating in their ESRD Network Healthcare-Associated Infection (HAI) Quality Improvement Activity (QIA)?	○ Yes ○ No	
3. Has the facility participated in the CDC Dialysis BSI Prevention Collaborative?	○ Yes ○ No	
4. In the past 2 years, has the facility participated in any other intensive program focused on HAI prevention? (e.g., clinical trial, company-led quality improvement project)	○ Yes (specify): ○ No	
5. Does the facility have a system for early detection and management of potentially infectious persons at initial points of patient encounter? *Note: This question does not refer to viral hepatitis (B or C) or vaccination status of patients. This question refers to the recognition of uncontrolled diarrhea, draining infected wounds, acute respiratory infection or influenza-like illness, and determination of travel history.*	○ Yes (specify one below): ○ System applies prior to arrival or immediately upon entering the dialysis facility (i.e., at check-in or while in waiting room) ○ System applies when patient arrives in dialysis treatment area (i.e. patient in dialysis treatment station) ○ No	
6. Does the facility have a policy/protocol for	○ Yes ○ No	

ICAR Prioritization Methods

ICAR Visits

- 90 Dialysis ICARS by 2024
- Prioritized by >0.75 vulnerability rating on SVI Index
  - 8 counties identified: Cook, Kane, Winnebago, Rock Island County, Peoria, Champaign, St. Clair, Jackson, Saline



Source: https://onemap.cdc.gov/Portal/apps/MapSeries/index.html?appid=3384875c46d649ee9b452913fd64e3c4

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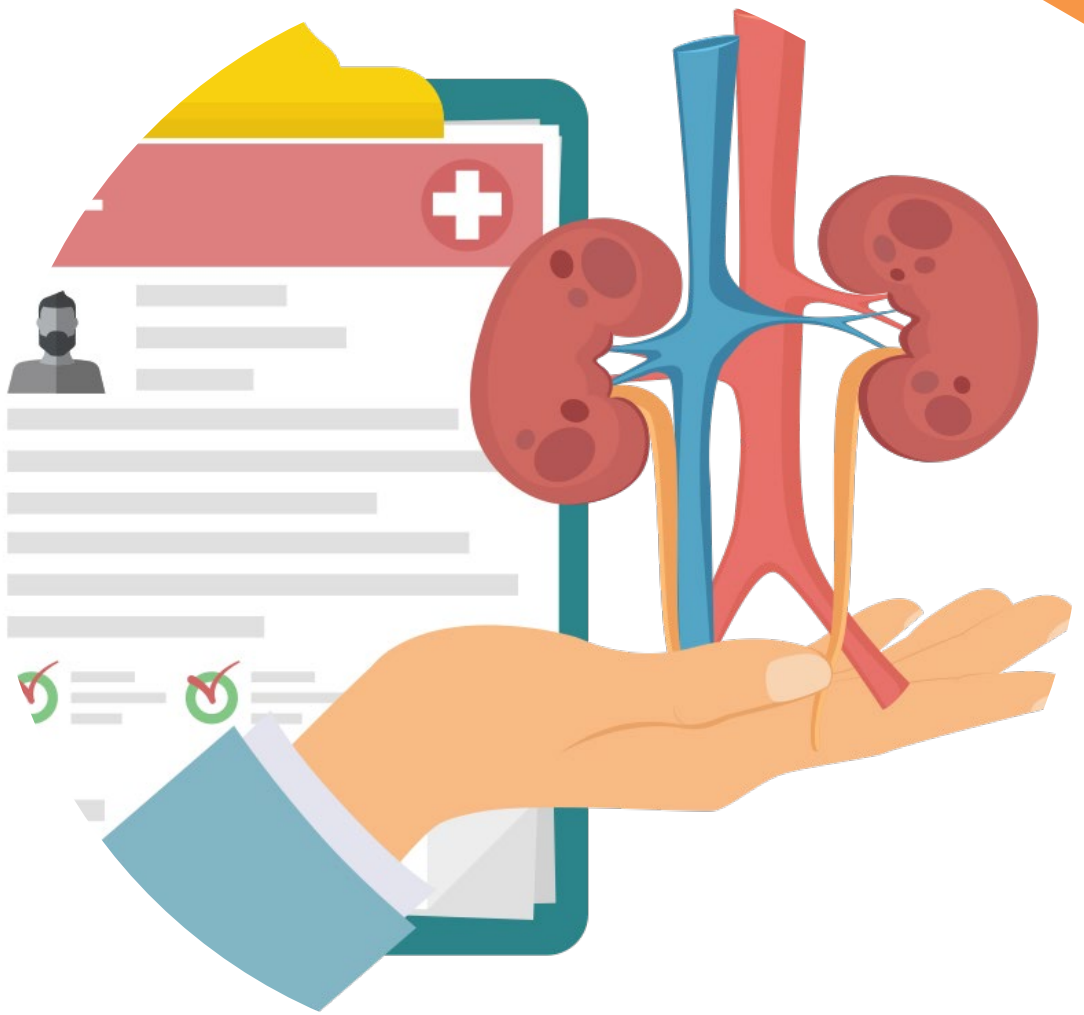

Any Questions?

Please reach out with any additional questions to dph.dialysis@illinois.gov

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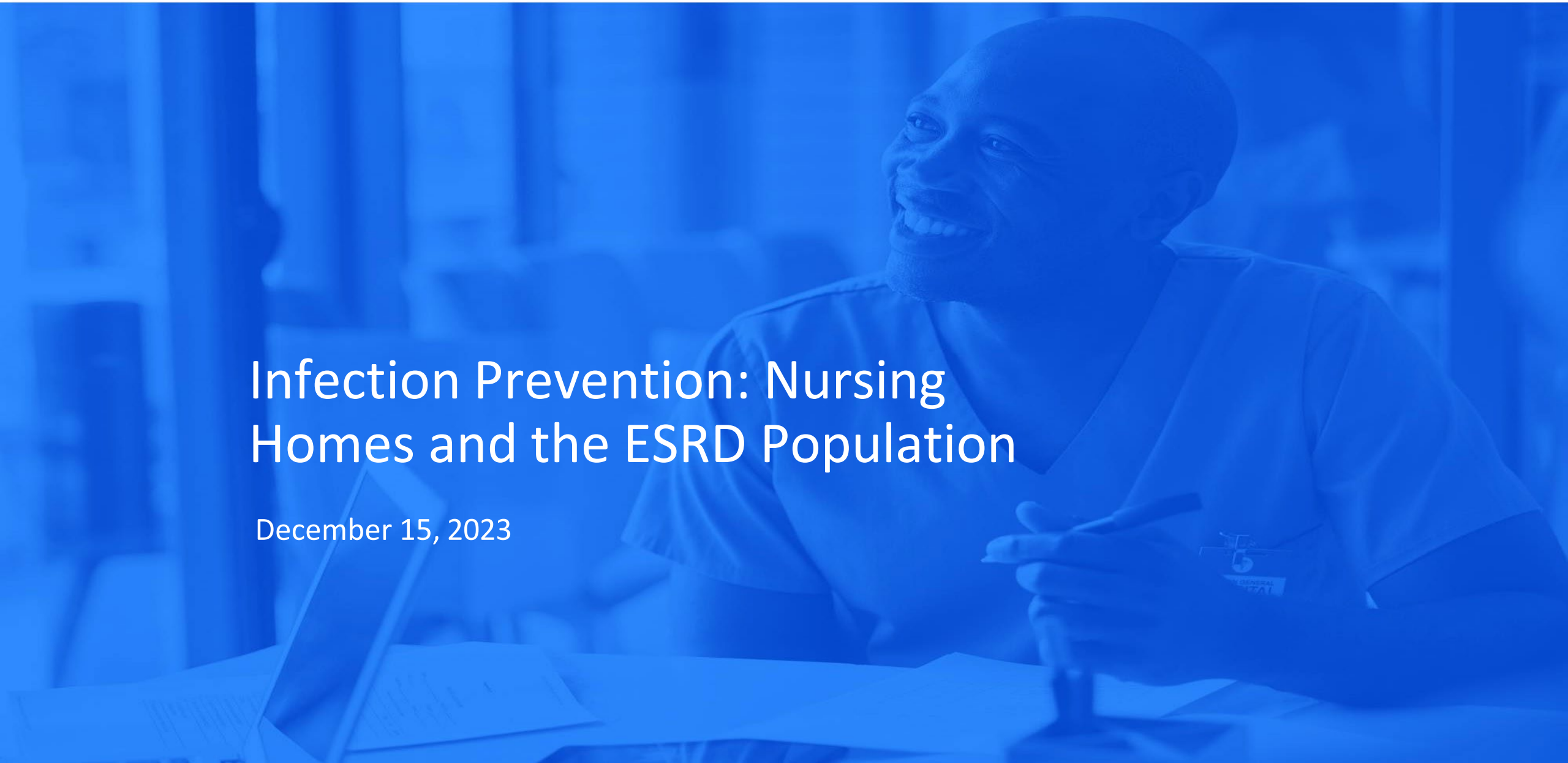
esrd.qsource.org



Infection Prevention: Nursing Homes and the ESRD Population

December 15, 2023

Speaker Introduction

Qsource ESRD Network 10 Quality Improvement Team

Stacy Dorris, MBA, RHIA, CPHQ

Quality Improvement Advisor

Hospitalization and Vaccination Focus

Ashley Dixon, RN, BSN

Quality Improvement Advisor

Clinical Quality of Care and Onsite Technical Assistance

John Knowles, MS,RN,RHIA

Quality Improvement Advisor

Home Modality and Nursing Home Focus

Speakers have nothing to disclose

Qsource ESRD Networks

Qsource

Currently operates in 11 states overseeing End-Stage Renal Disease, External Quality Review and Medicare Quality Improvement Organization activities.

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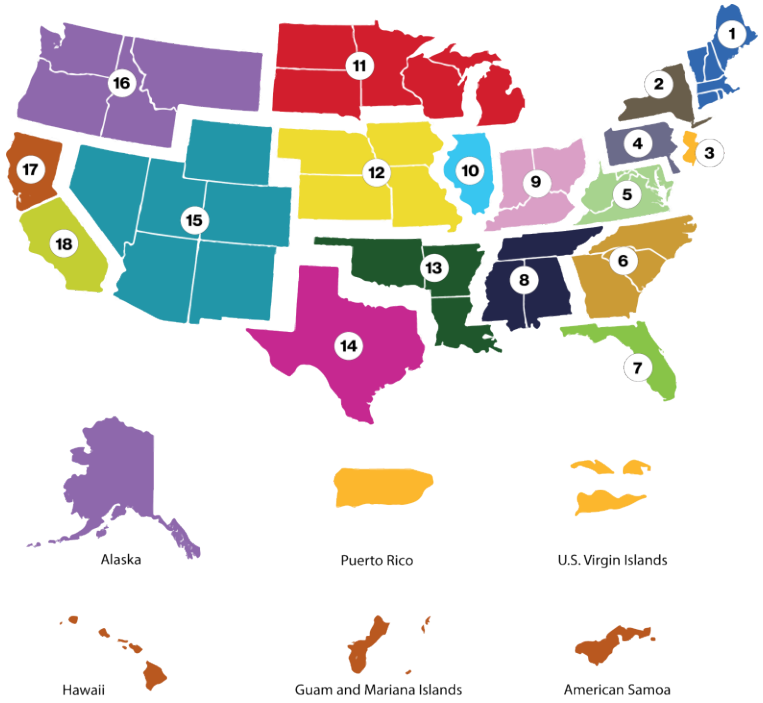
ESRD Network Program Overview

Aligned with CMS Strategic Pillars to advance equity, expand access, engage partners, drive innovation, protect programs, and foster excellence



Under purview of CMS iQuality Improvement and Innovation Group (iQIIG)

Division of Kidney Health

Improve care for ESRD patients in the Network service area

Improve health of ESRD population by reducing disparities

Reducing the cost of ESRD care by supporting performance improvement at facility level

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ESRD Network 10 Demographics

Currently operates in 11 states overseeing End-Stage Renal Disease, External Quality Review and Medicare Quality Improvement Organization activities.

32,654
Total Dialysis and Transplant Patients

344
Dialysis Clinics

9
Transplant Centers

15,774
In-Center Dialysis Patients

3,213
Home Dialysis Patients

1,034
Patients who reside and treat in SNF setting

**Data as of November 30, 2023*

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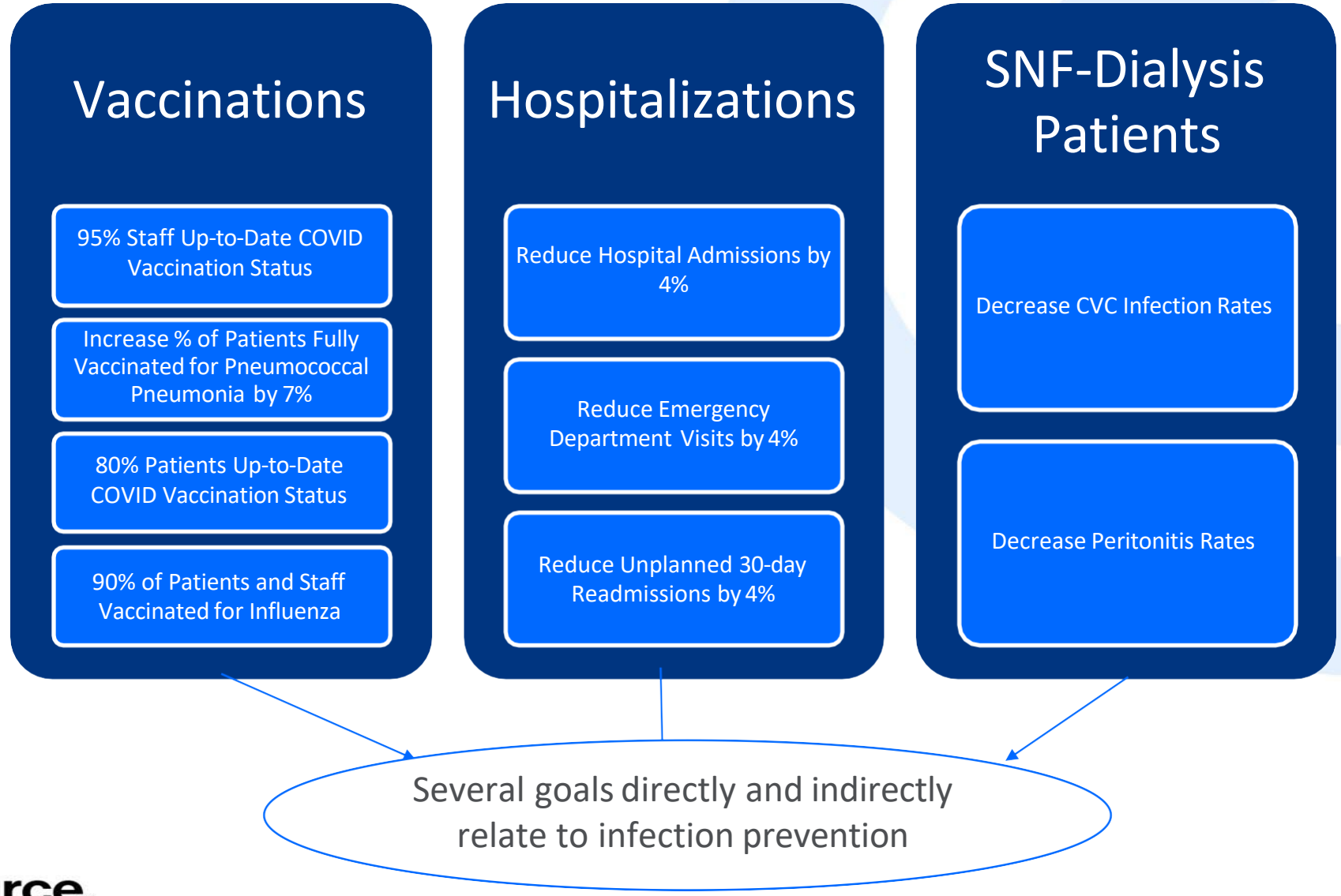
ESRD Network Goals



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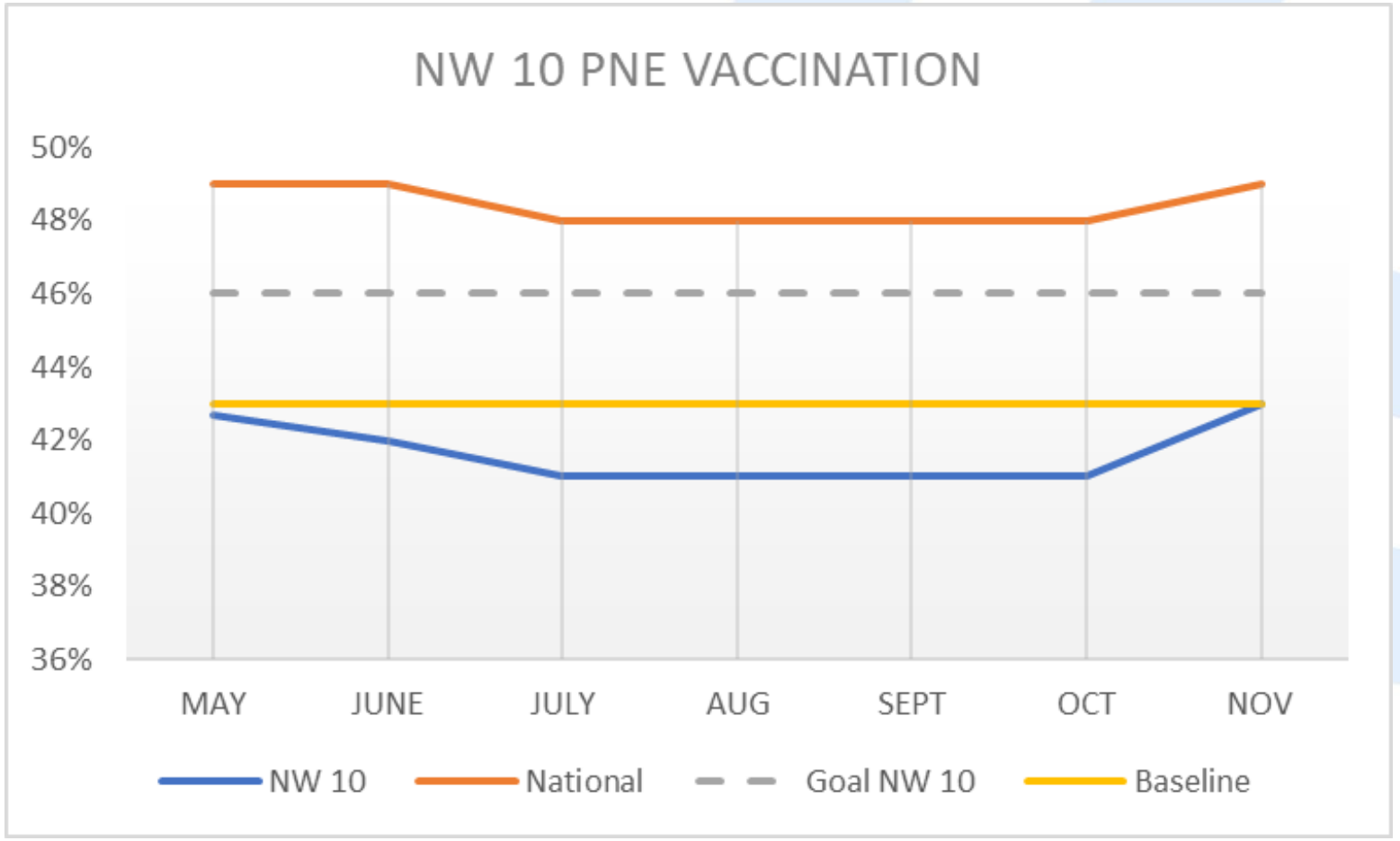
NW 10 Pneumococcal Vaccinations (May – Nov. 2023)

CMS Goal: Increase 7% from Baseline



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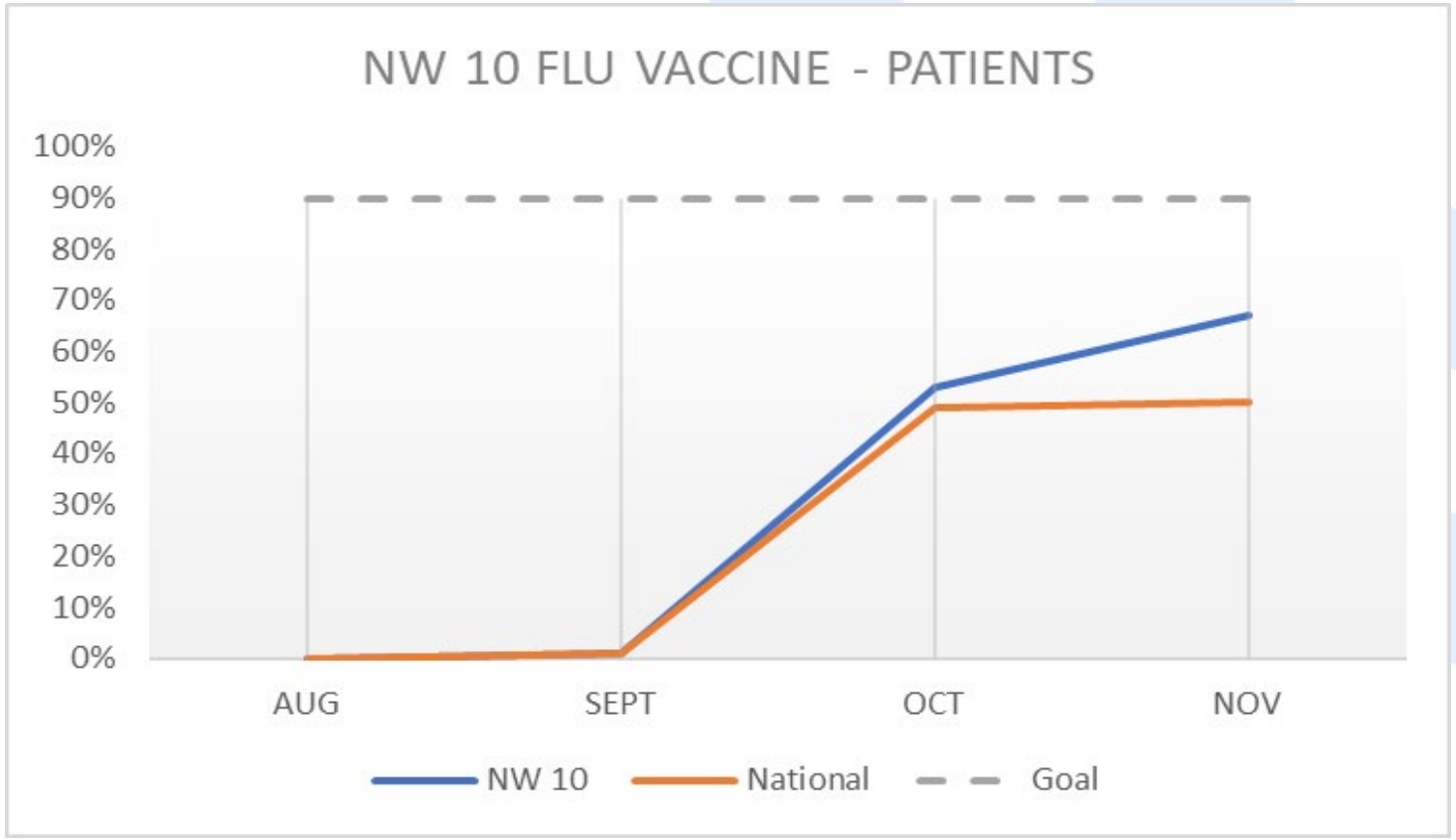
NW 10 Influenza Vaccinations (Aug. – Nov. 2023)

CMS Flu Goals

Staff Vaccinated: 90%

Patient Vaccinated: 90%



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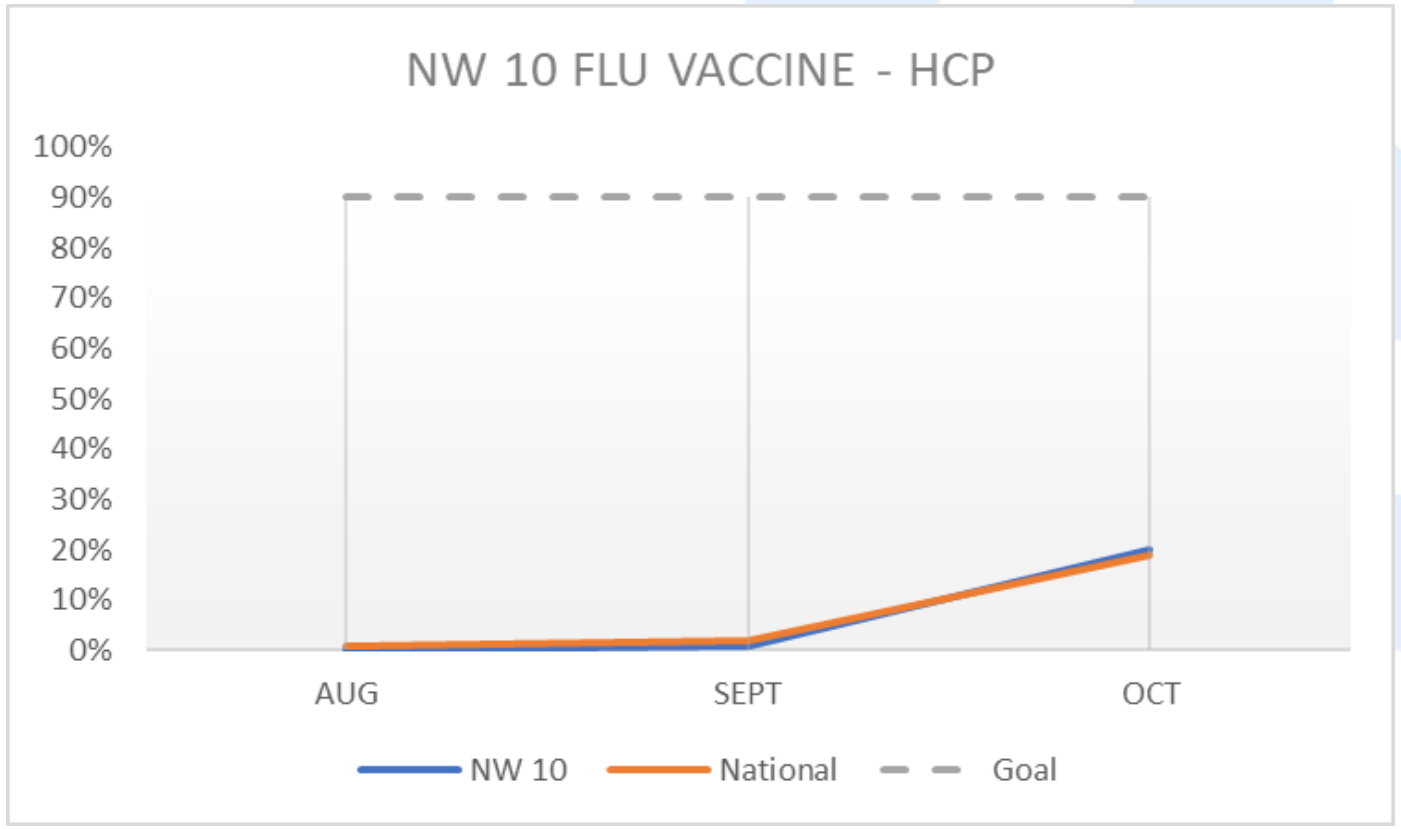
NW 10 Influenza Vaccinations (Aug. – Oct. 2023)

CMS Flu Goals

Staff Vaccinated: 90%

Patient Vaccinated: 90%



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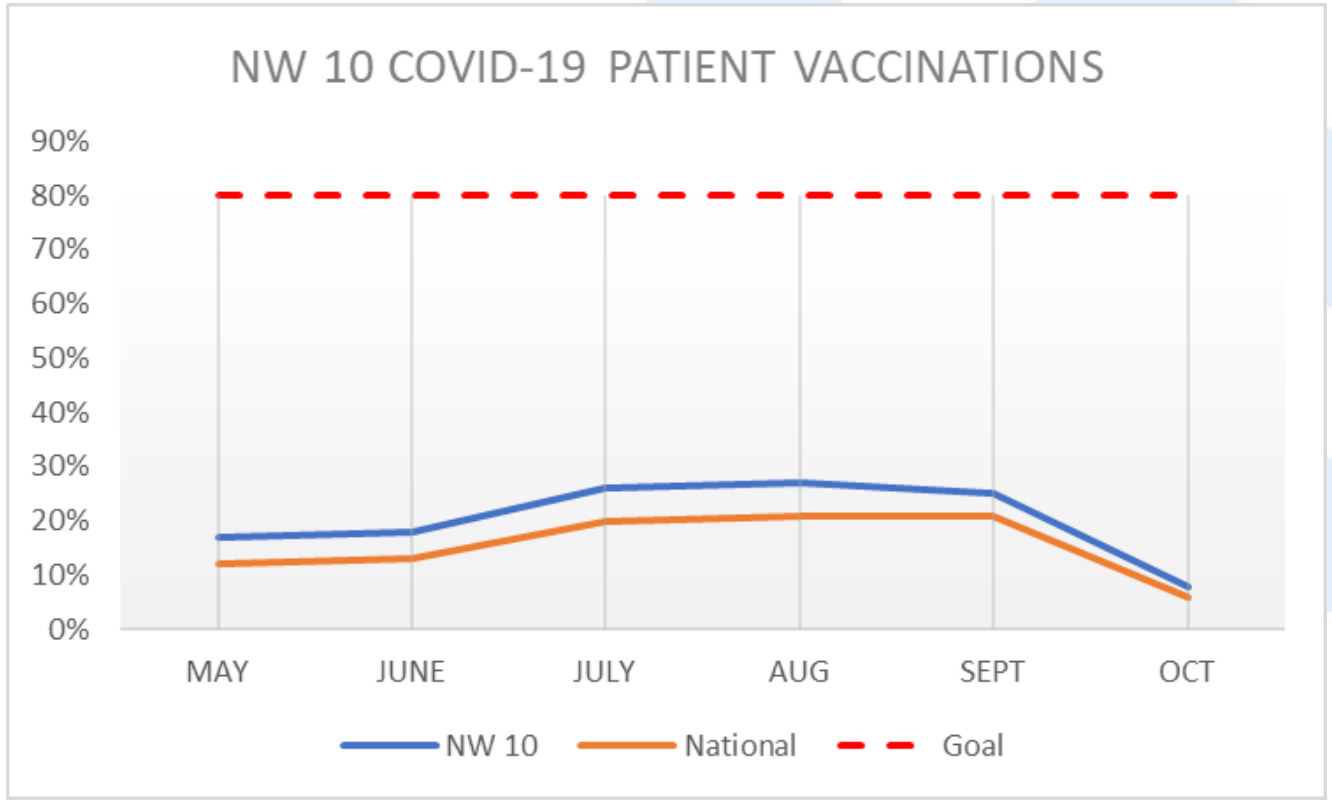
NW 10 COVID-19 Vaccinations (May – Oct. 2023)

CMS COVID Goals

Staff Up-To-Date: 95%

Patients Up-To-Date: 80%



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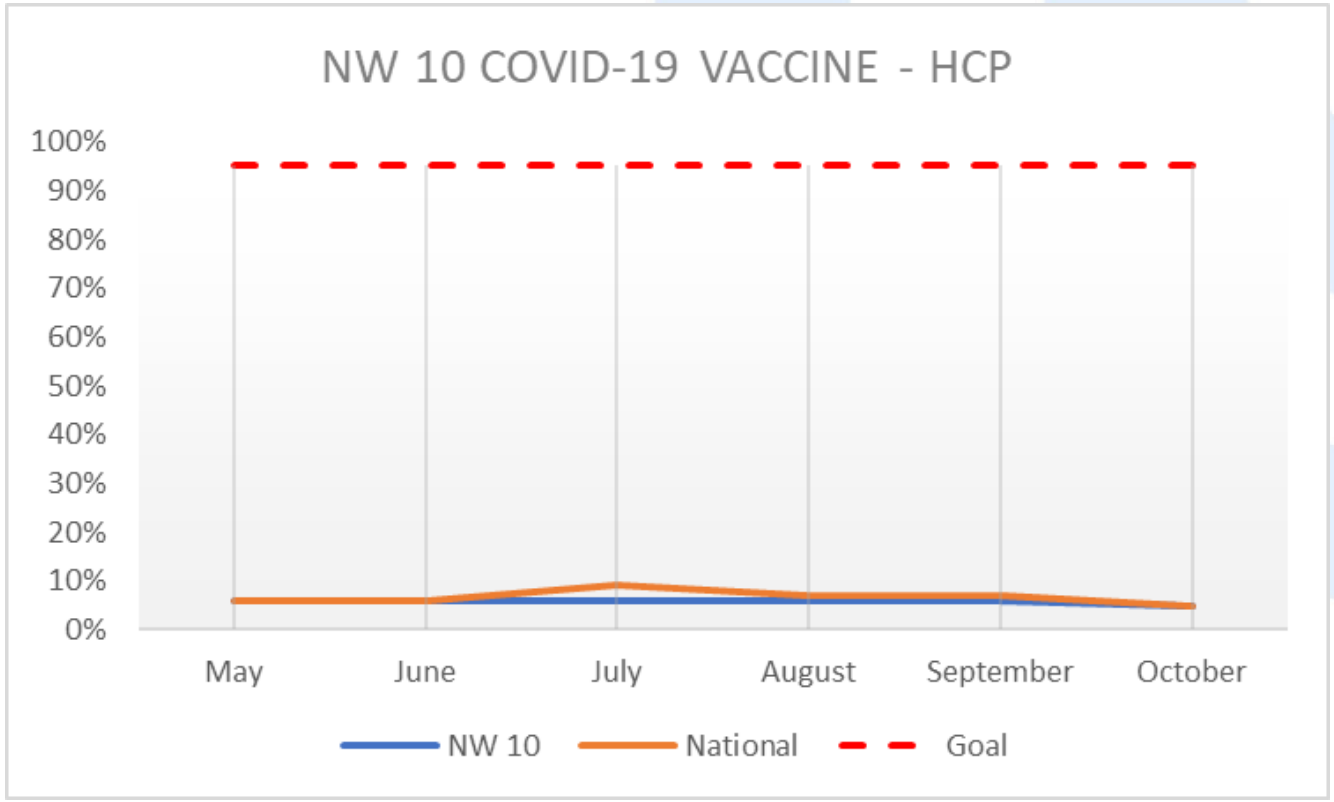
NW 10 COVID-19 Vaccinations (May – Oct. 2023)

CMS COVID Goals

Staff Up-To-Date: 95%

Patients Up-To-Date: 80%



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Hospitalization Measures:

List of Priority Diagnosis Categories

- Blood Pressure Management
- Fluid Balance Related
- Infection Related
- Anemia Management
- Endocrine Related
- Electrolyte and Mineral Metabolism
- Vascular Related

A419 Sepsis, unspecified organism	A4101 Sepsis due to Methicillin Susceptible Staphylococcus Aureus
A4102 Sepsis due to Methicillin Resistant Staphylococcus Aureus	T8571 Infection and inflammatory reaction due to peritoneal dialysis catheter
T8021 Bloodstream infection due to central venous catheter	T827 Infection and inflammatory reaction due to other cardiac and vascular implants and grafts

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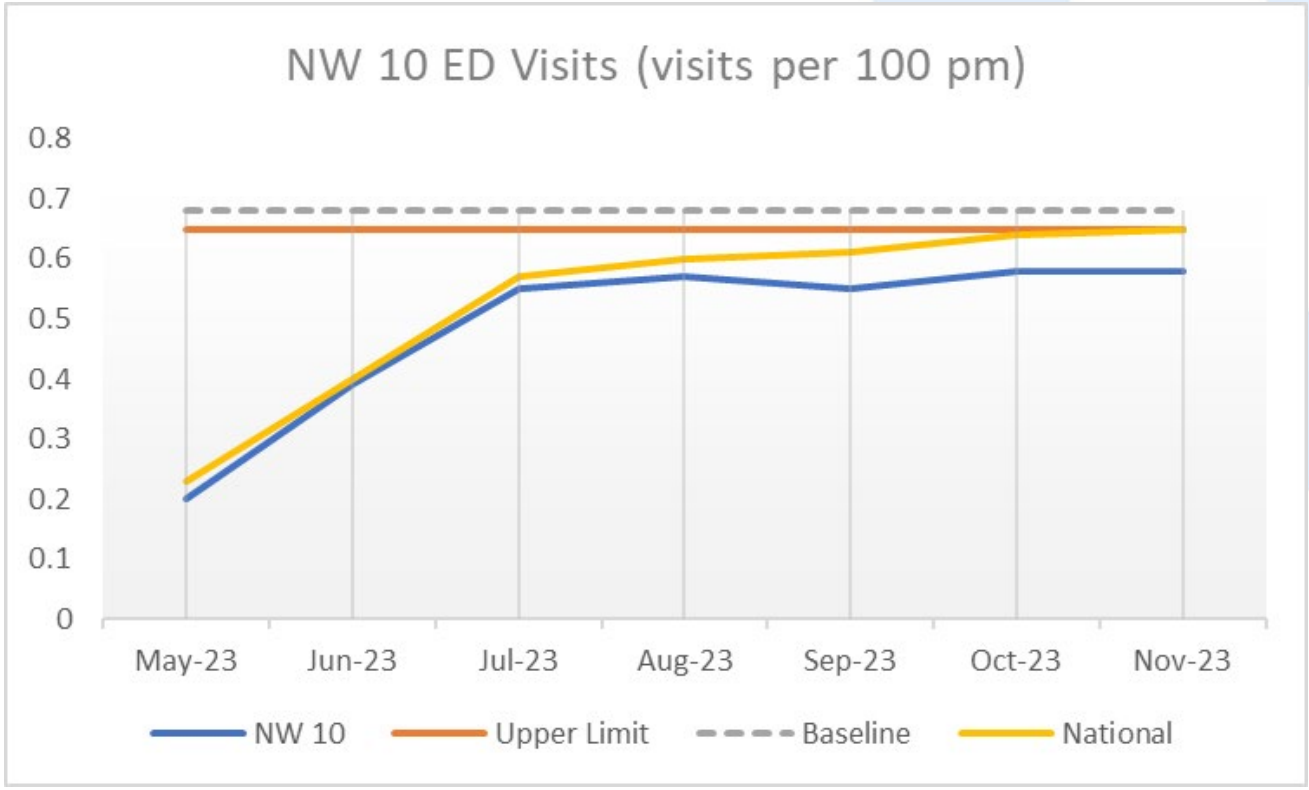
NW 10 ED Visits

May – Nov. 2023

CMS Goal: Decrease 4% from Baseline

Top Diagnosis Codes	NW 10 (N = 263)
Hemorrhage due to vascular prosthetic devices, implants and grafts, initial encounter	44%
Hyperkalemia	19%



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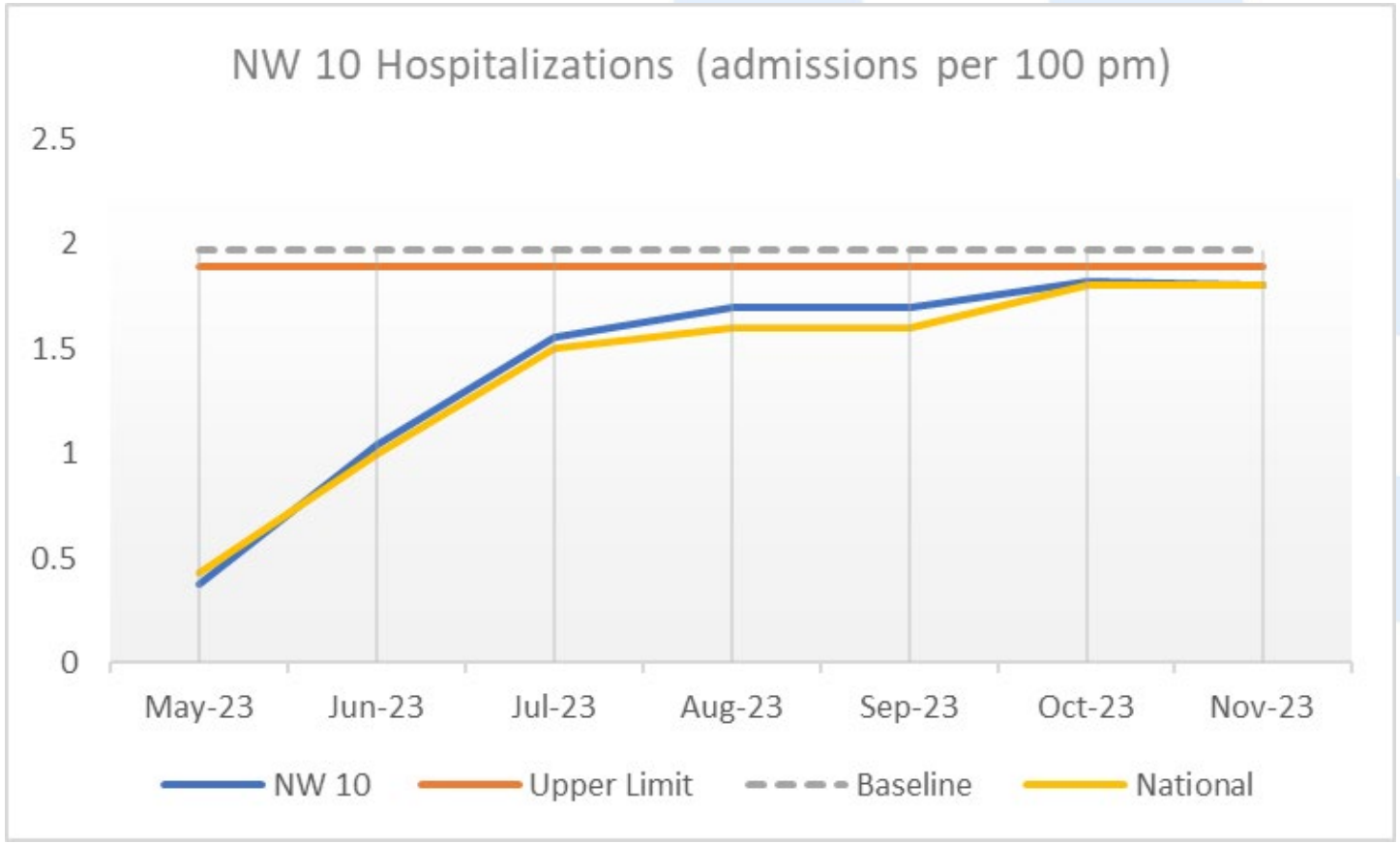
NW 10 Hospitalizations

May – Nov. 2023

CMS Goal: Decrease 4% from Baseline

Top Diagnosis Codes	NW 10 (N = 85)
Sepsis, Unspecified	24%
Fluid Overload, Unspecified	21%



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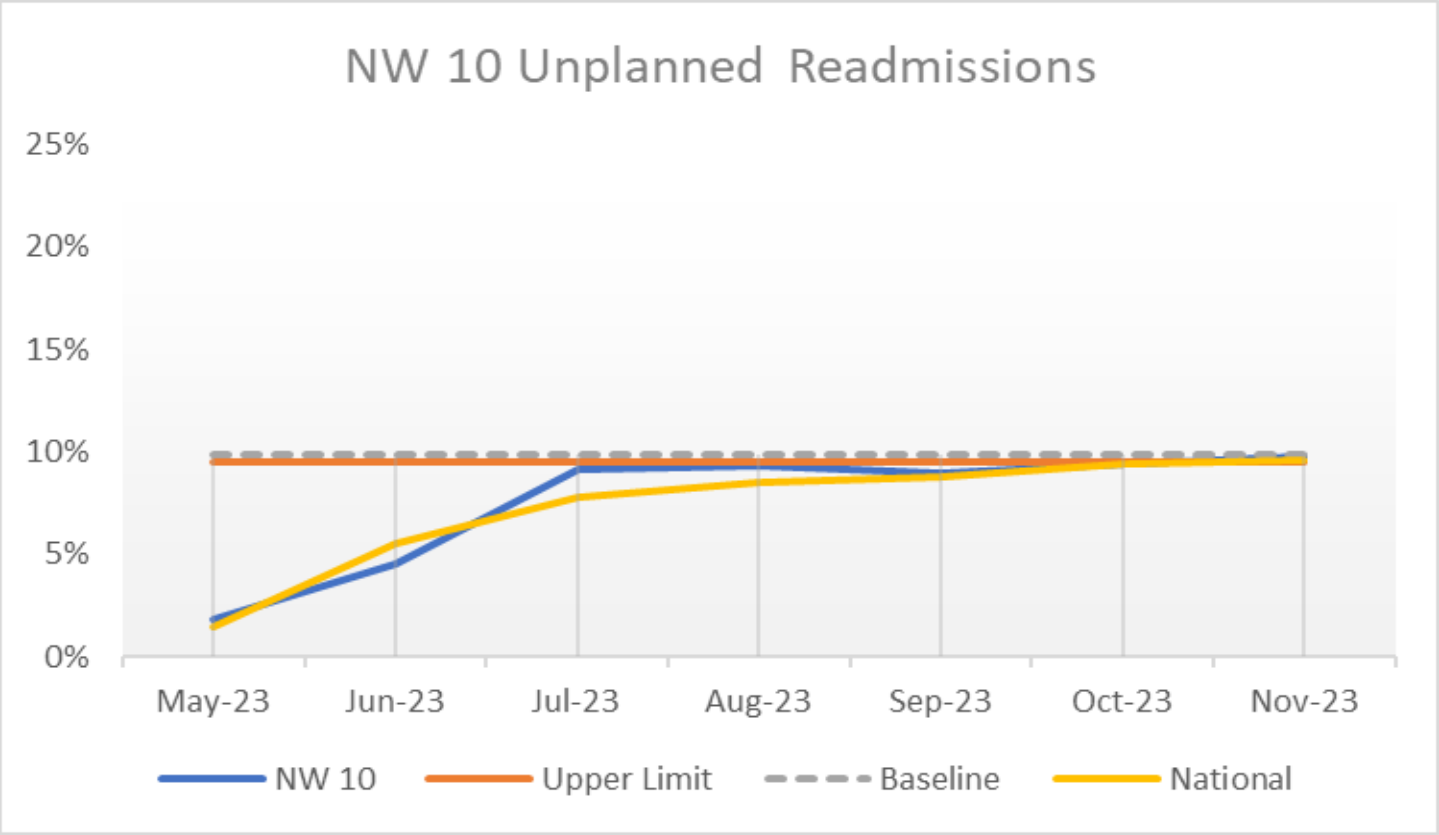
NW 10 Unplanned Readmissions

May – Nov. 2023

CMS Goal: Decrease 4% from Baseline

Top Diagnosis Codes	NW 10 (N = 85)
Sepsis, Unspecified	24%
Fluid Overload, Unspecified	21%



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Improved Data

=

Improved Patient Outcomes

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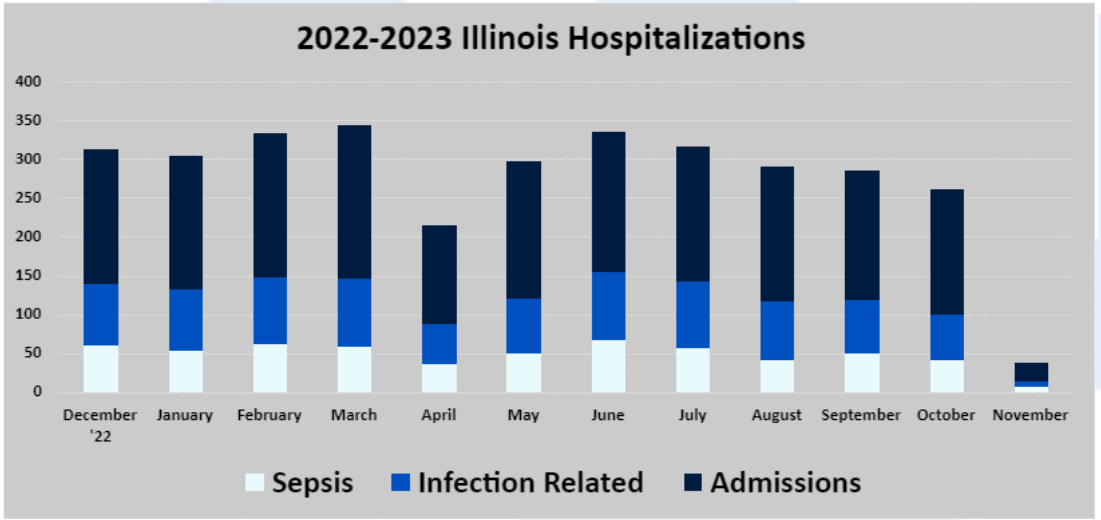
Strategies for Infection Prevention

WHY Are We Here?

Sepsis

- #1 Cost of hospitalizations
- #1 Cause of hospital readmission
- 1.7 million adults develop sepsis in a typical year
- 350,000 adults who develop sepsis die during their hospitalization or are discharge on hospice
- 1 in 3 people who die in a hospital had sepsis during that hospitalization



68% of Infection-Related Hospitalizations = SEPSIS

43% of Hospitalizations are related to Infection

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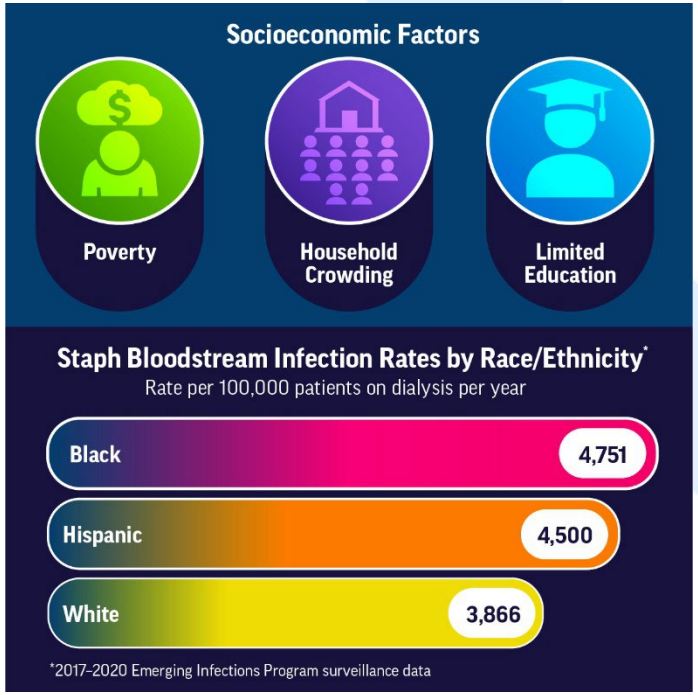
Challenges in Dialysis Population

- Staph bloodstream infections
- Resistant to common antibiotics

High risk of Infection

- Black and Hispanic people have greater numbers of medical conditions
- Staph bloodstream infection

Racial and Ethnic Gaps



Source: https://www.cdc.gov/vitalsigns/dialysis-infections/index.html

- Lack of patient education about treatment options
- Lack of prevention and care of kidney disease

Social and Economic Factors

- Higher risk of infection
- Limited access to vascular surgeons

Catheter Use

Vital Signs: Health Disparities in Hemodialysis-Associated Staphylococcus aureus Bloodstream Infections — United States, 2017–2020 | MMWR (cdc.gov)

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WHAT Can We Do?

Healthcare Providers

- Use proven practices
- Support catheter reduction
- Patient and staff education
- Data tracking and trending
- Keep all care teams engaged

Everyone

- Prevent CKD by managing diabetes and high blood pressure
- Read and share infection prevention resources
- Clean your hands often with alcohol-based hand sanitizer or soap and water
- Watch for signs of infection and its complications

Infection Prevention Best Practices

- Monitor Staff Hand Hygiene
- Understand Proper Care of Vascular Access for Dialysis
- Know Hepatitis C Status
- Ensure Staff and Patients have Flu and COVID-19 Vaccinations
- Pneumococcal and Hepatitis B Vaccinations are recommended for dialysis patients
- Maintain communication pathways with Dialysis Facilities
- Engage Patients in Infection Prevention

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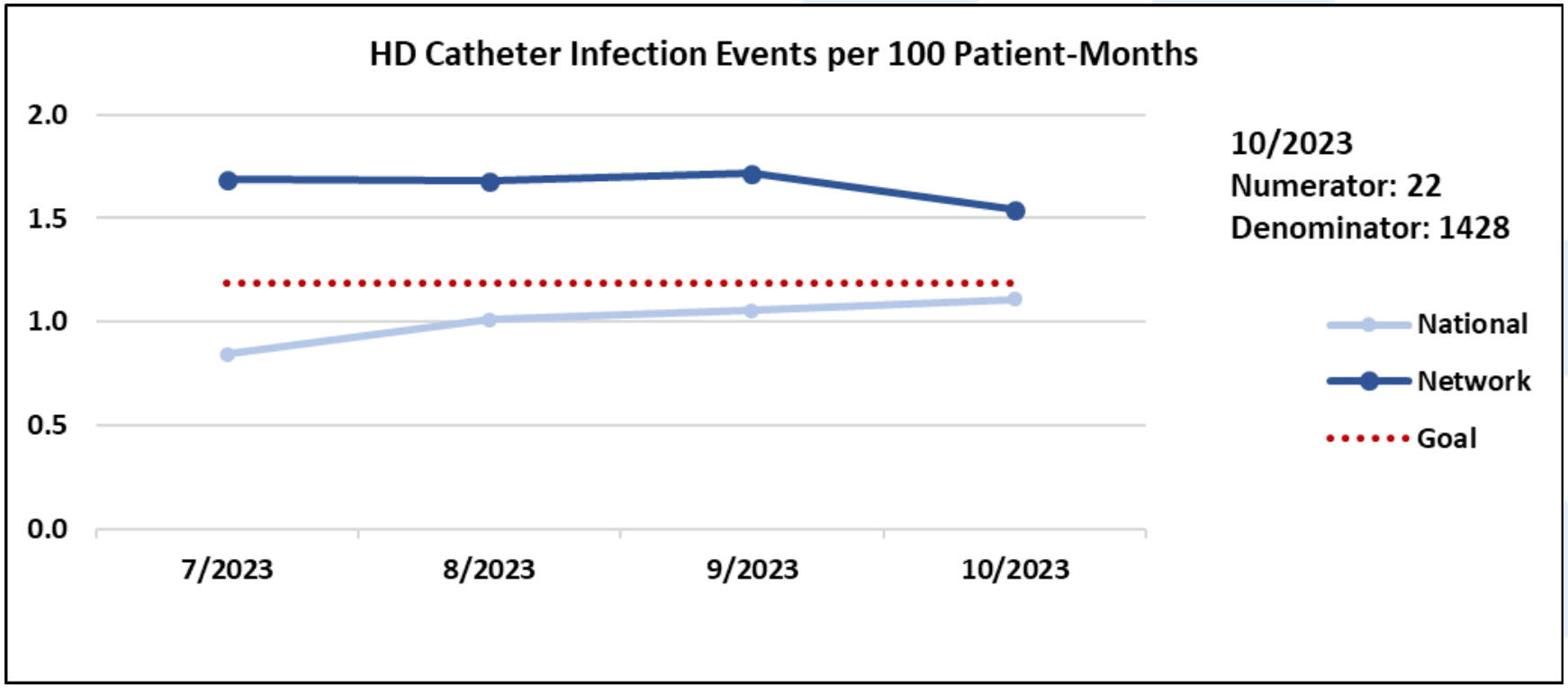
NW10 Nursing Home Dialysis Patients

Central Venous Catheter Infection Rates

CMS Goal: Decrease 6% from baseline



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Dialysis Access Monitoring

Central Venous Catheter CVC

- CVC dressing should be visually checked daily
- CVC dressing should remain dry and intact and caps in place at all times; should dressing or caps become disturbed, contact the dialysis team immediately
- CVC should only be utilized by the dialysis team; nursing home staff should NOT use the CVC for blood draws and/or medications
- Avoid getting the CVC site or dressing wet during bathing
- If the area around the CVC site is painful or red or any drainage is noted, contact the dialysis team immediately

CVC Exit Site Infection

Kumbar L and Yee J. Advances in Chronic Kidney Disease 2019 2616-22DOI: (10.1053/j.ackd.2018.10.005)

Lok C and Mokrzycki. *Kidney International*. 2011 79: 587-598.

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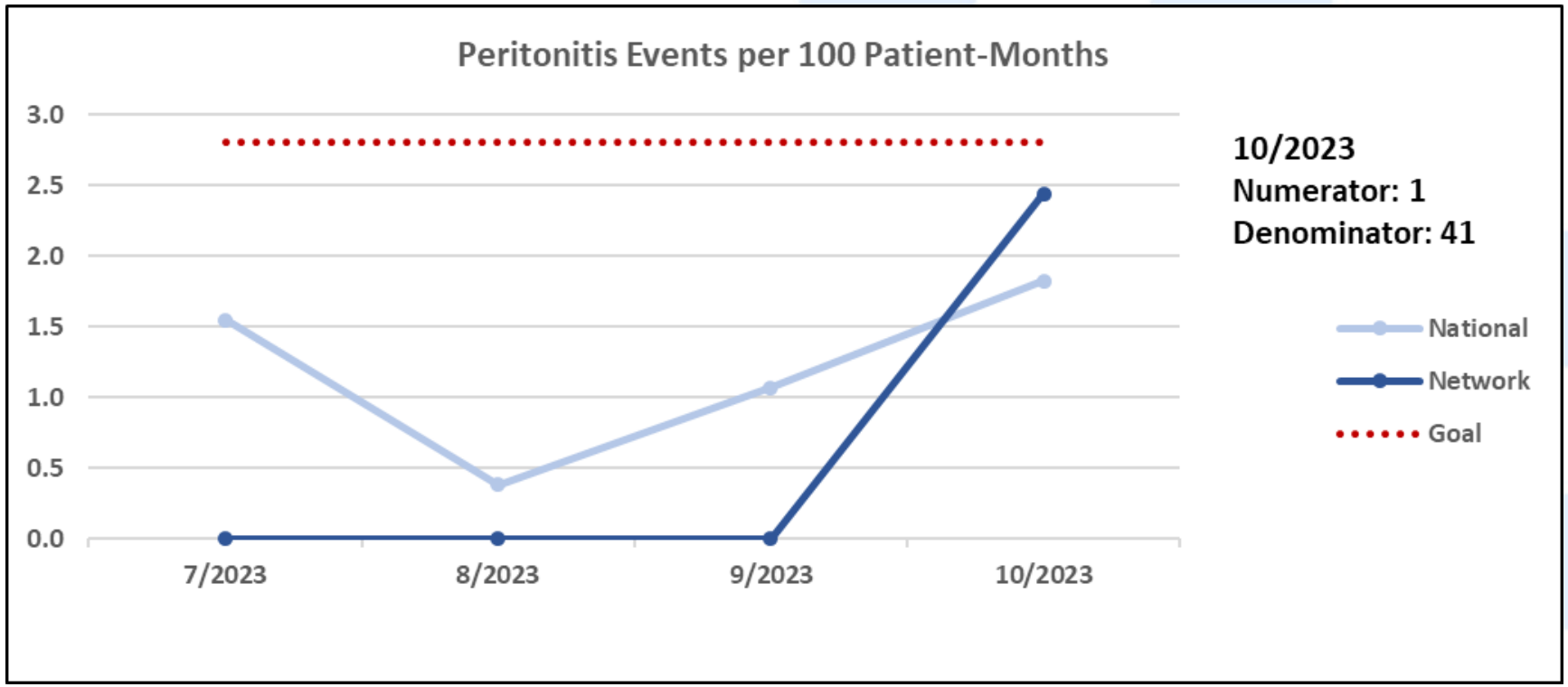
NW10 Nursing Home Dialysis Patients

Peritonitis Events

CMS Goal: Decrease 3% from baseline



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Dialysis Access Monitoring

Peritoneal Dialysis Catheter (PD Catheter)

- PD catheter site should be assessed, and site care provided daily per the instruction of the dialysis provider
- Nursing home teams should be educated on proper peritoneal care if a patient is performing PD as a resident in the facility
- Always wash your hands prior to performing any PD catheter inspection
- When cleaning the catheter site, start near insertion site and work outward and apply antibacterial ointment per MD order
- Assess insertion site for any redness, pain, or drainage; if noted report to dialysis team immediately
- Report any damage or change to catheter tubing to dialysis team immediately

Peritoneal Access Site Infection

Erythema but no drainage = not-exit site infection

Schmitt R, Haller H, Hiss M. AJKD 2012, 60:A29-A31.

Erythema + purulence = exit-site infection

Gloembiewska E and Ciechanowski K. *BMC Infectious Disease* 2021, 21: 624.

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Vascular Access Monitoring

Signs of Infection

- Redness or warmth near your access site
- Drainage or puss
- Swelling
- Fever

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Vascular Access Monitoring

AV Fistula/Graft

- AV fistula/graft should be assessed daily visually and palpated for thrill (pulsing)
- Post-dialysis dressing should not be left in place longer than 8 hours post treatment completion
- Avoid blood pressure readings and blood draws in access arm
- Avoid tight clothing or anything that may cause contriction of the access arm
- Report pain or absence of thrill (pulse) in access to dialysis team immediately
- Keep access clean and report any swelling, redness pain, or drainage to the dialysis team immediately

Vascular Access Concerns

Courtesy of M. Silva, MD

Ball, Lynda K. *The Art Of Making Your Fistula Or Graft Last – Home Dialysis Central*

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Engage, Educate, Empower Patients

Look

Look at your catheter dressing in the mirror.

It is clean and dry, and it covers the exit site (the place where the catheter comes out of your skin)

GO

The dressing does not cover the exit site, it is wet or dirty, there is blood or pus on the dressing.

Feel

Feel over the catheter dressing. *Do not re*

The dressing is dry and there is no pain in the area under the dressing.

GO

Preventing Peritonitis

Peritonitis: Symptoms, Treatment, Prevention

Dialysis patients have a greater chance of getting an infection. Your body's immune system may not be as strong as a person who does not have kidney disease. The type of treatment you receive may also put you at risk for an infection.

Peritoneal dialysis (PD) uses a catheter to remove waste products from the blood. The catheter is placed in the lining of the belly, called the peritoneum. If harmful germs, like bacteria or fungi, get on the catheter, you may get peritonitis.

What is peritonitis?

Peritonitis happens when the inside lining of your belly or abdomen is red and swollen. This lining is called the peritoneum.

How can I tell if I may have peritonitis?

Peritonitis can look and feel different in different people. The most common symptom is severe pain in the belly area. This pain may start light and get worse when you move. You may also notice that you are not very hungry and that you may feel nauseous.

Other signs you may have peritonitis are:

- A sore and swollen belly,
- Chills,
- Fever,
- Vomiting,
- Less urine than normal, and
- Cloudy fluid during peritoneal dialysis treatment.

How is peritonitis treated?

Peritonitis can be very serious or life-threatening. You should call your doctor or PD nurse right away if you have any of the signs above. You may be admitted to a hospital. Most times, you will be given medicine to fight the infection.

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Dialysis Care in the Nursing Home Setting

Caring for Dialysis Patients in the Nursing Home Setting

Missing or shortened dialysis treatments carries the risk of a shortened life expectancy

- Additional risks and complications include:
  - Worsening anemia and bone density
  - Irregular heartbeat, cardiac arrest, and death
  - Increased likelihood of strokes
  - Cramping and low blood pressure
  - Fluid overload

Shortening Treatments
by 15 minutes = 39 hours per year!

Missing Treatments
once a week = 52 treatments a year!

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Caring for Peritoneal Dialysis Patients in the Nursing Home Setting

Patients missing peritoneal dialysis treatments may not immediately feel the effects, but inadequate dialysis carries the risk of shortened life expectancy

- Additional risks and complications include:
  - Infection
  - Fluid overload
  - Cardiac complications including irregular heartbeat and death
  - Toxic build-up can cause nausea, vomiting, and mental status changes
  - High blood sugar will not allow ultrafiltration
  - Hurts chances of getting a transplant

Caring for Dialysis Patients in the Nursing Home Setting

Medications

- There are a lot of medications to keep track of, many of which are time-sensitive and require a strict schedule, such as phosphorus binders
- Do not administer any over-the-counter medicines or natural health products without talking to the doctor first. Due to reduced kidney function, these medications could cause unintended side effects or interact with other medicines the patient is taking
- Do not administer ibuprofen (Advil, Motrin), naproxen (Aleve), or similar medicines, unless otherwise instructed by the physician. These medicines may make kidney problems worse
- You may be asked to hold all blood pressure medications on dialysis days prior to dialysis, as the treatment could lower the patient's blood pressure to an unsafe level during their treatment

Caring for Dialysis Patients in the Nursing Home Setting

Diet and Fluid Intake

- Patients will need to limit fluids and certain foods that contain sodium, potassium, and phosphorus
- Patients may need to follow a heart-healthy diet to keep the cholesterol in their blood under control
- Patients may need higher levels of protein in their diet
- Patients will need to take prescribed phosphorus binders with their meals

Vitals and Labs

- Make sure to monitor vital signs, including weight, daily, especially on dialysis days, and communicate results with the dialysis team
- If you draw any new labs, make sure to send a copy or communicate lab results with the dialysis team

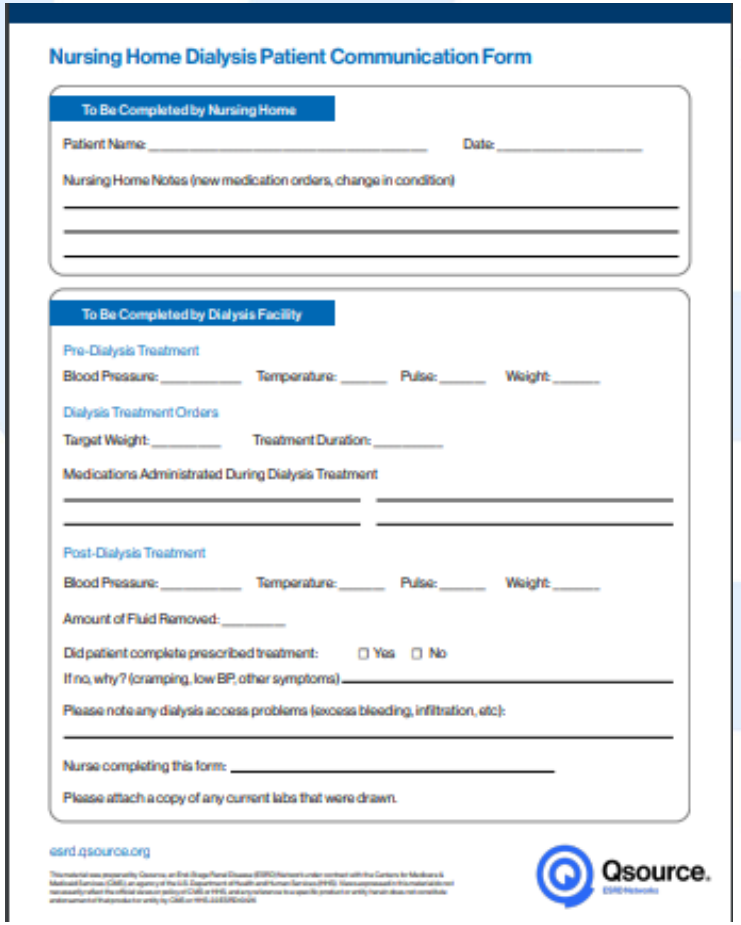
Caring for Dialysis Patients in the Nursing Home Setting

Important Reminders

- Inspect areas under and around the exit site of peritoneal dialysis catheters for drainage, redness or pain
- Check for cracks, slits or holes in the catheter tubing. Clamp the catheter and call the dialysis team immediately
- Keep dialysis catheter dressing clean and dry. If dressing comes off or gets soiled, call the dialysis team
- Only the dialysis team should use the dialysis catheter to draw blood or to give medications or fluids
- Watch patients with a fistula or graft for swelling, redness, drainage or tenderness in the area
- Avoid blood draws and blood pressures on the access arm
- Always keep the dialysis center and after-hours phone numbers handy

The Importance of Communication Pathways

- Communication is essential to the success of patient care
- Use Care Transition Form to facilitate clear communication and provide evidence of communication between nursing home and dialysis facility
- Have a plan of care for providing important updates
- Notify dialysis team if patient is hospitalized
- If you have dialysis in your setting, maintain routine meetings with the dialysis team to review plan of care



Nursing Home Dialysis Patient Communication Form

To Be Completed by Nursing Home

Patient Name: _____ Date: _____

Nursing Home Notes (new medication orders, change in condition)

_____

_____

_____

To Be Completed by Dialysis Facility

Pre-Dialysis Treatment

Blood Pressure: _____ Temperature: _____ Pulse: _____ Weight: _____

Dialysis Treatment Orders

Target Weight: _____ Treatment Duration: _____

Medications Administrated During Dialysis Treatment

_____ _____

_____ _____

Post-Dialysis Treatment

Blood Pressure: _____ Temperature: _____ Pulse: _____ Weight: _____

Amount of Fluid Removed: _____

Did patient complete prescribed treatment: ☐ Yes ☐ No

If no, why? (cramping, low BP, other symptoms) _____

Please note any dialysis access problems (excess bleeding, infiltration, etc):

_____

Nurse completing this form: _____

Please attach a copy of any current labs that were drawn.

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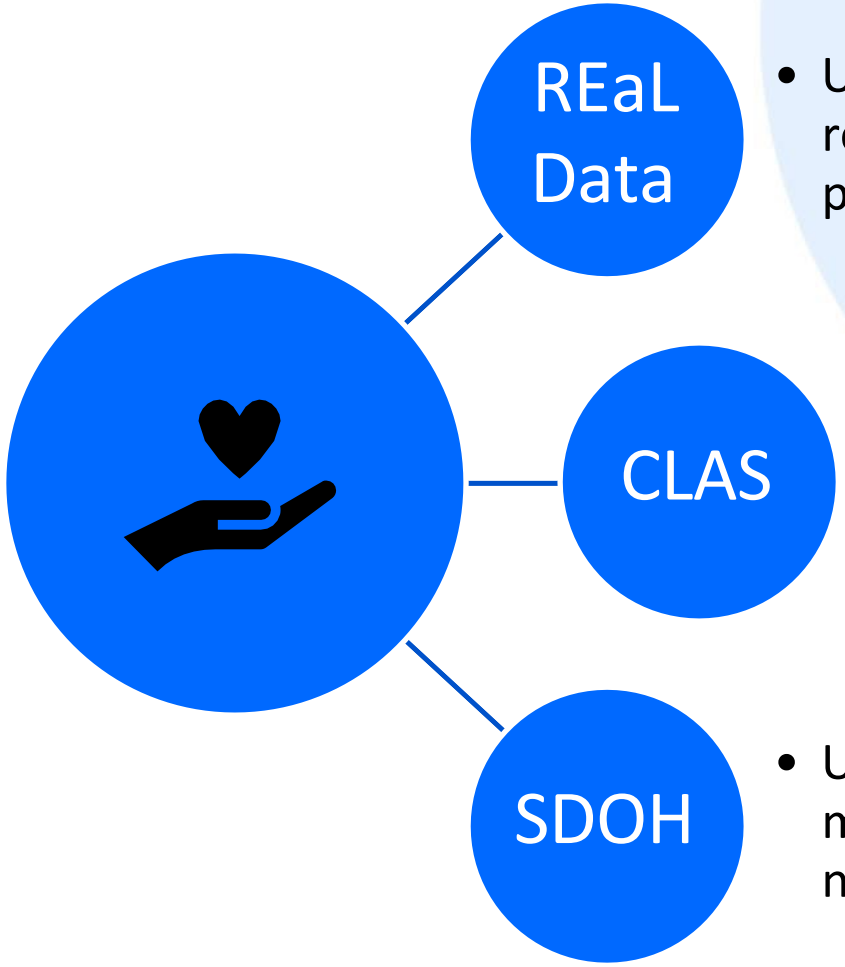
Health Equity: Your Role



- Understand your resident population
- Ensure services are respectful and responsive to cultural needs
- Understand non-medical social needs

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Resources

ESRD Nursing Home Toolkit

Nursing Home Dialysis Patient Communication Form

Nursing Home Staff Education: How to Care for Your Dialysis Patient Qsource ESRD Networks:

Nursing Home Patient Safety

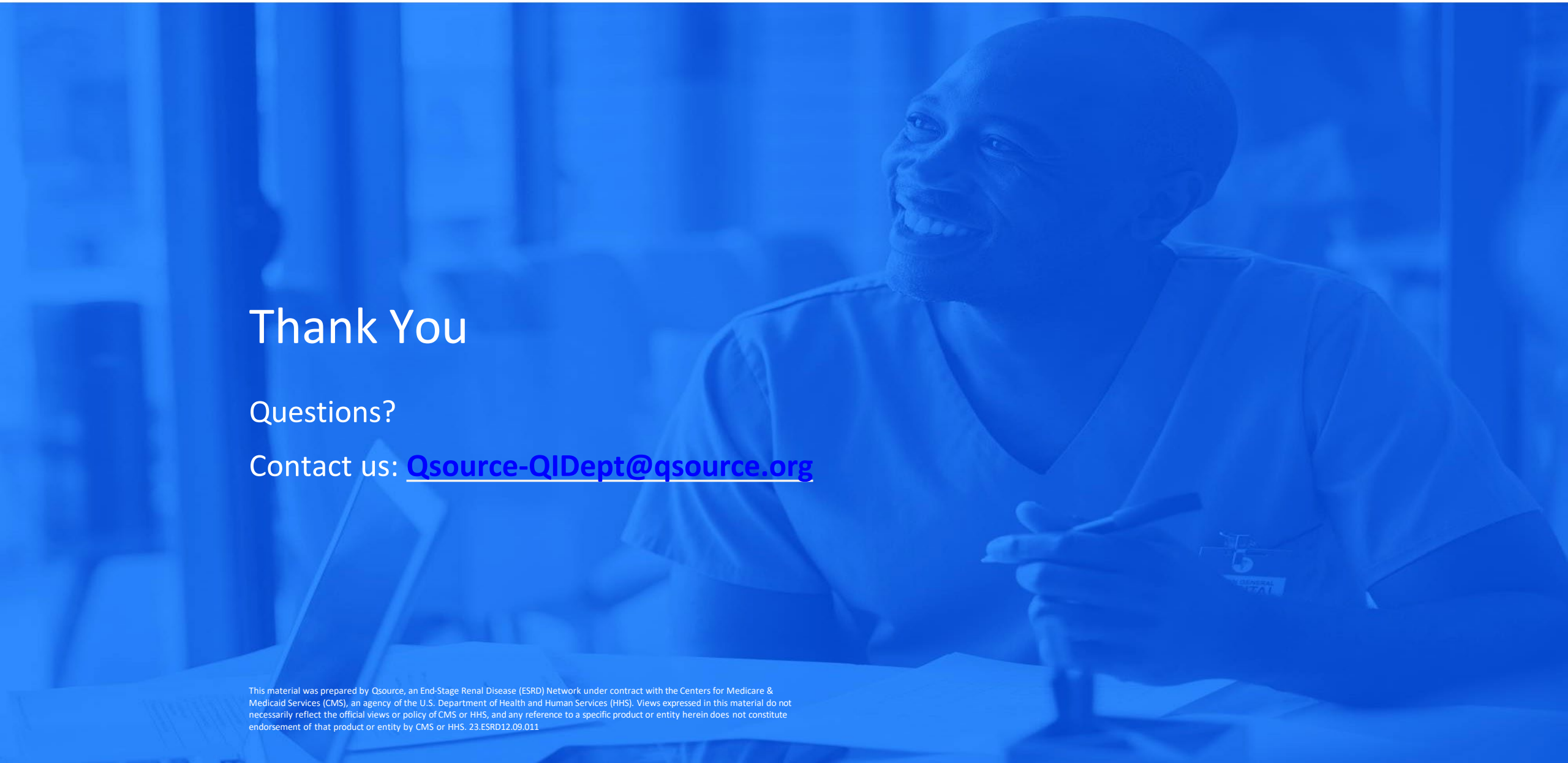
Making Dialysis Safer for Patients Coalition

Decreasing Catheter Infections for Patients Receiving Hemodialysis in the Nursing Home Decreasing Peritonitis

Patients Receiving Peritoneal Dialysis in the Nursing Home Missed Treatments and Reducing Hospitalizations

Workbook

CLAS Booklet



Thank You

Questions?

Contact us: Qsource-QIDept@qsource.org

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Open Q&A

Submit questions via Q&A pod to **All Panelists**

Please do not resubmit a single question multiple times

Slides and recording will be made available after the session.

Reminders

- For continuing education credit, please fill out the evaluation survey upon end of webinar

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  - Contact Telligen: **nursinghome@telligen.com**