



End-Stage Renal Disease
Network of New York

2022 Annual Report



Niagara Falls, NY

This report will cover quality improvement efforts led by ESRD Network 2
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ESRD Demographic Data

IPRO End-Stage Renal Disease (ESRD) Network of New York (Network 2) is one of four ESRD Networks managed by IPRO, a non-profit organization that works with government agencies, providers, and consumers to implement innovative programs that improve healthcare. In addition to serving as the ESRD contractor for the Network 2 service area, IPRO manages the ESRD Network of New England (Network 1), ESRD Network of the South Atlantic (Network 6), and ESRD Network of the Ohio River Valley (Network 9), collectively known as the IPRO ESRD Network Program. IPRO is fully committed to the goals and vision of the ESRD Network Program and supports the renal community in ensuring safe, effective, patient-centered care for the more than 196,709 ESRD patients in the four Network areas it manages.

Network 2 serves ESRD patients, dialysis providers, and transplant centers in the state of New York. The role of Network 2 is to improve the quality of care and the quality of life for people who require dialysis and/or kidney transplantation. The Network aligns its mission and activities with the U.S. Department of Health and Human Services (HHS) National Quality Strategy (NQS), the Centers for Medicare & Medicaid Services (CMS) goals addressed in the CMS Quality Strategy, and the CMS Sixteen (16) Strategic Initiatives designed to result in improvements in the care of individuals with ESRD. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

As the fourth most populous state in the country, 19.7 million people resided in New York State in 2022 (a 0.6% decrease from 2021). New York City (NYC) has the highest population density of any major city in the United States, with over 29,000 people per square mile in 2020. The population of the five boroughs of NYC—Bronx, New York (Manhattan), Richmond (Staten Island), Kings, and Queens counties—was estimated to be 8.3 million (as of July 1, 2021), according to the U.S. Census Bureau. It is estimated that 42% of the state's population was concentrated in New York City alone in 2022. The dramatic variance in population density between upstate and downstate New York impacts the availability of, and patient access to, healthcare services.

New York's population is rich in ethnic, racial, religious/spiritual, cultural, and lifestyle diversity. According to U.S. Census Bureau estimates for 2022, New York City's population was 39.8% White (69.1% New York State, 75.8% U.S.), 23.4% Black or African American (17.6% State, 13.6% U.S.), 14.2% Asian (9.3% State, 6.1% U.S.), 28.9% Hispanic or Latino (19.5% State, 18.9% U.S.), and 7.1% Two or more races (2.8% State, 2.9% U.S.).

In the downstate region (Hudson Valley, NYC, and Long Island), though there are many available healthcare providers, ESRD patients report challenges with accessing them, even by public and private transportation, especially during the pandemic. In upstate New York, the population density is much lower than in downstate, transportation options are limited and there are fewer treatment facilities. This means that ESRD patients in rural areas typically travel farther and longer to reach dialysis clinics, vascular surgeons, hospitals, and other healthcare providers

and clinicians; but both rural and urban patients face challenging factors that may affect treatment options, patient experience, satisfaction with care, and quality of care. According to the ESRD National Coordinating Center (NCC), as of December 31, 2022, the ESRD prevalent patient population in New York State was 47,963.

The Network's activities supported more than 28,230 patients reported as receiving dialysis treatment for ESRD as of December 31, 2022. There were more than 19,733 transplant patients in the Network's service area as of December 31, 2022. In New York State renal patients were served by 369 Medicare-certified dialysis facilities and 14 transplant centers, including seven Veterans Affairs (VA) hospitals.

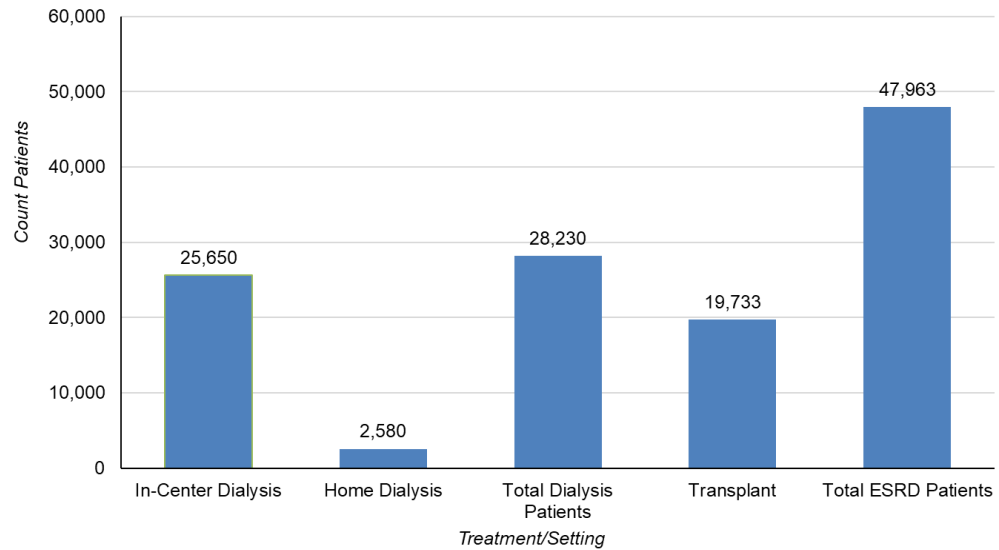
Patient Facility Representatives (PFRs), nominated by facility staff to engage with their peers, provided feedback about quality improvement activities and helped develop the Network's educational materials. Nominated PFRs participated in Network calls and events as well as national webinars. The PFR Alliance group met virtually on a monthly basis. During these meetings, the Network provided an overview of the status of projects as well as monthly assignments. The Network PFR Alliance includes patients serving as Patient Subject Matter Experts (PSMEs) on the national level. Network staff created easier ways for patients to engage with the Network, using innovative tools that included broadcast calling/texting, allowing for quick check-ins with staff to ensure patients always felt connected. Through the Network's PFR Alliance, patients received education and participated in facility QIAs, bringing the patient voice to the QAPI team. The Network adopted IHI's Small Test-of-Change model, which supports efforts to collaborate successfully with providers and patient groups within unique-needs localities, with a goal to improve healthcare outcomes through small tests of change.

The Network worked with Community Coalitions, a subgroup of dialysis facilities within its service area that included both high- and low- performing facilities. These facilities completed root cause analyses and participated in a Plan-Do-Study-Act (PDSA) cycle of four months. During the PDSA cycle, the Network engaged the community coalition facilities in interventions to drive improvement at the Network and facility level and assisted with mitigating barriers by providing 1:1 technical assistance based on data and facility specific needs. Upon completion of the PDSA cycle, best practices identified within the coalitions were spread to facilities across the Network's service area to form a community of practice.

During the reporting period, the Network worked in collaboration with its Medical Review Board, PFR Alliance, and Advisory Committees to develop and implement quality improvement projects aligned with the CMS-identified goals for the ESRD Network program.

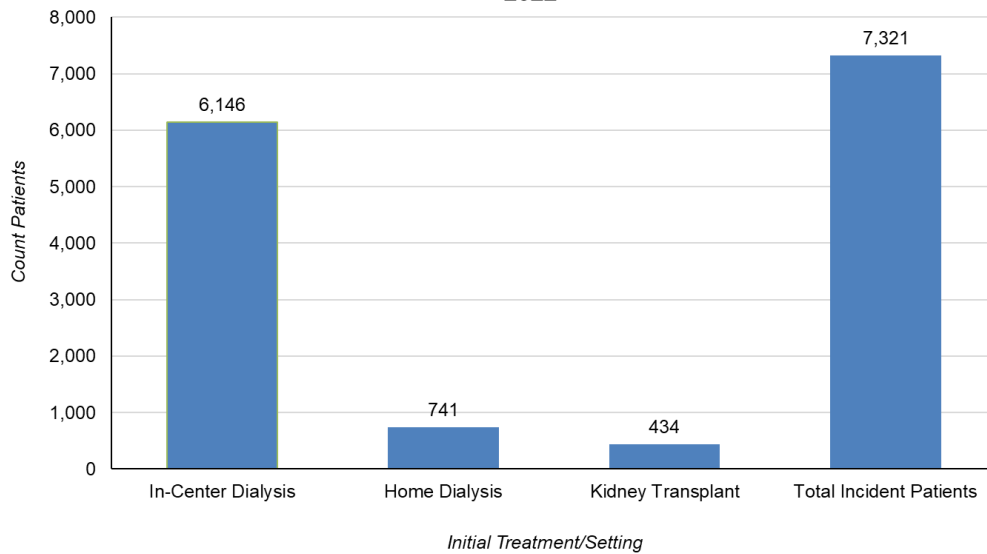
The Network deployed interventions through IPRO Learn, virtual learning management system (LMS), that targeted patients, dialysis and transplant providers, and other stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of care for ESRD patients are detailed in this report.

Network 2: Count of Prevalent ESRD Patients by Treatment/Setting 2022



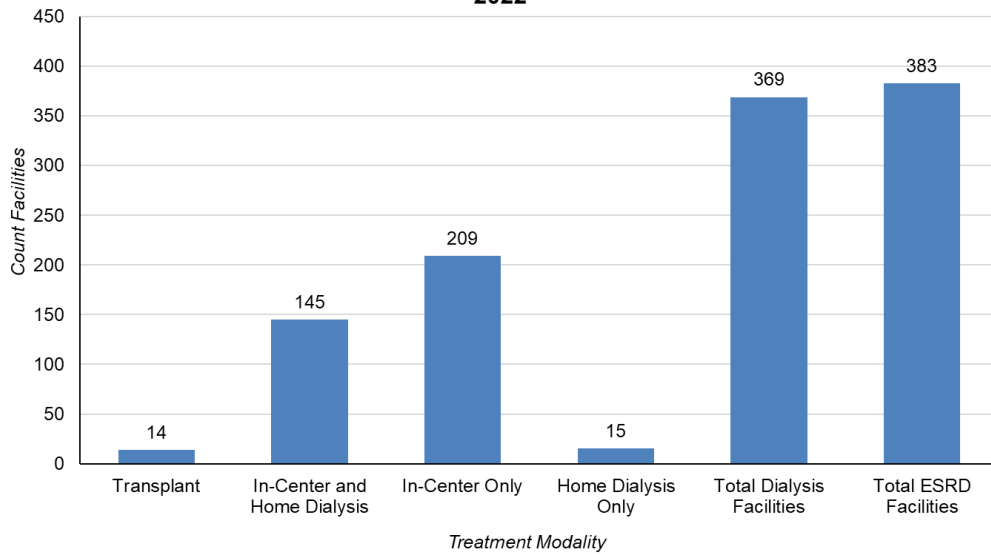
Total Dialysis Patients = In-Center Dialysis + Home Dialysis
 Total ESRD Patients = Transplant + Total Dialysis
 SNF dialysis patients are not shown due to small numbers.
 Source of data: EQRS May 2023

Network 2: Count of Incident ESRD Patients by Initial Treatment/Setting 2022



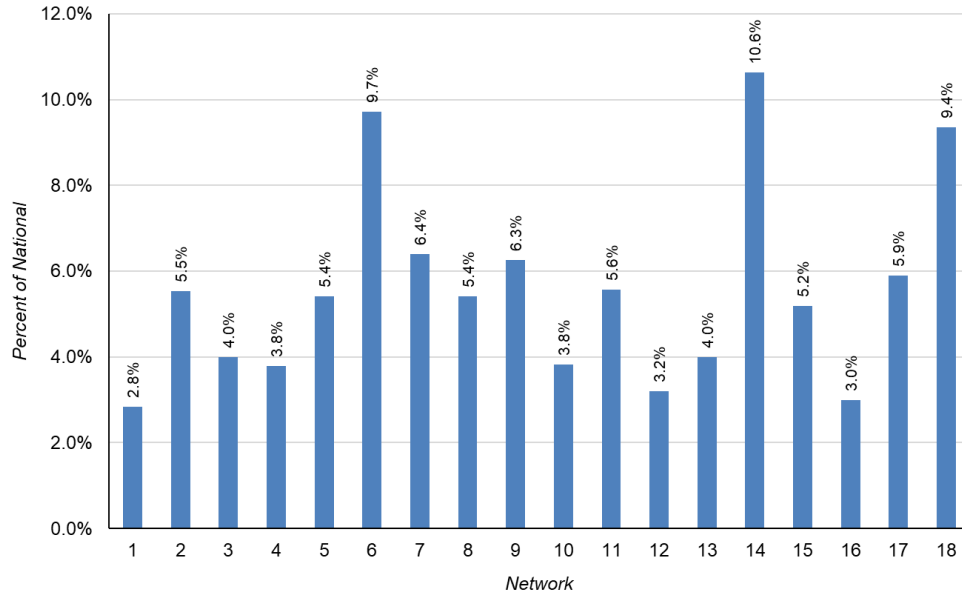
Total Incident Patients = In-Center + Home + Kidney Transplant
 Source of data: EQRS May 2023

**Network 2: Count of Medicare-Certified Facilities
by Treatment/Setting
2022**



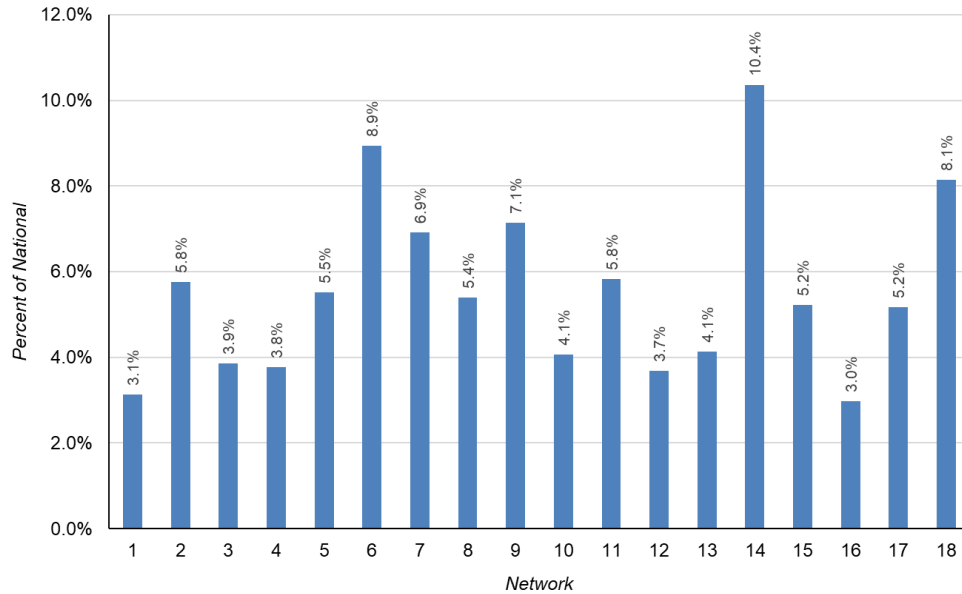
Total Dialysis Facilities = In-Center and Home Dialysis + Home Dialysis Only + In-Center Only
 Total ESRD Facilities = Transplant + Total Dialysis Facilities
 Source of data: EQRS May 2023

Percent of National Prevalent Dialysis Patients by ESRD Network 2022



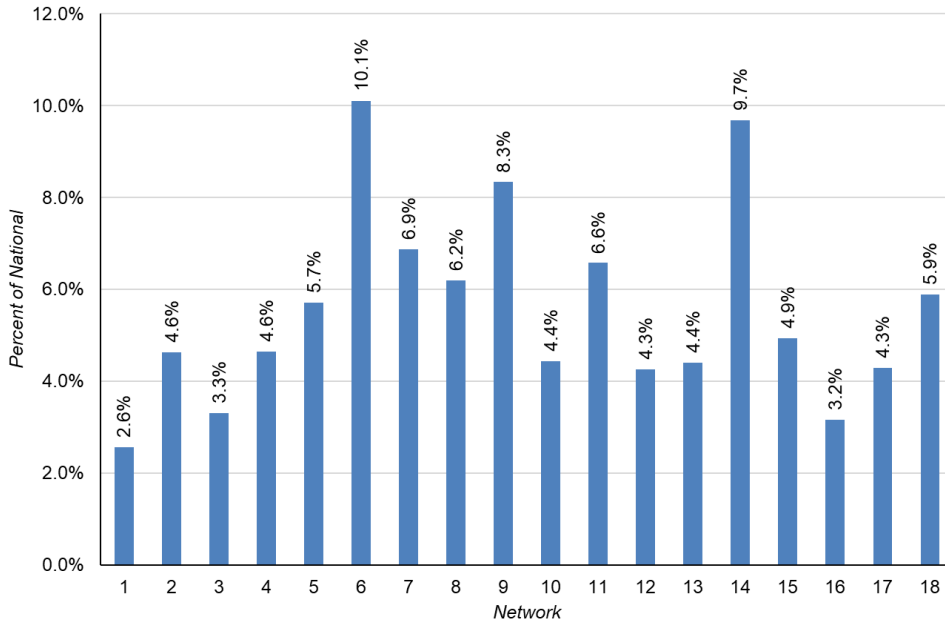
National total dialysis patients: 430,015
 Source of data: EQRS May 2023

Percent of National Incident Dialysis Patients by ESRD Network 2022



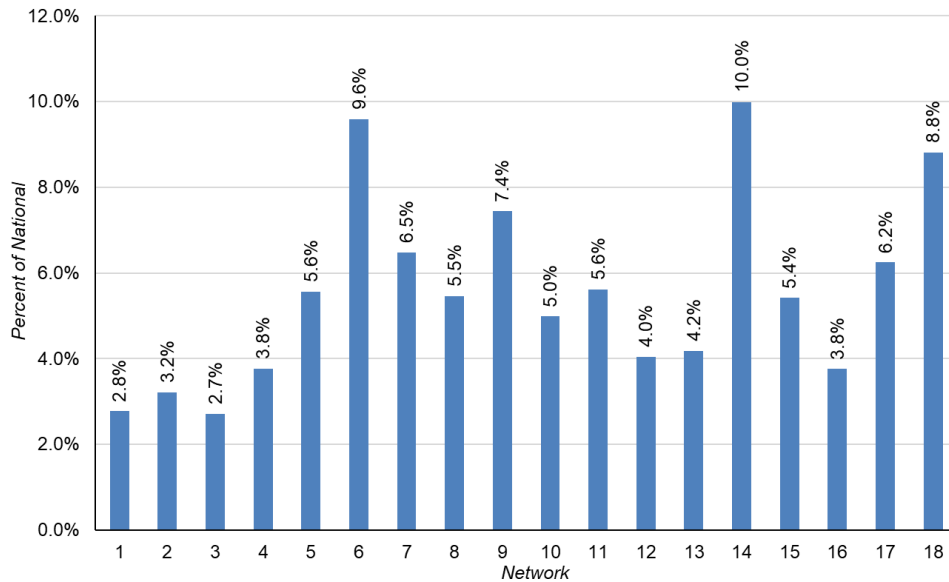
National total incident patients: 127,256
 Source of data: EQRS May 2023

**Percent of Medicare-Certified Dialysis Facilities by ESRD Network
2022**



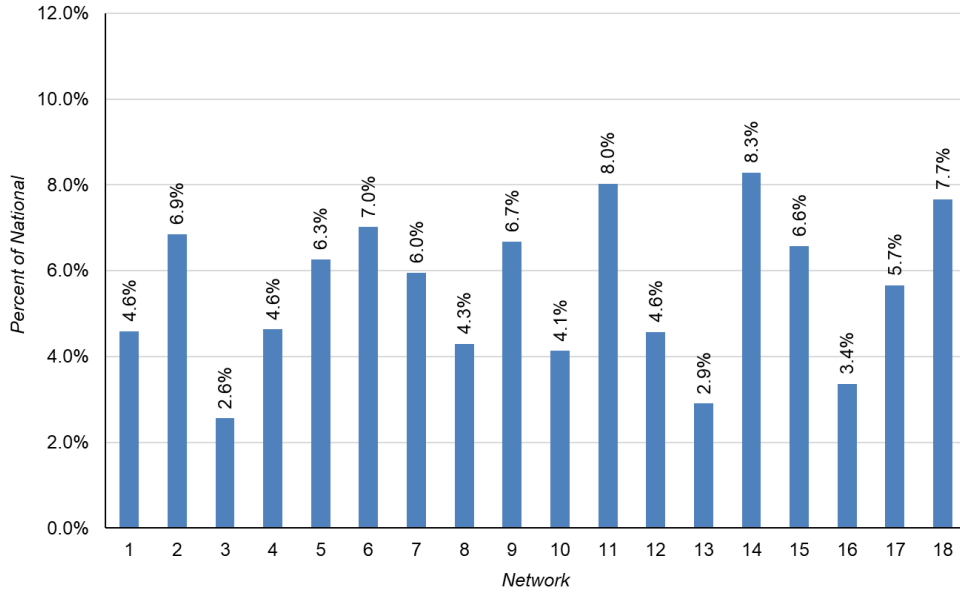
National total ESRD Medicare-certified dialysis facilities: 7,967
Source of data: EQRS May 2023

**Percent of National Home Hemodialysis and Peritoneal Dialysis
Patients by ESRD Network
2022**



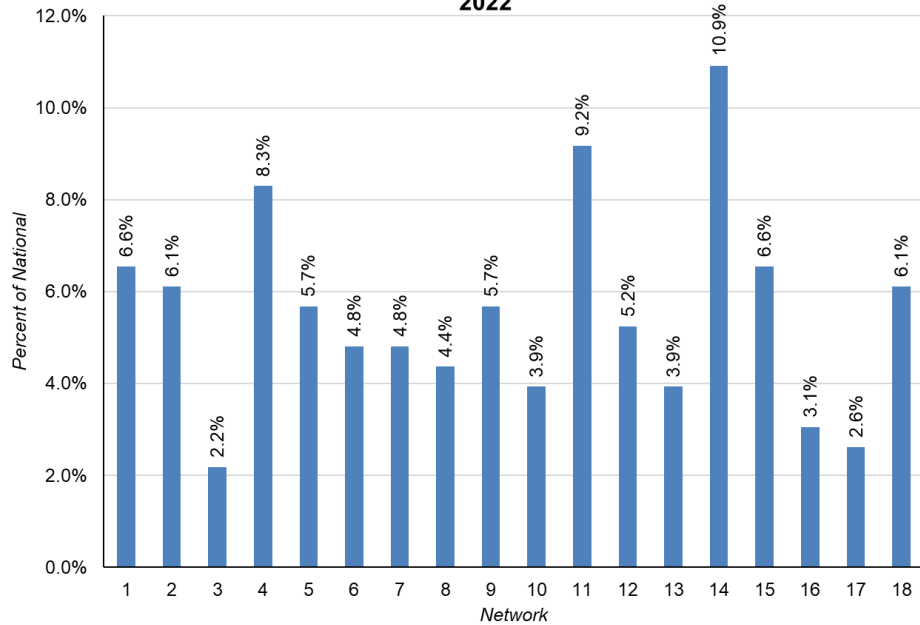
National total home hemodialysis and peritoneal dialysis patients: 80,460
Source of data: EQRS May 2023

**Percent of National Transplant Patients by ESRD Network
2022**



National total transplant patients: 288,023
Source of data: EQRS May 2023

**Percent of Medicare-Certified Kidney Transplant Facilities by
ESRD Network
2022**



National total ESRD Medicare-certified kidney transplant facilities: 229
Source of data: EQRS May 2023

Patient and Family Engagement

Through a concerted effort, the IPRO ESRD Network of New York identified and recruited patient leaders within the ESRD patient population to serve as Patient Facility Representatives (PFRs). During the performance period, the Network's PFR Alliance expanded to 191 ESRD patients and caregivers. The PFR Alliance was created to serve as a bridge between patients, facility staff, and the Network. The Network used interactive communications strategies including text messaging and social media outreach (Facebook, Twitter, and Instagram) to create a safe and open community to encourage easy check-ins and connectivity. Additionally, through its PFR Alliance, the Network was able to provide monthly educational meetings and foster patient feedback on recently created resources.

The PFR Alliance was instrumental in bringing the patient voice to facility Quality Assurance and Performance Improvement (QAPI) initiatives and increasing the number of facilities incorporating patients in their monthly QAPI meetings. The Network incorporated a variety of interventions to increase the number of facilities integrating patients in QAPI meetings:

- The *Help with HIPAA* resource was developed to respond to facility staff members' misconceptions that HIPAA was an ongoing barrier to patient participation in QAPI meetings.
- *Guidelines for Patient Representatives Who Attend QAPI Meetings* were developed by the Network to provide seasoned PFRs with instructions on effective ways to participate in their facility's QAPI meetings. Additionally, it provided insight into alternative measures to take in the event they cannot attend the meeting in person.
- *Including Patients in Your Facility QAPI Meetings: Format and Guide* was developed by the Network to provide facilities instructions on selecting patients and developing an ongoing process for meaningful engagement of patients in QAPI meetings.
- The Network created a short informational flyer outlining foundational information on how facilities can include patients in their QAPI meetings "*Incorporating the Patient's Voice into Your Facility's QAPI Meetings.*"

The Network worked to increase the number of facilities supporting a peer mentoring program. At the end of the performance period, 109 facilities were actively supporting a peer mentoring program with a total of 131 peer mentors recruited from former peer mentors and currently active peer mentors. The Network began the year using IPRO Learn but transitioned to monthly and bi-monthly live peer mentoring sessions via WebEx, based on community feedback.

Interventions

- Live Peer Mentoring training was presented in two introductory sessions.
 - Peer Mentorship: Mentoring to Support Choices: This module provided patients with foundational information including "What is peer mentoring?" and "How does peer Mentoring work?". The module also provides tips for success, program

guidelines, and different ways to mentor (Lobby Session, Group Session, and One-to-One Session)

- Talking Effectively with Another Patient: This module provided more specific information on how to be an effective peer mentor as well as tips for honing communication skills. “Shared decision making, building relationships through communication, active listening, protecting patient confidentiality, mentoring for diversity, and tips for success were key topics presented in the module.
- Activating/ Re-activating Long-term PFR Alliance Members: Most facilities have at least one patient facility representative or a patient advocate actively supporting patients. Many of these individuals were engaging in different levels of peer mentoring as well as peer-to-peer education without formal certification. The Network worked with facilities to formally identify these individuals and once identified, the Network provided each individual with both orientation and formalized training. The Network focused on peer mentoring re-education and the development of conversation retention skills through the IPRO Learn Peer Mentoring Program and live virtual engagement sessions.

Health Equity

According to the World Health Organization (WHO), health inequalities are systemic differences in healthcare outcomes. Equity is the absence of unfair, avoidable, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, geographically, or by other dimensions of inequality (e.g., sex, ethnicity or disability). The Network team sought to identify the various types of health inequities within our service area that would inhibit the overall quality of life for ESRD patients. An initial needs assessment of all dialysis facilities was conducted to help identify these ongoing barriers. The assessment yielded the following results:

- Barriers to transitioning to home therapies were identified as health illiteracy, a lack of understanding of what home therapies entail, limited space to host home therapy supplies, and limited or no family/caregiver support.
- Patients with mental health issues were identified as having barriers to health due to the stigma associated with mental health diagnoses, a lack of patient awareness, dissenting cultural beliefs about mental health, and limited access to mental health professionals.
- Telehealth barriers were identified as a lack of smartphone devices or computers, limited knowledge of how to use telehealth applications and smartphones and limited or no access to broadband internet and Wi-Fi.
- Barriers to vaccinations were identified as fear of medical reactions, mistrust of the healthcare system, medical racism, and limited education and understanding of vaccinations.
- Barriers to becoming active and remaining active on the transplant list were identified as health illiteracy, general fear of transplant, lack of social support, limited transportation, and dental infections.

Initial interventions were educational and focused on providing facilities with knowledge of ongoing services that were available to help mitigate their identified barriers. Following the Network's needs assessment survey, in collaboration with the Weitzman Institute*. The Moses/Weitzman Institute is a national health system organization focused on transforming healthcare delivery and directing it to vulnerable individuals. Counties in the Network's service area were divided based on the Social Vulnerability Index created by the Center for Disease Control Prevention (CDC). The Network conducted extensive data analysis on the quality improvement data. Counties within the Network's services area were stratified based on their social vulnerability index; counties with high social vulnerability were included in the initial analysis.

High socially vulnerability counties were identified to be Bronx County, Kings County, Montgomery County, Queens County, and Sullivan County. Once the counties were identified the data were stratified into different categories based on the OKR topics COVID-19 hospitalizations, Inpatient hospitalizations, readmissions, emergency department hospitalizations, influenza vaccinations, transplant, transplant waitlist, home transitions, and home incidence.

The data were further stratified by state and county population, urban and rural settings, and sex, race, and ethnicity. The identified high socially vulnerable counties were then compared to counties with low social vulnerabilities (Saratoga County and Suffolk County). The data analysis showed inequities throughout each area of focus, with the strongest and most prominent vulnerabilities occurring in the categories of COVID-19 hospitalizations, emergency department visits, hospital readmissions, and inpatient hospitalizations.



ESRD Network Grievance and Access to Care Data

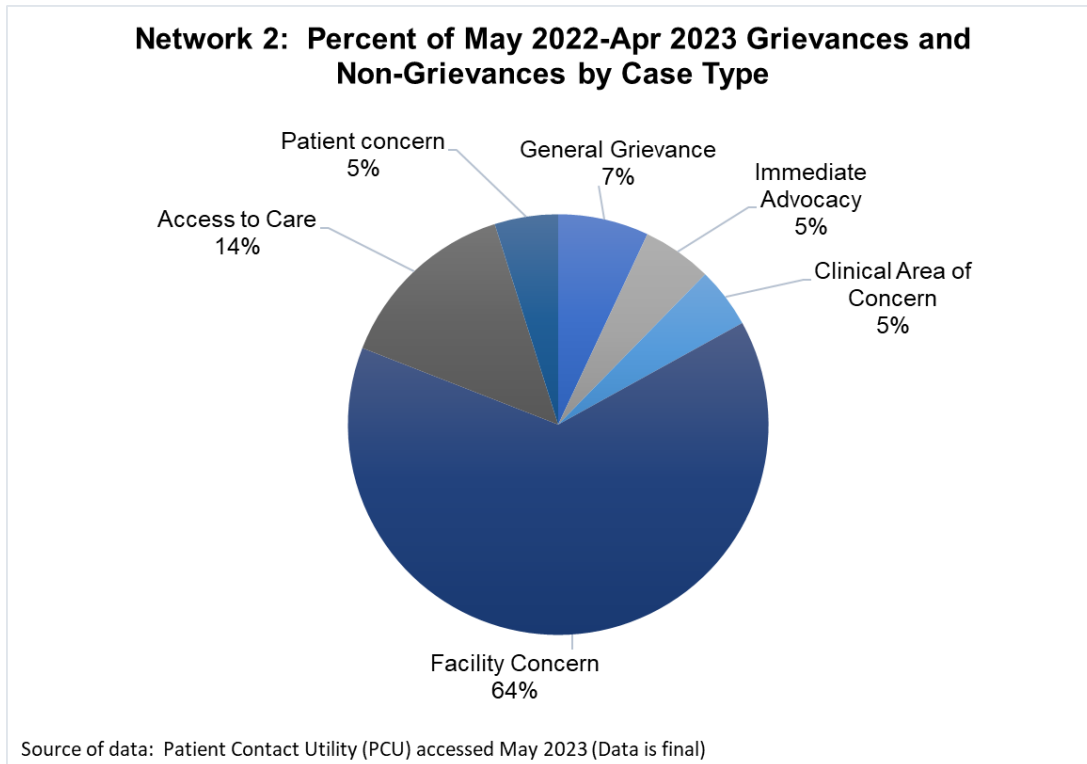
The Network responds to grievances filed by or on behalf of ESRD patients in New York State, with a goal to address and mitigate concerns.

Grievances

During the performance period, the Network received 20 clinical quality of care (QoC) cases that were reviewed by the Network's clinical staff, with the goal to address and resolve the grievant's issues, while also providing support, educational resources, and direction to the facility staff. QoC cases were staff related; treatment related cases included concerns with cannulation, symptoms post treatments, cleaning of the blood, fluid removal, dialysis supplies/equipment, and access site issues. The Network reviewed 30 general grievance cases with areas of concern that included communication/miscommunication issues, professionalism, staff/patient ratios, and staff relations. The Network reviewed 23 immediate advocacy cases that were related to communication/miscommunication, professionalism, staffing ratios, and the physical environment. The Network also received 275 facility concern cases and provided technical assistance to the clinics with all 275 cases. The facility concern cases were related to disruptive/abusive patient behavior, non-adherence, mental health, cognitive concerns, staff shortage issues, and other categories.

The Network interventions implemented to address these issues included recommendations for clinics to conduct staff in-services on effective communication, professionalism, de-escalation techniques, and the benefits of using a strengths-based approach when working with patients. The Network also participated in meetings with the patients, their families, and the clinic teams to address areas of concerns and formulate interventions to resolve reported grievances. The Network Program recorded a webinar titled *Effective Communication*, which was made available to the clinic teams and used as an IPRO Learn activity. The Network Program also created and rebranded resources including *Grievance Process-Guide*, *We Can Help You*, *ESRD Patient Rights and Responsibilities* and *Decreasing Patient-Provider Conflict: A Pathway to Resolution*. Overall, the Network successfully resolved all cases within the mandated time frame; immediate advocacy cases were resolved within 10 calendar days, general grievances and QoC cases were resolved within 60 calendar days.

With fewer staff members available to work with patients, staff shortages within dialysis facilities seriously affected patient care. As a related issue, dialysis social workers covering multiple clinics were unable to devote full time to their assigned patients. To help address the potential issues caused by the above, the Network employed strength-based approaches, not only with patients, but also with staff. The approach focused on reducing burnout and compassion-fatigue at the clinic level was done by providing education on how to manage stress and conflict. The "Effective Communication" webinar educated staff that if stress becomes constant and overwhelming, it can damper effective communication; staff were provided with examples on how to recognize the onset of stress and how to manage stress.



Access to Care and Involuntary Discharge (IVD) Cases

In 2022, the Network received 82 cases involving access to care concerns, 44 cases were related to “at risk events” and 38 cases involved “failure to place.” With each access to care case, the Network provided technical assistance (TA) to help facility staff effectively support and protect their patients’ access to treatment. The Network averted 34 at risk cases, and 26 “failure to place” patients who were placed. Seventeen patients were discharged from their respective facilities during the performance period.

To strategize long-term solutions and action plans as part of the TA provided by the Network, the Network encouraged clinic staff members to incorporate the identified areas of concern during the facility’s monthly Quality Assurance Performance Improvement (QAPI) meetings. The Network also encouraged clinic staff to implement peer-to-peer support via the Network’s Peer Mentoring Program, for patients who experienced challenges.

The Network continued to promote its Second Chance Program to clinics for patients with a history of involuntary discharge, behavioral, and/or non-adherence issues, with a goal to reduce the number of patients using hospital emergency departments for life sustaining treatments. Through the program, dialysis units are offered a 30-day trial period during which they may accept a patient for treatment. During the performance period, three patients completed the program successfully and were placed.

The Network continued to provide educational resources to both patients and clinic staff on patients' rights and the CMS Conditions for Coverage and encouraged clinic staff to incorporate patients into QAPI meetings.

Network Assistance and Quality Improvement

The Network advocated for patients, promoting the rights of patients to participate in their healthcare and emphasized the importance of patients voicing their perspective about services provided by the facility. The Network mediated cases regarding patients' concerns with the facility and implemented QIAs that included interventions designed to provide facility staff with guidance on communication techniques that would better support their patients' care.

The Network worked toward accomplishing the following overarching goals during the performance period:

- Resolve all grievances within required time frames: 10 calendar days for Immediate Advocacy and 60 calendar days for General Grievance and Clinical Quality of Care.
- Increase patients' awareness of the Network and the educational resources available by sharing information during the monthly Patient Facility Representative (PFR) Alliance meetings.
- Provide educational resources with each grievance resolved.
- Increase use of IPRO Learn modules. The Network used IPRO Learn to promote the Network's pre-recorded webinar *Effective Communication* with the goal for all clinics participating in IPRO Learn activities to complete this activity.
- Support dialysis facility staff who have limited time, skills and training in conflict resolution, with an ultimate goal to enhance staff members' ability to manage and deal with patients who have provide supportive services to patients to address their mental, emotional and/or psychosocial issues. and decrease the number of cases reported to the Network.

The Network continuously promoted an environment of advocacy for all ESRD patients and ESRD patients' caregivers. Through advocacy work, the Network provided educational training and resources on patient rights to all staff and patients. Educational resources including *Your Rights and Responsibilities as an ESRD Patient* were made available to patients and clinics on the Network's website in the form of a printable handout. During phone calls and meetings, the Network provided continuously emphasized to patients and clinic staff information about patients' rights and responsibilities.

The Network also provided mediation to help de-escalate ongoing patient concerns and create an environment of safety and inclusion. Interventions focused on supporting facility staff in implementing de-escalation techniques and adopting effective communication skills, as well as offering guidance in identifying potential barriers that could negatively affect a patient's ability to remain compliant with their treatment plan. These interventions provided facilities with the necessary guidance to improve their patients' overall quality of care. While each intervention focused on a different topic, all Network-implemented interventions incorporated the basic elements of quality improvement:

- An environmental scan/needs assessment of dialysis clinic staff.
- Provision of TA to support clinic staff in using quality improvement tools, including root cause analysis (RCA) and plan-do-study-act cycles (PDSA).
- Ongoing emphasis of the value of establishing professional boundaries with patients.
- Early introduction and ongoing reinforcement of the value of integrating quality improvement methodologies into the culture of the clinic.

The Network provided patients and/or facilities with the following resources:

- The *Dialysis Patient Grievance Toolkit* created by the Forum of ESRD Networks' Kidney Patient Advisory Council (KPAC).
- *CMS Conditions for Coverage Interpretive Guidance: V766 & V767* to define acceptable reasons for involuntary discharges.
- Grievance preparation worksheets and a poster to create awareness of the educational resources available to dialysis patients.
- *Patients' Rights and Responsibilities*.
- A poster and flyers (*What the Network Staff Can and Cannot Do*) that outline for patients clearly defined parameters of the support that the Network is able to provide.
- Crisis Prevention Institute's (CPI) *Top 10 De-Escalation Tips resource*.
- The Second Chance Program flier and brochure to help promote the value of this program.

Transplant Waitlist & Transplanted Quality Improvement Activity May 2022-April 2023

Project Overview

Network 2 serves as a support and champion for patients (regardless of age or ethnicity as well as those with common comorbid conditions, including diabetes and hypertension) through its efforts to fulfill the stated goal of the Executive Order on Advancing American Kidney Health (AAKH) for 80% of new ESRD patients to be either receiving dialysis at home or receiving a transplant by the year 2025. The Network's goals for this performance period were to increase the number of patients on the United Network for Organ Sharing (UNOS) waitlist in the Network service area by 5% and increase the number of transplants in the Network service area by 6%.

The Network collaborated with dialysis facilities, transplant centers and stakeholders across its service area to provide information and resources about the benefits of transplantation as a preferred treatment modality and to increase patient access to this care option

Information was shared with facility staff and patients via the IPRO Learn education platform, as well as work groups and engagement in community coalitions. Using these approaches, the Network integrated principles of health equity and patient and family engagement to provide education and information about treatment options and to increase patient access to transplantation.

Interventions

Utilizing IPRO Learn, the Networks one-stop-shop learning management platform, members of the dialysis provider community were engaged in monthly and bi-monthly quality improvement activities and interventions geared toward addressing and overcoming the region's top-reported barriers to waitlist and transplant.

The Network collaborated with New York State transplant centers to develop three resources that were released to the dialysis community:

1. With a goal to reduce referral burden and improve health equity, and working with the Albany Medical Center, the Network developed *Tips for Positive Referral Outcomes: Frequently Asked Questions*, which shared five strategies to foster more efficient and streamlined referrals for waitlist.
2. The Network also created a transplant course which offered continuing education credits to our providers, titled *How CMS Goals, Payment Models, and Quality Incentive Plans Align to Promote Transplant and Home Modalities*. This course reviewed the 2020 Advancing American Kidney Health (AAKH) Executive Order, the CMS ESRD Transplant and Home Quality Improvement Goals, the ESRD Quality Incentive Program, the ESRD Treatment Choices (ETC) Payment and Kidney Care Choices (KCC) Models, and the State Surveyor Measurement Assessment Tool (MAT).

3. In collaboration with New York-Presbyterian/Columbia University Irving Medical Center, a resource was released to overcome an identified barrier to proper collection and shipment of monthly blood samples, *Maintain Your Patients' Active Status on the Transplant Waitlist with Monthly Blood Samples- FAQs and Best Practices*.

Other interventions focused on identifying which transplant centers required COVID-19 vaccinations and sharing that information via newsletter with patients and providers. In addition, the Network offered guidance to dialysis providers on health equity, which included information on the use of plain language and the teach-back method.

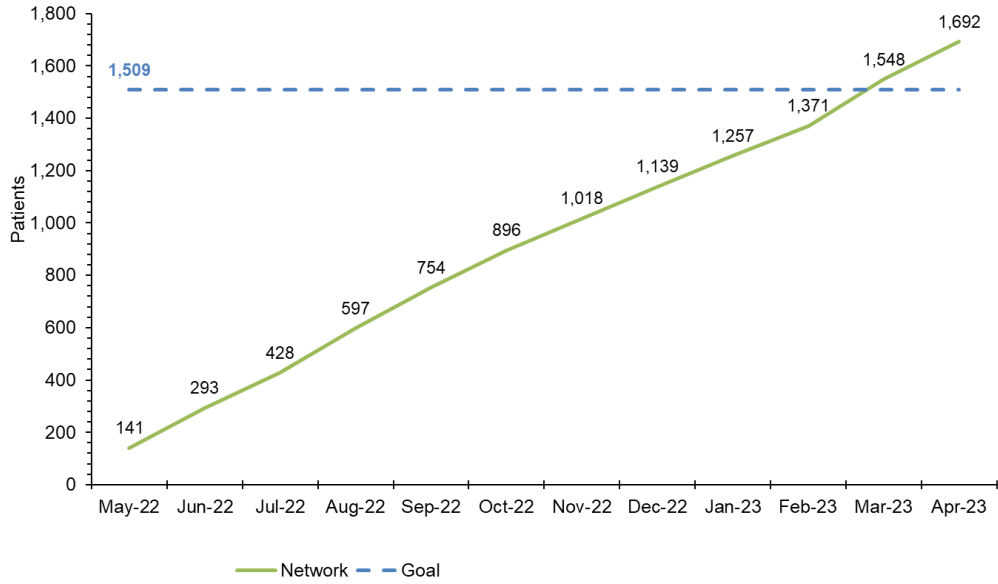
Collaborating continuously with community coalition facilities throughout the year, the Network provided individualized technical assistance to guide facilities through rigorous quality improvement cycles, during which they conducted root cause analyses and completed a four-month plan-do-study-act (PDSA) cycle. The Network provided facility staff resources and guidance related to the fundamentals of quality improvement and the importance of engaging patients and family members in quality improvement activities. Specific resources included the *Transplant Change Packet, Neighborhood Navigator, and My Dialysis Life Plan*; additional focus was placed on teaching motivational interviewing strategies and the value of patient inclusion in facility Quality Assurance and Performance Improvement (QAPI) activities.

In addition, the Network collaborated with a patient group, the CKD Champions of New York, to gather information from dialysis and transplant patients about what they wish they had known before starting their transplant journey. Patients treated by each of the 13 adult kidney transplant facilities in the Network's service area were polled, with a total of 10/13 facilities responding. This offered the Network full data sets to help promote patient informed decisions in transplant centers.

Outcomes

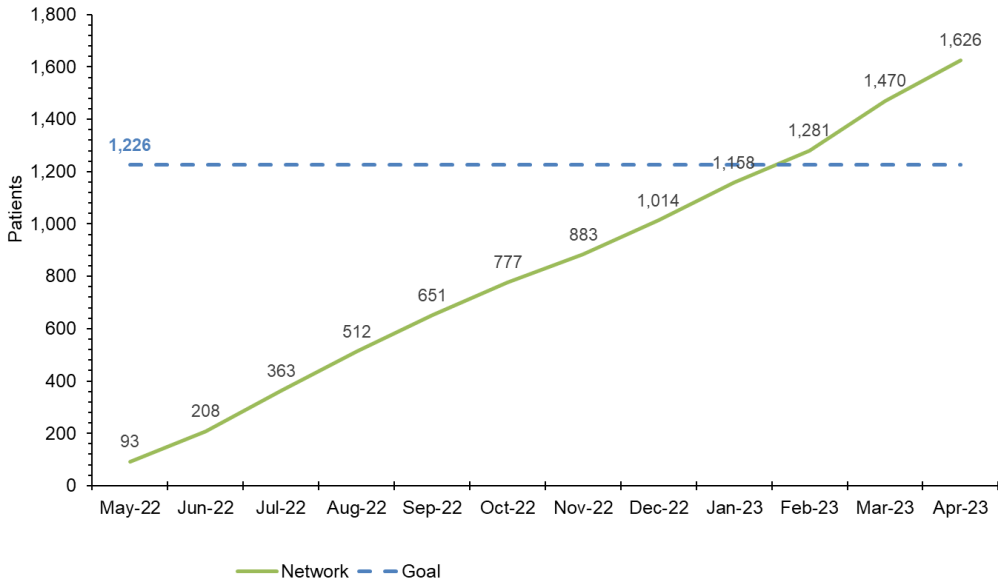
The Network's activities resulted in an additional 1,692 patients added to the transplant waitlist during the performance period (18% increase from baseline period) and 1,626 patients receiving a transplant as of April 30, 2023; a 40% increase from baseline period.

**Network 2: Count of Patients Added to a Kidney Transplant Waiting List
May 2022 - April 2023**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023

**Network 2: Count of Patients Receiving a Kidney Transplant
May 2022 - April 2023**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023

Barriers to Achieving Goals

The ESRD population in the Network's service area has the second highest transplant rate of all ESRD Network Organizations in the country. Despite this success, barriers remain related to early CKD education, preemptive waitlisting and transplant, the acceptance of high kidney-donor profile index (KDPI) kidneys and living donation in the region.

Best Practices Spread to Achieve Goals

The Network hosted two Treatment Modality Best Practice webinars during which high performing facilities shared their best practices for increasing rates of waitlist and transplant. In September 2022, a regional social worker from PDI-Worcester shared best practices in waitlisting and transplant. Best practices included distribution of robust educational tools, identification of and collaboration with transplant centers that offer specialized services, and implementation of strategies for driving a pro-transplant culture.

In February 2023, a kidney care options educator from U.S Renal Care Orange shared her facility's approach to providing education about ESRD and treatment options to CKD patients, pre-emptive referral for waitlisting, ensuring health literacy in all educational materials, patient to patient advocacy, and reliable and consistent communications with transplant centers. In addition, three facilities in the Network's service area shared best practices on the IPRO Learn platform. These presentations feature implementation of community wellness days, monthly blood sample processes, and successful approaches to establishing a pro-transplant culture within their facilities.

Home Therapy Quality Improvement Activity May 2022-April 2023

Project Overview

The choice of home modality enhances a patient's quality of life and is more convenient than traveling to an in-center clinic three times per week. It is also shown to improve patients' mortality and morbidity making it a preferred treatment modality for ESRD. Dialysis patients need education and support to determine the appropriate dialysis modality that fits their lifestyle, including but not limited to, how each modality will affect travel, diet and fluid consumption, school, work, social interaction, and well-being. The Network has been committed to

- providing patients and staff with education and resources to create a pro home culture;
- encouraging provision of treatment modality education for patients with chronic kidney disease (CKD) in advance of their need to select their treatment modality;
- sharing best practices with facility staff to encourage patients to consider a home program; and
- supporting innovations that expand access to home or offer quick starts on a home therapy, such as urgent start peritoneal dialysis.

The Network's goals for this performance period were to increase the number of new patients starting dialysis on a home therapy to 20% above the baseline measurement (April 30 -2020 – May 1, 2021) and the number of patients transitioning from incenter hemodialysis (IHD) to a home therapy by 6% over baseline.

Interventions

The Network's service area has the largest number of independent dialysis facilities in the nation. This creates a host of unique barriers when it comes to having patients start their dialysis or transition to a home modality. To address these barriers, the Network convened a task force comprising nephrologists, nurse practitioners, patients, and Network staff to work together to identify strategies to address the challenges of moving incident and prevalent patients to home therapies.

The Network also worked in conjunction with the National Kidney Foundation's ECHO Project. Thirteen dialysis facilities enrolled in the ECHO Project that started December 2022 and focused on increasing knowledge and comfort with initiating and retaining home dialysis patients. Each facility participated in hour-long meetings twice a month. The first thirty minutes of each meeting featured a case presentation by one of the dialysis facilities enrolled. The last thirty minutes of the call featured a presentation by a home dialysis expert panel. There were up to 14 curriculum topics covered under two main topic areas: building/growing a home program and clinical/psychosocial issues.

IPRO Learn, the Network's learning management system is our platform to disseminate education to the dialysis facilities. A flyer posted to IPRO Learn, *Cozy at Home*, explained that

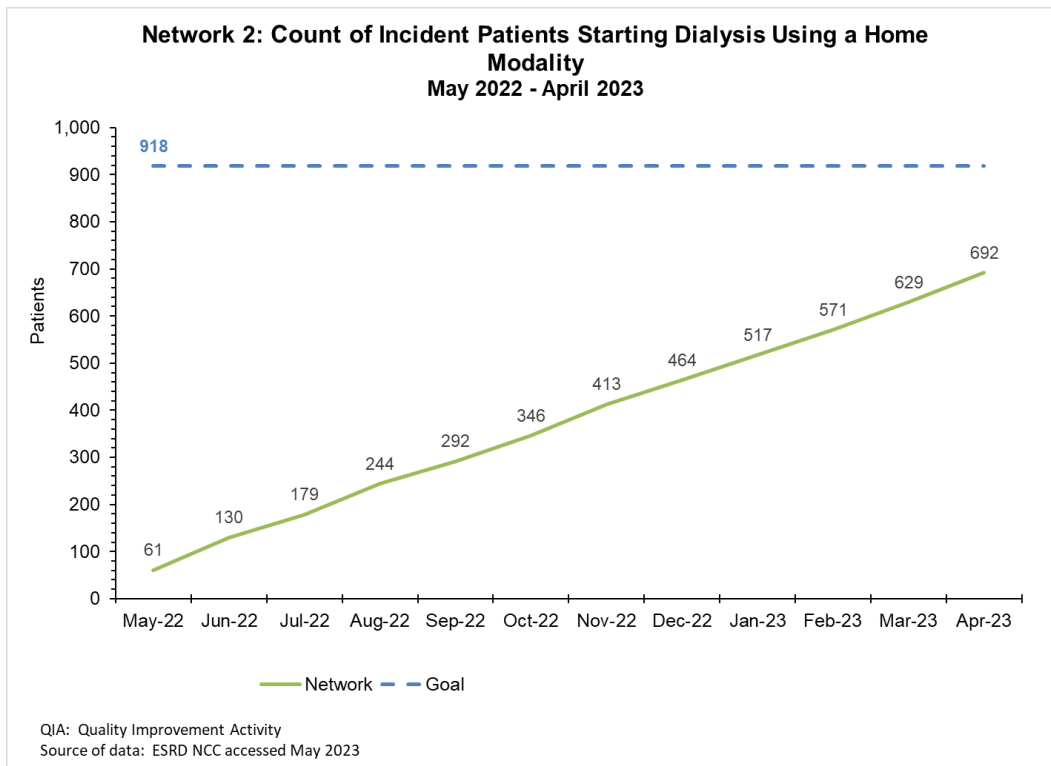
with the winter months approaching, a good way to avoid travel and going out in the cold would be to dialyze at home. The flyer gave some tips on establishing a pro home culture within facilities and provided a link to the IPRO Learn discussion board where facilities could add their success stories.

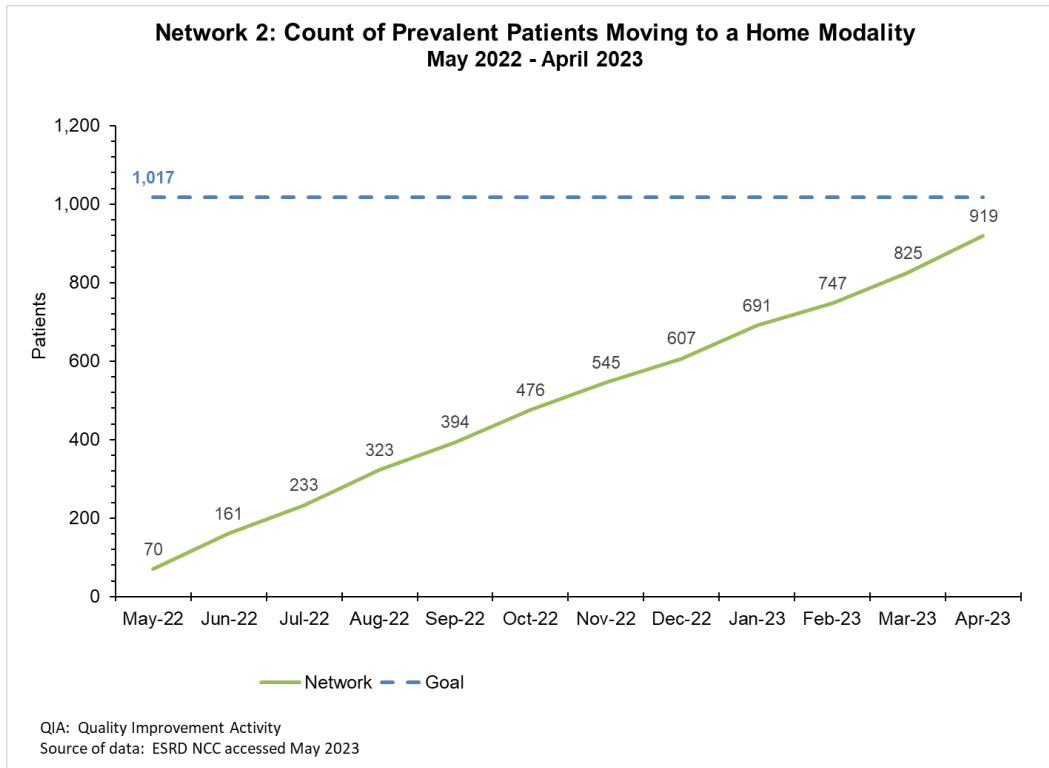
Sixty-seven percent of the facilities in the Network’s service area completed the educational activity associated with the flyer. Of that group, 57% noted that they were working to help more patients receive home therapy now that the weather was turning colder. and 50% noted that they had patients on a waiting list for training. To mitigate the barrier of wait lists, we discussed ways to conduct group trainings.

We also had a lot of facilities contributing to and reading success stories on IPRO Learn. The Network found that the issues surrounding travelling during the winter months were a key motivator in encouraging patients to consider home dialysis.

Outcomes

In the Network’s service area, 692 incident patients started dialysis on a home modality during the performance period (75% of goal). In addition, 919 patients transitioned to a home modality from ICHD, (90% of goal). While the Network team's work with dialysis facilities was successful in attaining a steady increase in the number of both incident and prevalent patients on a home modality each month, we did not meet our goal.





Barriers to Achieving Goals

Due to the number of independent dialysis facilities, each provider has their own infrastructure barriers and difficulties with creating a pro home culture. In New York, specifically the New York metropolitan area where most people live in apartments, many people face restrictions related to housing infrastructure, including limited electrical outlets and space for supplies.

Best Practices Spread to Achieve Goals

Community coalitions functioned as bodies of stakeholders within a community, dedicated to defining a healthcare issue within the designated community, producing a root cause analysis to identify areas for improvement, committing to work as a group to achieve quantitative aims, and implementing specific actions tied to the identified root causes that are designed to improve healthcare outcomes within the community.

Throughout the performance period, the Network shared best practices within our coalitions. The Network structured its coalitions (three per year) so that, within each coalition, the Network identified facilities that could be classified as low performers, moderate performers, and high performers in terms of moving patients to home modalities with a goal to have high performing facilities share their best practices with both low and moderate performing facilities. During each four-month intensive PDSA cycle with coalition facilities, the Network selected a top performer, and that facility was featured on a Network-wide best practice call.

Influenza Vaccinations (Patient and Staff) May 2022-April 2023

Project Overview

According to the Centers for Disease Control and Prevention (CDC), “People with chronic kidney disease (CKD) are at high risk of developing serious flu complications, which can result in hospitalization and even death. This is because CKD weakens immune response, which can make the immune system less able to fight infections. People with CKD at any stage, people who have had a kidney transplant, and people who are undergoing dialysis treatment are all at increased risk of severe illness from flu.”

The Network worked to increase the vaccination rate for individuals with ESRD residing within its service area as well as the staff working in the facilities that treat them. Interventions, resources, and technical assistance were provided to dialysis centers, with a goal to facilitate an increase to 90% of the number of dialysis patients receiving an influenza vaccination by the end of the performance period. For facility staff, the Network’s goal was for 90% of staff to receive an influenza vaccine by the end of the performance period.

Patient data were reported by facilities in the End Stage Renal Disease Quality Reporting System (EQRS). Allowable exclusions for patients were medical contraindication or a history of severe allergic reaction to the vaccine. Staff data was reported in the National Health and Safety Network data set and did not include any exclusions.

Interventions

The Network provided facilities with resources and interventions via its learning management system platform, IPRO Learn, with a goal to identify successful strategies for increasing influenza vaccination rates for patients and staff. Interventions were focused on education using resources including the ESRD National Coordinating Center’s (NCC) *Vaccination Change Packet* to allow facilities to select the primary drivers for influenza vaccines that were most appropriate for their patients and staff.

The Network assisted facilities with the collection of patient vaccination data by providing facility performance reports identifying patients that remained eligible for vaccination, so the facilities could efficiently target their interventions. We encouraged the promotion of a vaccination day at each facility where patients and staff could receive the Influenza vaccine on site and create a sense of community need. The Network team provided facility specific technical assistance based on barriers identified, including those barriers encountered by independent facilities that lacked corporate resources for education and documentation.

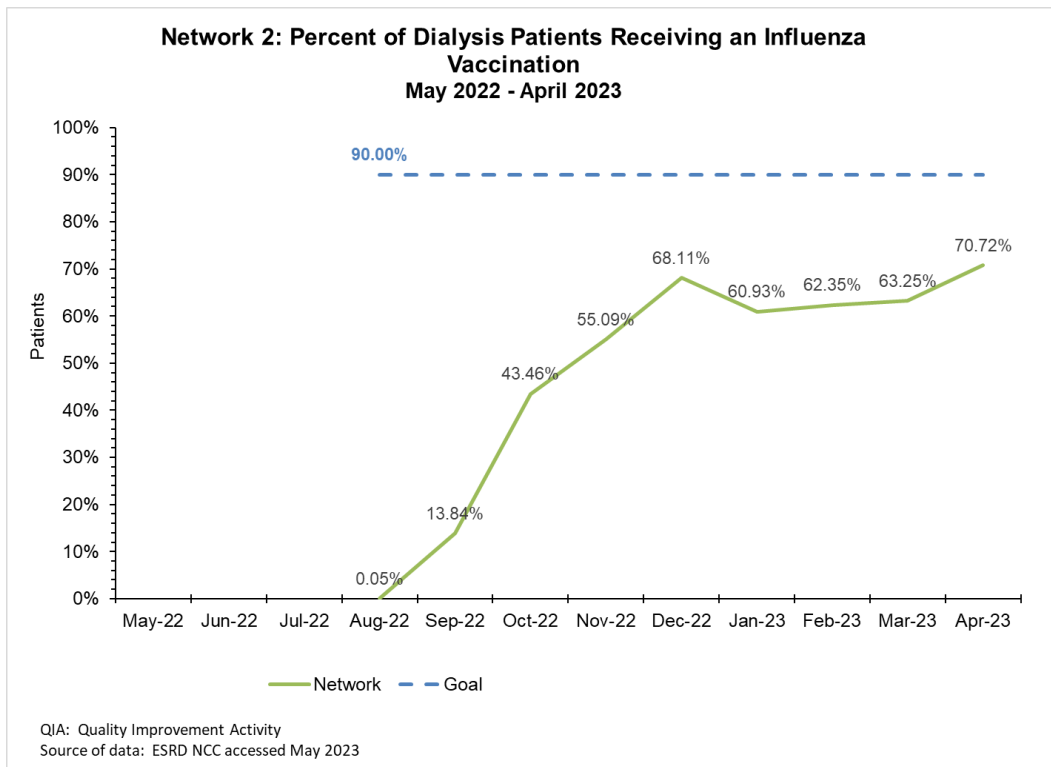
At any given time throughout the performance period, 30% of the Network facilities were enrolled in a community coalition. These coalition facilities performed a root cause analysis to determine their barriers in effectively raising vaccination rates and then were provided specific

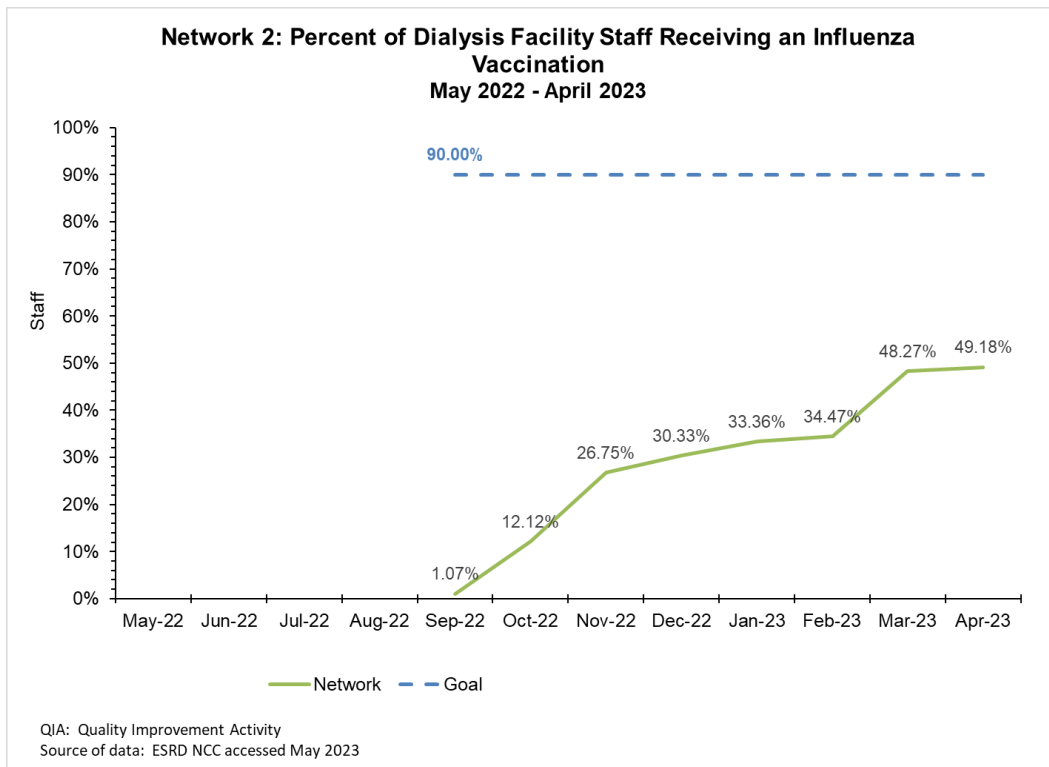
assignments through a plan-do-study-act cycle to target their quality improvement efforts on the barriers they identified.

We encouraged all our facilities to explore the IPRO Learn *Increasing Vaccination Rates* toolkit, which contains Network-developed and national resources, including the CDC’s *Key Facts About the Seasonal Flu Vaccine, Misconceptions about Seasonal Flu and Flu Vaccines*, and the ESRD National Coordinating Center’s (NCC) *Vaccination Change Packet*. Once this resource was reviewed, we asked facilities to select the primary drivers for improving influenza vaccination rates that were most appropriate to use for their patients and staff. Fifty-four percent of facilities (190) participated in the activity; 37 facilities focused on achieving a high performing culture, 18 facilities focused on implementing quality improvement strategies, 18 focused on adopting processes to achieve quality goals, eight focused on expanding efforts beyond their facility staff, 60 focused on providing education on vaccinations, and 49 focused on addressing vaccines hesitancy. Ninety-one percent of the facilities indicated they would adapt/adopt these processes and would share the resources with 1,282 of their partners and stakeholders in the community. Another tool in the toolkit, a presentation on *EQRS Vaccinations: Patient Influenza (flu) and Pneumococcal (pneumonia) Vaccines in EQRS* generated 5,139 presentation reviews and 664 YouTube views of the recorded presentation within 1 month of posting.

Outcomes

The Network’s activities resulted in the following outcomes in the Network’s service area at the end of the performance period: a total of 20,089 patients (70.72%) of the patients in the Network’s service area received an influenza vaccine and 2,948 facility staff members (49.18%) of staff members in the Network’s services received an influenza vaccine.





Barriers to Achieving Goals

The Network found that Inconsistent data entry practices were a major barrier to recording vaccinations. Much of this was due to the high number of independent facilities in the Network’s service area (45%). Due to ongoing staff shortages, many independent facilities had lost staff members who had formally been trained on EQRS upkeep and NHSN input of Influenza data. Without a larger corporate structure to help recover those functions for the facility, many data entry processes were broken or were not occurring. This issue, coupled with patient and staff lack of confidence in the effectiveness or the necessity of the vaccine, created a challenge for facilities to address patient and staff vaccination with the intensity and frequency necessary to improve results.

Best Practices Spread to Achieve Goals

Best practices identified by the Network included ensuring collaboration with stakeholders, promoting the IPRO Learn platform as a resource for accessing the most accurate and current information to educate and motivate both patients and staff to receive vaccines, and provision of education on hesitancy by physician groups to build trust with the patients. These best practices were shared with facilities across the service area through discussion forums on the IPRO Learn platform. Best practice posters were featured on IPRO Learn to share tips from these providers each quarter. We also asked best practice speakers to present every six months on their work and invited the entire Network service area to attend or listen to the calls to share and spread these ideas and processes.

COVID-19 Vaccinations (Patients and Staff) May 2022-April 2023

Project Overview

According to data from the US Renal Data System, 15.8% of all patients on dialysis in the United States had contracted COVID-19 during the COVID Omicron strain (Ba4/ Ba5). To prevent transmission of the disease the Network worked to ensure that a minimum of 80% of dialysis patients received a primary COVID-19 vaccination and/or vaccination series and 80% of fully vaccinated dialysis patients receive any Centers for Disease Control and Prevention (CDC) and/or Centers for Medicare & Medicaid Services (CMS) COVID-10 vaccinations. In addition, the Network worked to ensure that 100% of dialysis facility staff received a primary COVID-19 vaccination and/or vaccination series and 100% of fully vaccinated staff received any additional CDC and/or CMS recommended COVID-19 vaccinations. Outcomes for these measures were based on data reported to the National Healthcare Safety Network (NHSN).

Interventions

The Network reviewed data to identify facilities that struggled with increasing COVID-19 vaccination rates. From that list we placed 32 facilities in a community coalition to determine the root cause of their barriers and to assist them with a plan-do-study-act cycle to improve their outcomes. As part of the Network's coalition, these facilities were provided educational resources and tools via IPRO's learning management system platform, IPRO Learn, to guide facility staff in developing and executing strategies to increase vaccine uptake. The Network focused regional education on addressing patient and staff vaccine hesitancy, which was resulting in increased spread of COVID.

Coalition facilities were asked to complete monthly assignments involving sharing of identified best practice interventions on the IPRO Learn platform.

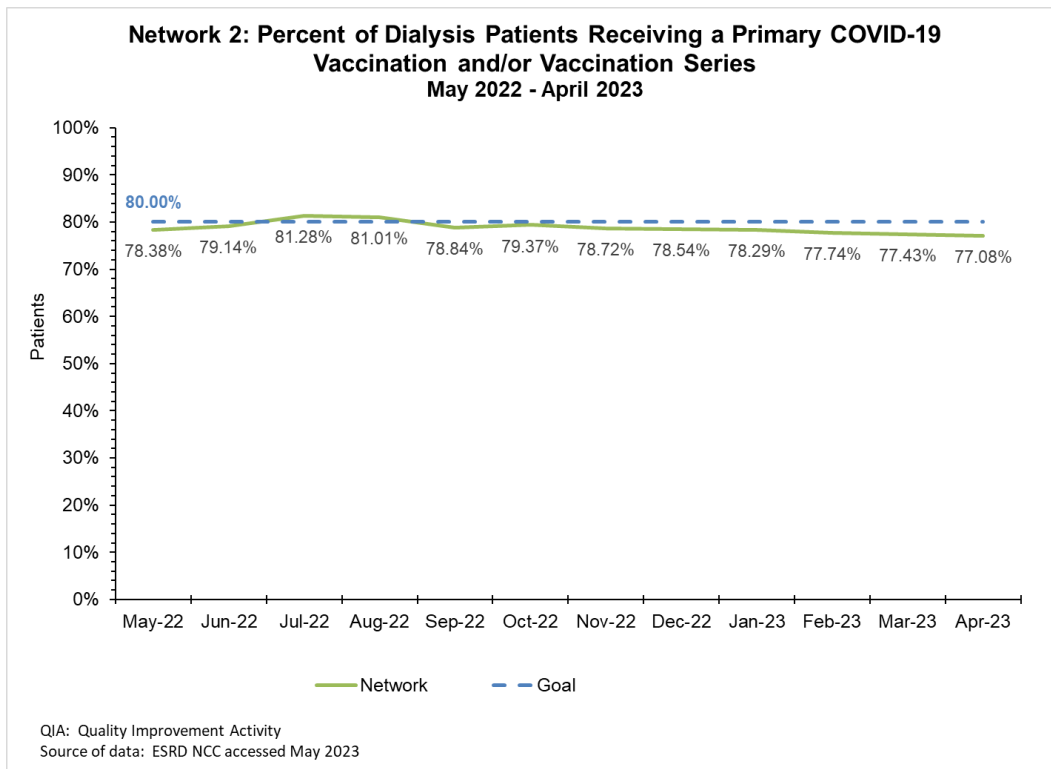
While the Network did not experience an increase in overall COVID hospitalization rates as compared to the prior year, there were still several facilities that had experienced two or more COVID hospitalizations during the performance period. As part of the Network's technical assistance, we worked with each facility that experienced this type of increase in COVID-19 cases to assess patient and staff status relative to COVID-19 vaccinations, as well as the infection control practices that were in place to help prevent further transmission.

In addition, the Network identified patients who remained unvaccinated and provided a list of these patients to all facilities in the Network's service area in the form of a performance report. Facilities were asked to investigate and record information for any patients who may have received the vaccine but were not documented, and they were encouraged to provide individual coaching and education on the benefits of the COVID-19 vaccine for both patients and staff who had not been vaccinated. Facilities received tools including the CDC's *Stay Up to Date with COVID-19 Vaccines* to provide education on COVID-19 recommendations and information on COVID-19 vaccines as well as COVID-19 additional doses and boosters.

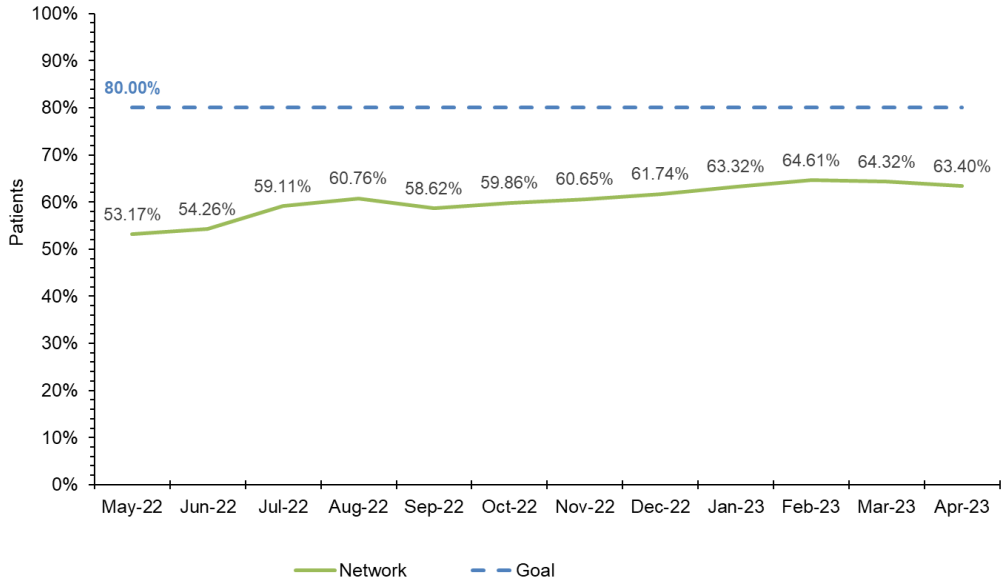
The Network IPRO Learn platform provided facilities easy access to resources, including guidelines from the Occupational Safety and Health Administration (OSHA) to help facilities identify COVID-19 exposure risks to workers who were unvaccinated or otherwise at risk. The Network worked with facilities to focus on COVID booster dosing with patients, while also focusing on patients who had never received the primary series.

Outcomes

The Network’s activities resulted in the following outcomes in the Network’s service area at the end of the performance period: a total of 27,204 patients (77.08%) and 9,813 staff members (93.68%) received a primary COVID-19 vaccination and/or vaccination series.

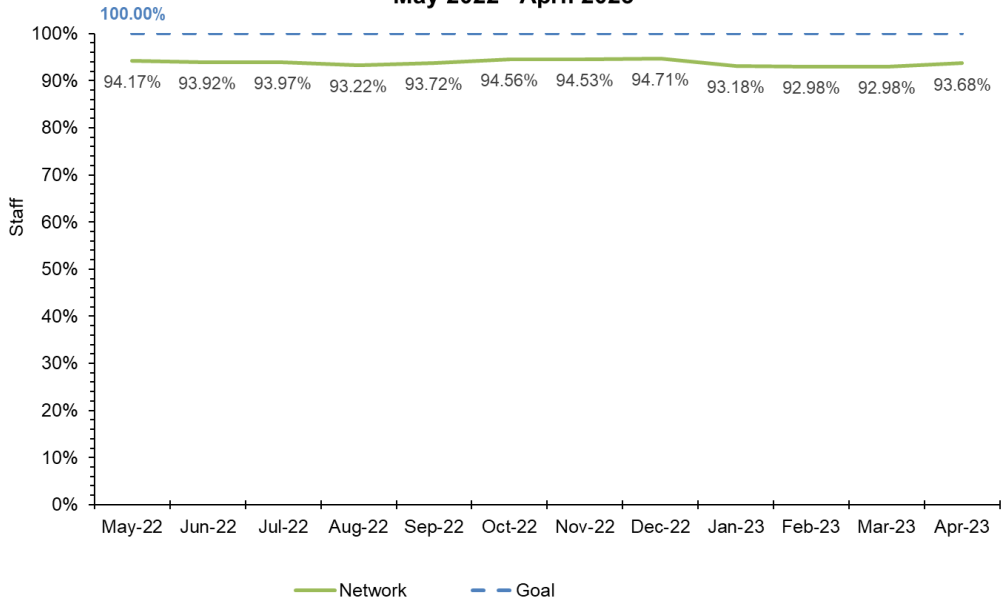


**Network 2: Percent of Fully Vaccinated Dialysis Patients Receiving
COVID-19 Vaccination Booster
May 2022 - April 2023**

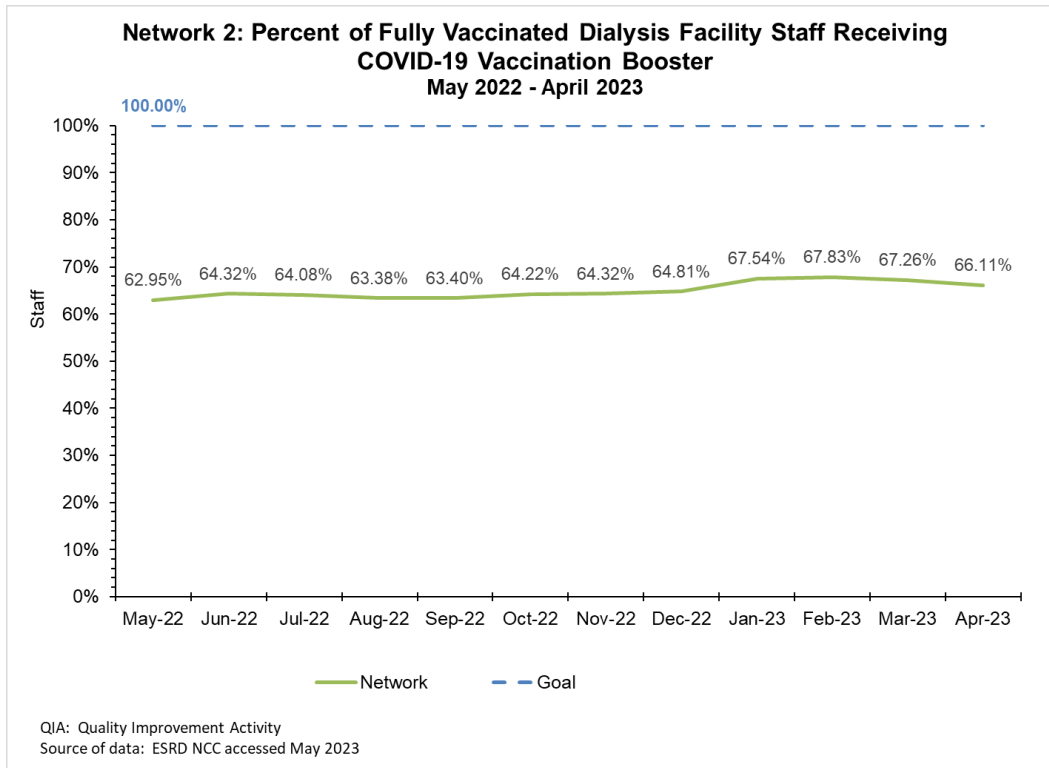


QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023

**Network 2: Percent of Dialysis Facility Staff Receiving a Primary
COVID-19 Vaccination and/or Vaccination Series
May 2022 - April 2023**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023



Barriers to Achieving Goals

The Network 2 service area includes many independent facilities (112), 45% of the Network service area. Because independent facilities do not receive the support and resources available to large dialysis organizations from their corporate quality and education departments, these facilities are forced to manage all aspects of the vaccination program including education, documentation, and training. Many facilities that did not have effective tracking mechanisms in place were unable to determine which patients were vaccinated; had issues with documentation of the vaccinations; and did not have the resources necessary to educate and inform patients and staff. The Network worked with independent facilities to help overcome all these issues and attempted to combat the vaccine fatigue/hesitancy that became more prevalent at the end of the pandemic as vaccination guidance evolved, COVID transmissions increased, and new variants emerged. Staffing shortages across the Network service area was another factor that affected all facilities, making it challenging for facilities to consistently focus on the promotion of vaccines.

Best Practices Spread to Achieve Goals

The Network gathered best practices and shared these in IPRO Learn discussion board forums. via semiannual best practice calls hosted by the Network, and during all one-on-one technical assistance interactions. We also offered an open office hour call to share best practices and help facilities overcome barriers. This call was very well received, with many independent facilities participating to learn from high performing facilities how best to increase their vaccination rates. The open office hour call featured discussions on involving the medical director to promote vaccines in the workplace, having a vaccine champion, and how to document vaccines effectively.

Data Quality (Admissions, CMS Form 2728, CMS Form 2746) May 2022-April 2023

Project Overview

The Network sought to attain the following goals:

- Achieve a 5% relative improvement in the rate of patient admission records from dialysis facilities entered within five days,
- Achieve a 4% relative improvement in the rate of initial CMS-2728 forms submitted from dialysis facilities within 45 days,
- Achieve a 5% relative improvement in the rate of CMS-2746 forms submitted from dialysis facilities within 14 days of the date of death.

The data used for the project reflect a 12-month rolling average.

Interventions

The Network used IPRO Learn to help facilities reliably and easily establish a routine process for downloading and reviewing the ESRD Quality Reporting System (EQRS) Patient Roster Report each month. By requiring that facilities submit the number of patient records that were corrected after completing the activity, facility staff were able to clearly see the benefit of performing the review process regularly; specifically, the positive impact it would have on patient records accuracy, cleanup, and the 2744 Annual Facility Survey.

In response to facility requests for “more training/resources/ease of use in EQRS reports,” the Network developed, recorded, and posted to YouTube and on the IPRO KnowledgeBase, several training videos providing facilities with step-by-step information on how to perform various EQRS-required activities. Videos on the following topics were widely viewed and well received as evidenced below. Note: The data reported below represent results across the IPRO ESRD Network Program:

- EQRS Patient Roster Report: 4,119 article views, 125 YouTube ‘likes.’
- Improving Facility EQRS Data Submission Compliance: 1,535 article views, 18 ‘likes’, 883 YouTube views.
- EQRS Vaccinations - Patient Influenza (flu) and Pneumococcal (pneumonia): 5,139 article views, 60 ‘likes’, and 664 YouTube views (within 1 month of posting).
- EQRS Depression Screening Reporting: 2,265 article views, 28 ‘likes’, webinar/recording in development.

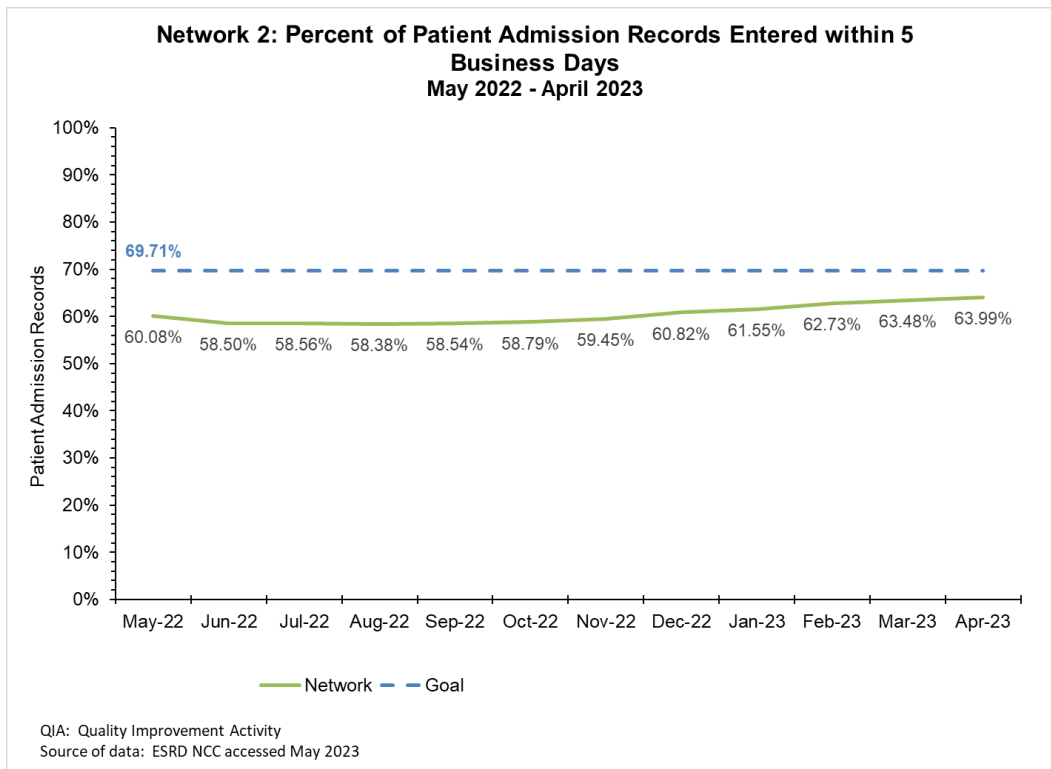
In addition, the Network distributed to dialysis facilities and transplant centers monthly EQRS newsletters that addressed the questions asked by facilities during that time period, CMS updates, and new training opportunities and resources. This helped EQRS users stay current on EQRS priorities, deadlines, and best practices.

Having streamlined the process for facilities to obtain assistance from the Network, facility staff were able to direct all requests for assistance through the IPRO KnowledgeBase. The

KnowledgeBase also offered facility staff access to educational resources, including training materials and webinar recordings that provided information on EQRS processes. Should they still require support, the IPRO KnowledgeBase offered facilities the option to submit a ticket that was quickly routed to the team that was best able to provide assistance. This eliminated time spent arranging phone calls and searching through individual emails; with 97% of tickets fully resolved within five business days.

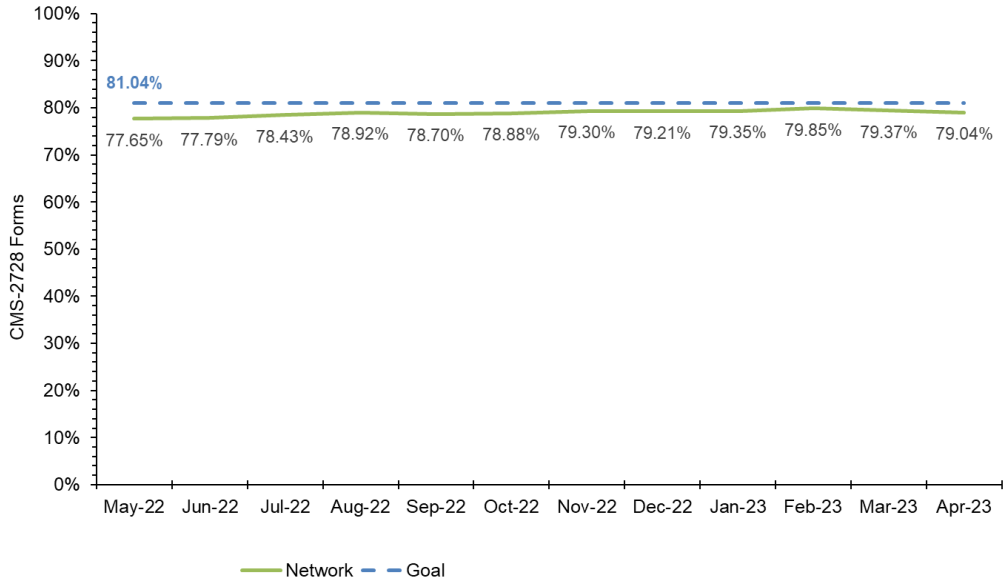
Outcomes

The Network exceeded the 5% goal for the 2746 Forms measure, achieving a 10% improvement over baseline.



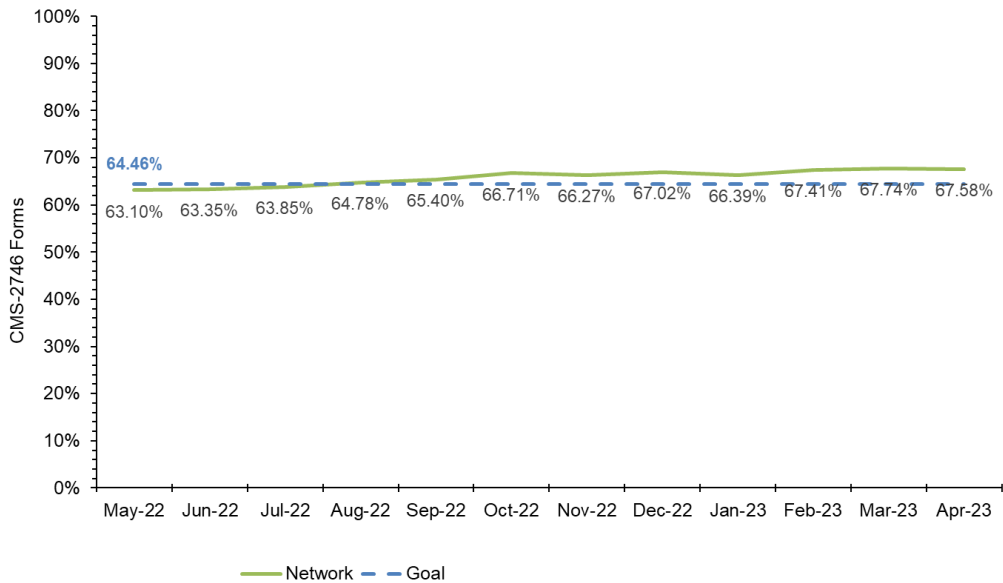
The Network fell short of achieving a 4% improvement in 2728 Forms and the 5% improvement goal for the admissions measure; although facilities made significant efforts to improve timeliness for all three measures.

Network 2: Percent of CMS-2728 Forms Submitted within 45 Days
May 2022 - April 2023



QIA: Quality Improvement Activity
 Source of data: ESRD NCC accessed May 2023

Network 2: Percent of CMS-2746 Forms Submitted within 14 Days of Death
May 2022 - April 2023



QIA: Quality Improvement Activity
 Source of data: ESRD NCC accessed May 2023

Barriers to Achieving Goals

Large Dialysis Organizations (LDOs) comprised 50% of the total number of facilities in the Network's service area, and their compliance with EQRS had a strong impact on Network-wide performance. The Network provided the LDOs with corporate-level EQRS compliance data from month to month to show that overall, the LDOs averaged a consistently low compliance rate, and often a declining rate rather than improvement. LDO teams advised the Network of their plans to make corporate-level changes aimed at improving their compliance, the effects of which are expected to be apparent after the publication date of this report.

Facilities made significant efforts to improve timeliness for all three measures; however, 40% of the facilities in the Network's service area are independently owned and did not have corporate-level support and back up when facility staff could not keep up with the workload.

Facilities continued to have high staff turnover rates, with skilled employees leaving the facility permanently or temporarily. This created a need for the Network to provide continuous training of new facility staff. Providing consistent training, maintaining timely and accurate contact information, and sending monthly newsletters helped the Network ensure that essential information was being distributed to existing facility staff, with a request that they share all information with their newest teammates.

Best Practices Spread to Achieve Goals

Facilities in the Network service area implemented process improvements, designated staff to EQRS tasks, and developed a sustainable process for reviewing the EQRS Patient Roster on a regular basis to ensure timeliness and accuracy of patient data.

The Network trained facilities to ensure that all staff contact information was maintained accurately and in real time in the IPRO Contacts Management System, so that Network communication and EQRS cleanup reports would reach the right people responsible for the EQRS tasks as well as those who provide oversight. With quarterly IPRO Learn activities reminding facilities to update their personnel, the IPRO ESRD Network Program maintained a bounce rate of less than 5% for emails sent to facilities.

The Network collaborated with Small Dialysis Organizations to encourage them to improve their EQRS compliance process. This led to several organizations designating corporate-level EQRS data contacts to help monitor facility EQRS performance and caused some to enhance their EMR systems to be more compatible with EQRS batching.

The Network gathered *Best Practices for Improving EQRS Compliance* from successful dialysis facilities and distributed the list of suggestions throughout the Network. When asked via the IPRO Learn platform whether their facility planned to implement some of the best practices provided, 97% responded that they would.

Hospitalization (Inpatient Admissions, ED Visits, Readmissions and COVID-19 Admissions) May 2022-April 2023

Project Overview

Individuals with end stage renal disease (ESRD) have the highest risk for acute care services, including hospitalizations and emergency department visits, among those with chronic medical conditions¹. There are many reasons dialysis patients may not be able to achieve and maintain optimal health. These can include comorbidities associated with ESRD (e.g., anemia, diabetes, cardiovascular disease, mental health issues) and increased risk of bloodstream infections, pneumonia, urinary tract infections, peritonitis, and access site infections. They may also be related to health maintenance behaviors, such as lapses in preventive health checkups, medication errors, dietary issues, physical inactivity, use of alcohol or tobacco, and missing or shortened dialysis treatments. These risks are further compounded when patients have an unstable social support system; financial problems; or limitations in access to food, shelter, transportation, clothing, medication, medical care, or emotional support.

The Network collaborated with dialysis providers across its service area to reduce inpatient hospital admissions, 30-day hospital readmissions, and outpatient emergency department visits related to the CMS Primary Diagnosis Categories. Network staff met with patients, nephrologists, primary care practitioners, transplant and dialysis facility staff representing all modalities, regional management of dialysis organizations, and IPRO Quality Innovation Network-Quality Improvement Organization (QIN-QIO) staff working on improving care transitions in the New York. Informed by these meetings, Network staff planned, developed, and implemented quality improvement strategies that included peer mentoring, guiding staff in working with patients to create comprehensive and meaningful plans of care, and patient centric quality improvement activities at dialysis facilities. In addition, the Network incorporated a cross-cutting focus on health equity, rural health, and patient and family engagement to reduce incidents of hospital admissions, readmissions, and emergency department visits.

Interventions

To foster a community of practice focused on reducing hospitalizations, the Network collaborated with facilities to create a Transitions Champion role, and each facility in the Community Coalition was asked to assign a staff member to that role. We also encouraged facilities to spotlight the importance of their quality improvement efforts using strategies such as huddle boards and visual displays that shared data and resources. These displays informed and engaged staff members and patients in the process of attaining quality improvement goals.

¹ Li HL, Tai PH, Hwang YT, Lin SW, Lan LC. Causes of Hospitalization among End-Stage Kidney Disease Cohort before and after Hemodialysis. *Int J Environ Res Public Health*. 2022 Aug 18;19(16):10253. doi: 10.3390/ijerph191610253. PMID: 36011888; PMCID: PMC9408097.

The facilities were asked to focus their education on reducing incidents of one of the three topic areas: inpatient admissions, emergency department visits, or readmissions; and each facility included a patient representative in the creation of the visual displays. Thirty percent of the facilities in the Network's service area participated in this intervention and shared their displays with the Network.

To promote wellness and reduce hospitalizations due to influenza, the Network introduced a vaccination resource created by the Centers for Disease Control and Prevention (CDC) in October of 2022. The resource highlighted the benefits of the flu vaccine and was distributed to more than 11,000 patients and stakeholders. Feedback received from more than 208 facilities in the Network's service area was positive. In responding to questions assessing the value of the resource, 90% of the facilities indicated that they had adopted the resource into their practice and indicated that "the resource was very informative and a great way to cut down the hospitalization rate."

As part of the Network's efforts to reduce hospitalizations due to COVID-19, the Network created a COVID Technical Assistance Process, which included identifying facilities that had increased hospitalizations related to COVID-19 cases; surveying the facilities on issues that may have led to increased transmission of the disease; and provision of one-on-one technical assistance to those facilities to identify ways to reduce transmission of the virus.

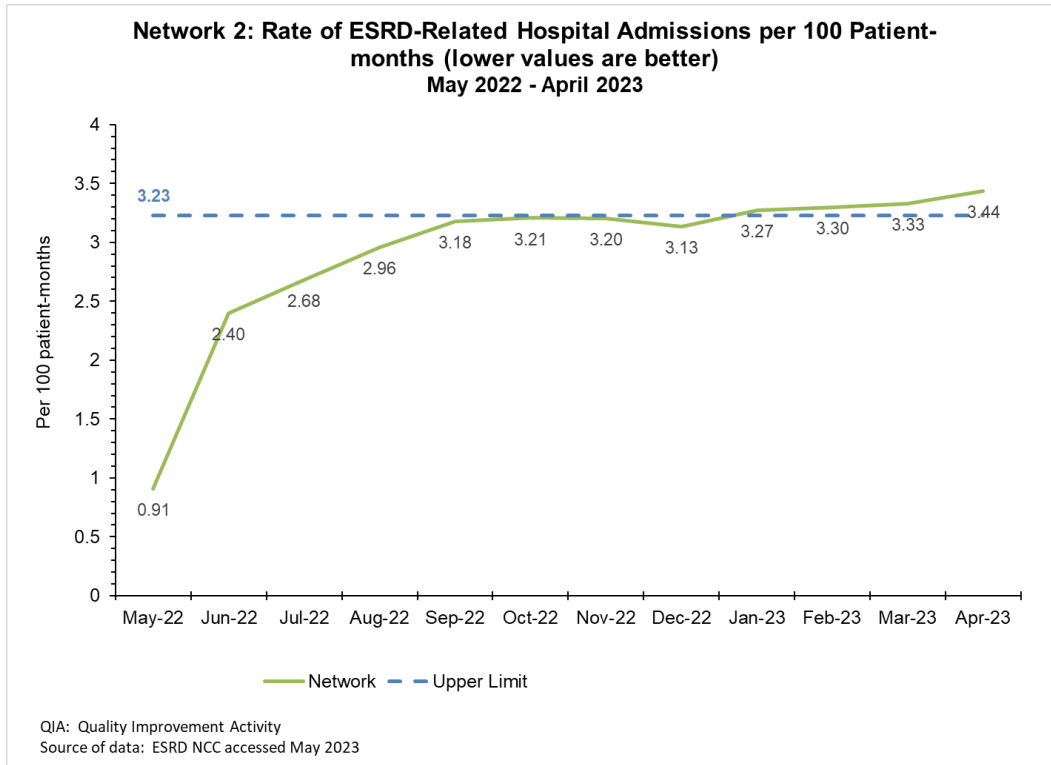
The Network reinforced best practices for infection control based on the then-current CDC recommendations for dialysis facilities, promoted adherence to current COVID-19 vaccination recommendations, and provided updates on how to manage COVID-19 transmission as the pandemic evolved. We shared tools to help reduce the spread of infection, i.e., the *IPRO Dialysis Audit Tool*, *Environmental Surface Disinfection*, as well as other infection control audit tools provided by the ESRD NCC and the CDC.

Throughout our work we tracked the outbreaks to determine if trends were identified and included facilities' regional operations and quality management in our communications to provide support to the facilities with which we worked.

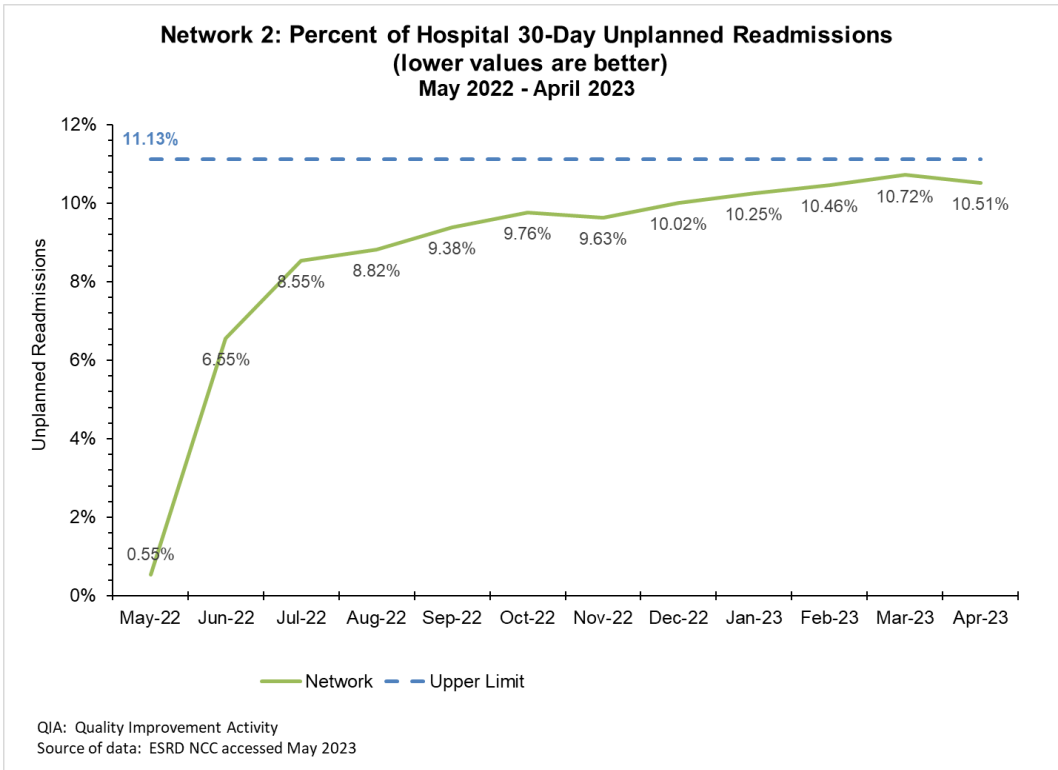
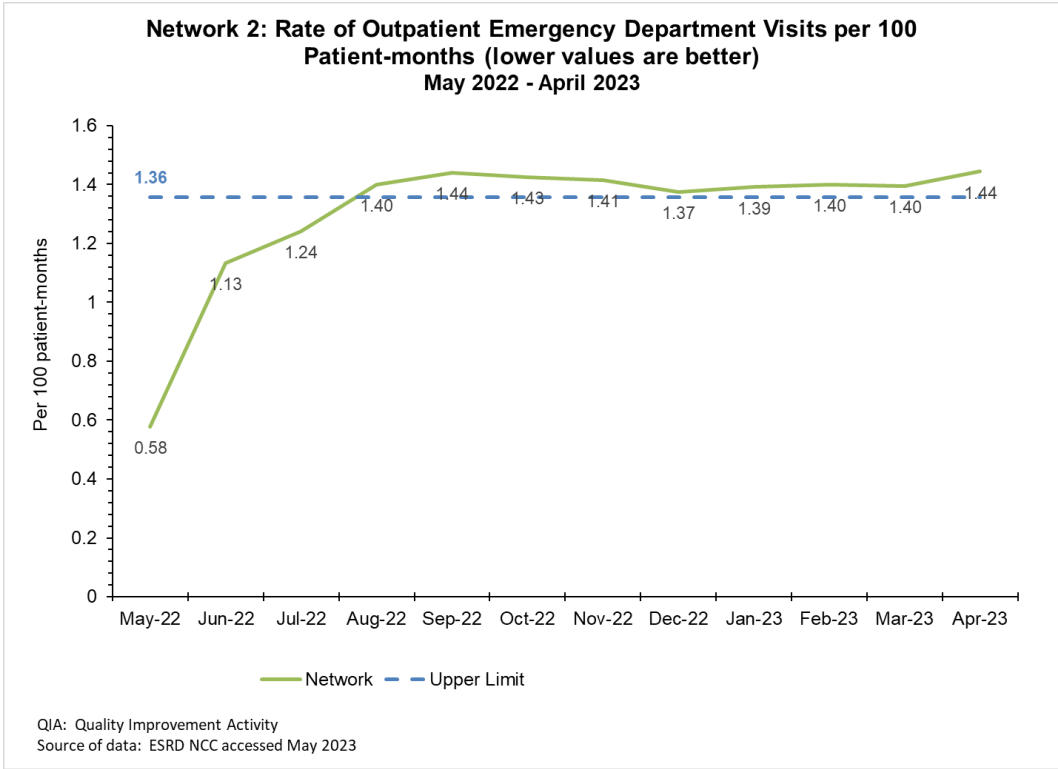
Outcomes

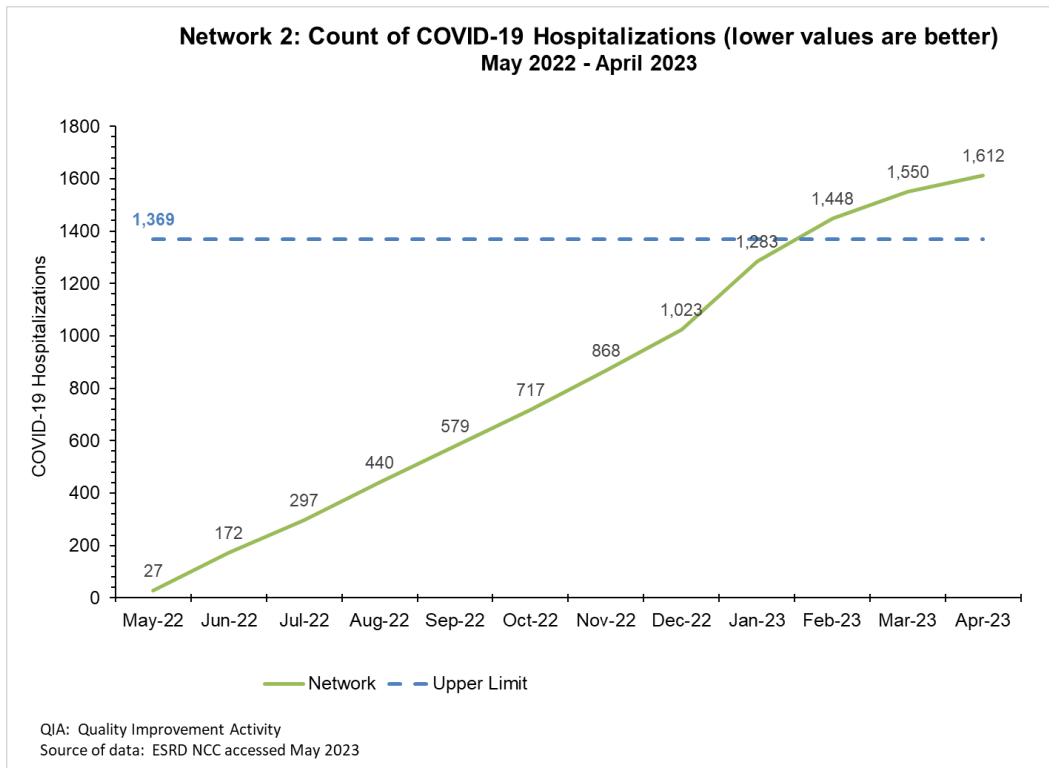
During the performance period, the Network's goal was to support dialysis facilities in its service area in attaining a 3% reduction from the baseline period in hospitalizations, readmissions, and emergency department visits; for an aggregate total reduction goal of 5% from our first contract year. The baseline data were collected from Medicare Claims for January-December of 2020. The Network did not achieve the goal of a 3% reduction, in these performance areas but still noted a significant decrease in incidents of hospitalization, readmission and ED visits. We were able to achieve a reduction in hospitalizations from 6,311 at baseline to 5,186 at remeasurement; a reduction in readmissions from 645 at baseline to 479 at remeasurement; and a reduction in emergency department visits from 2,652 instances at baseline to 2,180 at remeasurement.

Based on an average admission cost of \$12,944 per instance for a Fee-for-Service (FFS) Medicare patient, the reduction in hospital admissions in the Network 2 service area equates to Medicare cost savings of \$14.5 million, with 1,125 fewer admissions during the performance period. The reduction of emergency department visits by 472 from baseline yielded a \$343,000 savings in Medicare costs based on an average cost of \$727 per visit ED visit)².



² ESRD National Coordinating Center (NCC) data as of April 2023)





Barriers to Achieving Goals

The baseline data for all indicators were collected during 11 months of the COVID-19 pandemic (June 2020 to April 2021). Due to the COVID-19 surge during this period patients were discouraged or unable to seek acute services for anything other than absolute emergencies, which lowered the overall admission rates and emergency department visits. Attempting to lower utilization of these services with an artificially low baseline was a barrier for the Network in achieving its goal. CMS removed the requirement for hospitalization reduction this performance period due to this barrier and is realigning baseline hospitalization rates to reflect May 2022 – April 2023 activity.

Best Practices Spread to Achieve Goals

Using the IPRO Learn Forum to discuss best practices in transitions in care and to post the huddle board displays, the Network supported the sharing of many unique approaches and best practices, connecting with 50% of the facilities in the region. We also presented two best practices webinars. One of the best practice calls was attended by 63 facilities in the Network’s service area, and the recordings of both calls were posted to IPRO Learn for facility staff to view at their convenience. The focus of the discussion was on recommended interventions for rural facilities to help reduce hospitalizations and ED visits. The speaker discussed the importance of Network staff communicating with patients and families to build trust and empower them to advocate for themselves when they are at a hospital with no ties to the ICHD. An algorithm was shared to determine which resources should be provided to the patient and family prior to discharge to prevent readmissions. All the facilities that participated stated they would use these interventions to reduce acute incidents for patients treated by their clinic. The other best

practice call shared the approach a vascular access surgeon was taking, using telemedicine technology to evaluate vascular access issues remotely and provide a plan of care. This technology allowed the surgeon to guide the clinicians regarding which patients should seek care with their surgeon or vascular clinic to prevent an unnecessary trip to the hospital with a vascular access issue.

By building a community of practice that shared the best practices and educational processes, increasing patient education, improving patients' understanding of when to access different levels of care, and sharing unique best practices that bridge services the Network has built a strong foundation to continue to reduce the unnecessary use of acute care services in our region.

Depression Treatment September 2022-April 2023

Project Overview

Depression not only affects one's mental health but can also have negative impacts on physical health. Studies have shown that depression in ESRD can lead to a decreased quality of life and even an increased risk of mortality. Due to the high incidence of depression being identified in ESRD patients the goal of this project was to increase the depression screening rates to a minimum of 80% of the ESRD patient population. An additional goal was to increase the percentage of patients who receive mental health treatment after they screened positive for depression by 6% from base year. Through this project The Network aimed to increase awareness in the community about the importance of mental health screening and treatment for the ESRD population while working to help identify and mitigate barriers encountered.

Interventions

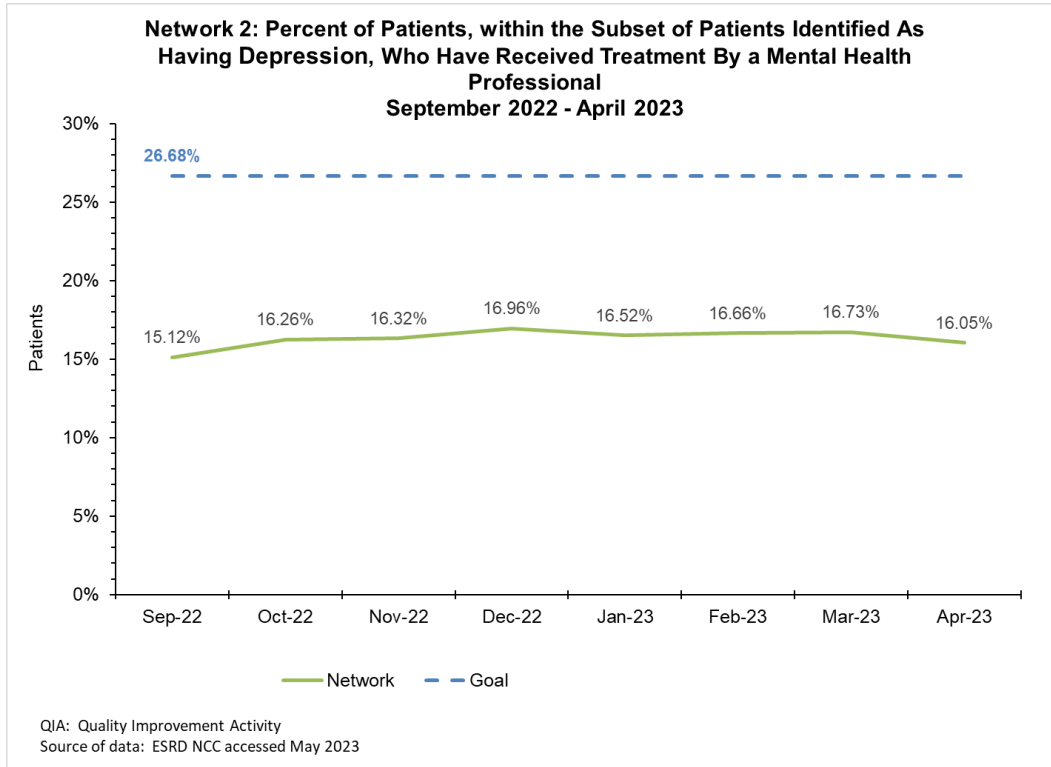
The Network used IPRO Learn, a learning management system platform, to survey and gather data from facilities within the Network's service area on the top barriers encountered when referring patients for mental health treatment. We also engaged the Network's medical review board, advisory committee, and the facilities we work with on a one- to- one basis in quality improvement community coalitions to vet and respond to the barriers identified. Through those processes the most common barriers identified were stigmatizing beliefs/shame, lack of mental health providers, appointment fatigue, and denial.

The Network created a plan to deal with each barrier identified. To overcome lack of mental health providers and appointment burnout, the Network educated the community on the option of tele-health for mental health care to increase access to mental health providers and allow patients to accomplish a visit from their home, rather than traveling to another appointment. We distributed educational resources including the National Institute of Mental Health's *What is Telemental Health?*, *United Way 211*, and the Substance Abuse and Mental Health Services (SAMHSA) *Locating Telehealth Services for Behavioral Health*. We also developed two facility-based handouts to assist staff in learning how to overcome stigma: *Stop the STIGMA Surrounding Depression* and *Shatter the STIGMA, Flipping the Facility Culture Frequently Asked Questions*. Additionally, the Network provided a thorough review of the depression facility performance report card during a best practice call. After receiving feedback from facilities on the depression performance report card, the Network worked to make rapid cycle improvements to increase the usefulness of this report for facilities.

Outcomes

The Network's efforts resulted in a 98.44% depression screen rate across the Network's service area, exceeding the 80% goal. The second goal was to have at least 27.34% of those patients who screened positive receive mental health treatment. While that goal was not met, the Network was successful in having 16.05% of positive-screened patients receiving treatment.

The focus on telemental health was well received in the Network’s service area, with 97% of providers who viewed the resources adapting/adopting them for their facilities. In addition, 96% of the facilities indicated they would adopt the Network generated resources focused on ending the stigma surrounding depression.



Barriers to Achieving Goals

Understanding the barriers to depression treatment was a new area of focus this year within the Network’s service area. The Network focused a great deal of effort on building awareness and understanding throughout the community, as well as supplying resources where none had existed in the past. The Network made significant inroads in identifying and tackling the commonly identified barriers to screening and was able to successfully implement interventions that led to 308 patients receiving treatment for their depression. In addition, the Network worked with the ESRD National Coordinating Center (NCC) and provider organizations to address barriers related to accuracy in the data reported and the timeliness of receipt of the data sets used for reporting.

Best Practices Spread to Achieve Goals

The Network spread identified best practices throughout the year using the IPRO Learn learning management system platform and quarterly through shared best practice calls. With the large prevalence of independent dialysis facilities in Network 2 we targeted our approach to ensure facilities understood the new depression treatment rate data and how to interpret the performance report cards. The Network hosted a best practice call, presenting to more than 50 facility staff from the across its service area, during which these data and the facility depression

performance report card were reviewed at length to help ensure that facility staff entered correct information into the ESRD Quality Reporting System (EQRS). The Network revised the report card after receiving feedback from facilities requesting changes to provide additional information and to simplify the format. Additionally, through working with the community coalition the Network learned how a Patient Facility Representative was able to help a facility fight stigma in mental health treatments by sharing their personal experiences. During a Network-wide best practice call, this individual also shared as a best practice, her experiences with depression and her work in talking to other patients.

Nursing Home (Blood Transfusion, Catheter Infection, and Peritonitis) May 2022-April 2023

Project Overview

The Network team recognizes the importance of ensuring the safety and quality of care provided for the vulnerable population of renal patients receiving dialysis in a nursing home setting. As reported in the United States Renal Data System (USRDS) Annual Data Report (ADR), *“nursing home ESRD patients have high rates of comorbid disease: 77.5% cardiovascular disease, 62.9% diabetes, 36.5% depression, 19.9% Alzheimer’s/dementia, and 15.5% chronic obstructive pulmonary disease (COPD). Furthermore, mortality is significantly higher in nursing home ESRD patients compared to all ESRD patients. In the USRDS 1998-2000 ESRD cohort, the mean death rate for nursing home patients with ESRD was 3.5 times that of the ESRD population in general.”*³

The Network collaborated with ESRD providers that offer dialysis in the nursing home setting, nursing home facilities, patients and other key stakeholders to improve patient safety, reduce harm, and improve care for ESRD patients living in a nursing home and receiving their dialysis care in that setting. The Network focused activities on attaining a 6% reduction in hemodialysis catheter infection rates and a 3 % reduction in the rate of patients receiving blood transfusions from the prior year’s baseline rates.

Interventions

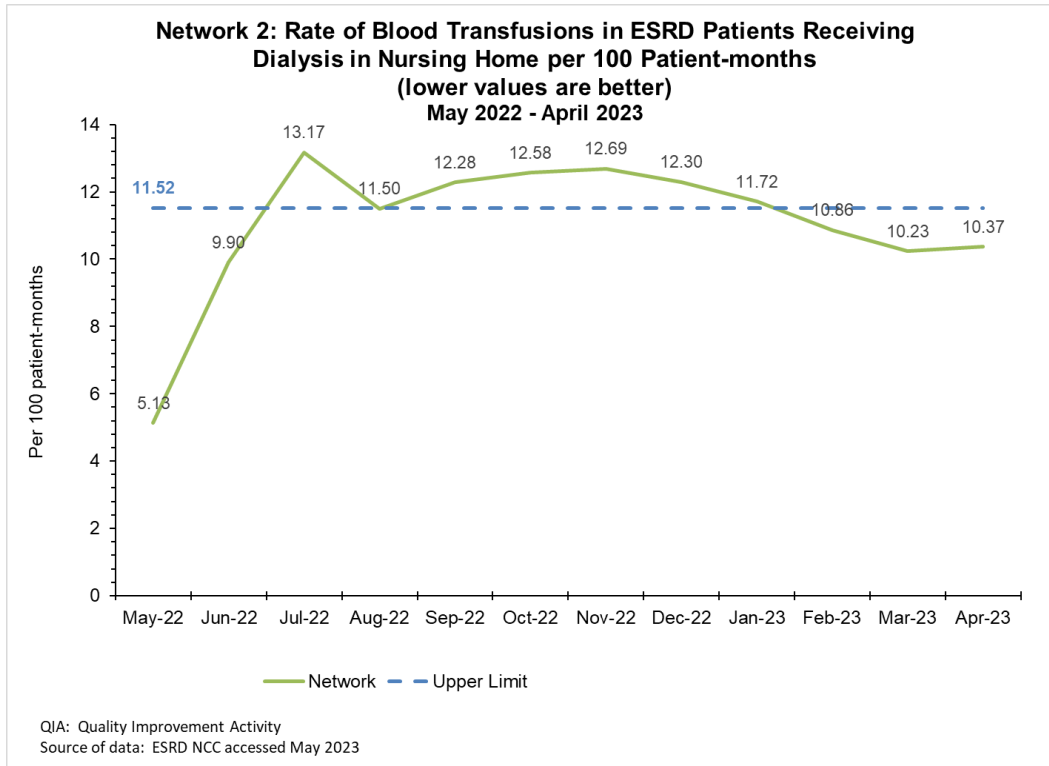
The Network provided one-on-one technical assistance to facilities conducting root cause analyses (RCA) for each infection or transfusion reported. Based on the findings of the RCA, facilities were given resources to help mitigate identified barriers and were prompted to conduct plan-do-study-act (PDSA) cycles to evaluate interventions they put in place. Nursing home staff members were provided education on infection control best practices, with an emphasis on how to manage care of the hemodialysis catheter to prevent infections throughout the year.

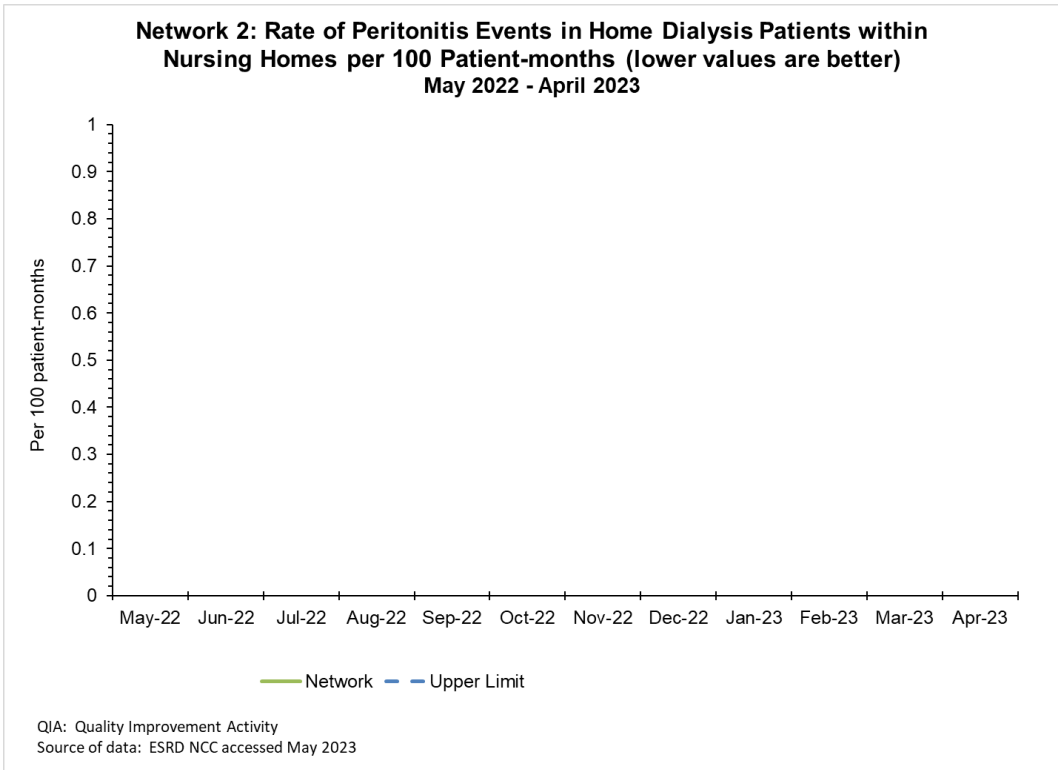
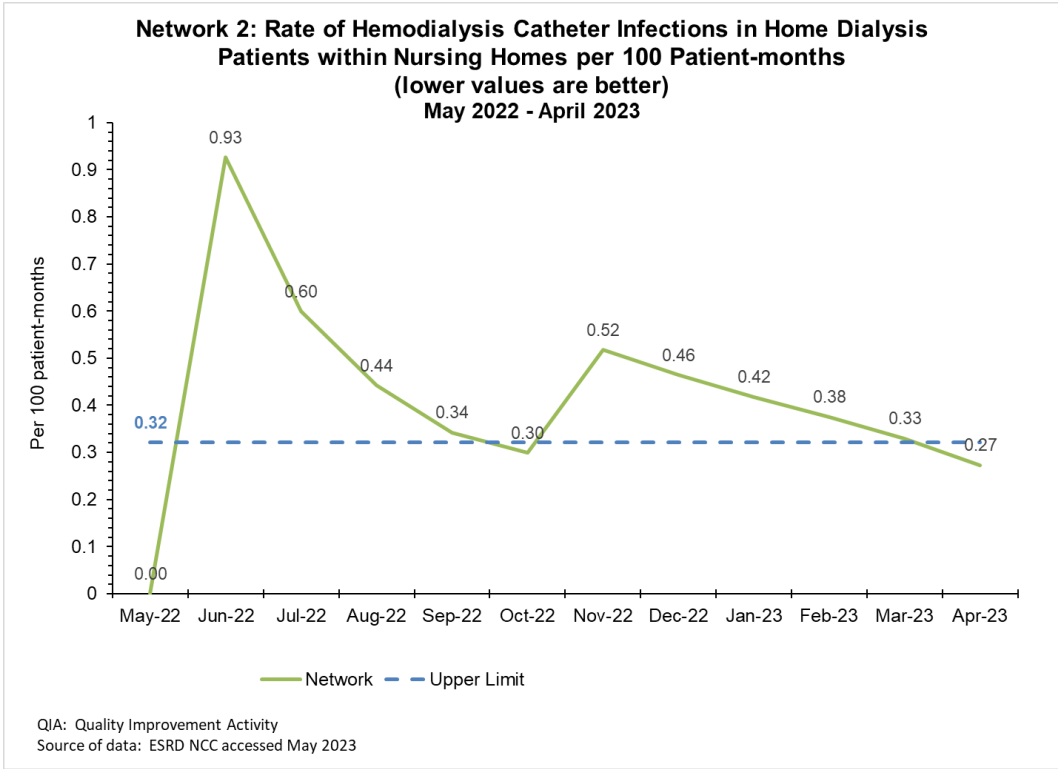
For blood transfusions the Network focused on working with facility staff to ensure care coordination and medical management of any at risk patients who had low hemoglobin counts. The Network released two care coordination resources: 1.) a hand-off checklist to help with communication between the dialysis provider and the nursing home at the point of care. and 2.) an integrated care plan to encourage staff from the dialysis provider and the nursing home to conduct a joint care planning sessions for their patients. We also provided tools to help staff members conduct reviews of blood transfusion indices and shared best practices on the use of medications administered with greater frequency (e.g., three times per week rather than long-acting medication administered one time per week) to promote red blood cell formation.

³ Yang A, Lee, W, Hocking, K. Health outcomes in nursing home patients on dialysis. Helio. 2014; Online.

Outcomes

The Network's work with dialysis facilities resulted in a reduction in the rate of bloodstream infection, lowering the rate from 0.35 to 0.27 over the course of the performance period meeting the 3% reduction goal. Network efforts also led to a reduction in blood transfusion rates, lowering the rate from 11.95 to 10.37, achieving the 6% percent reduction goal for the performance period.





Barriers to Achieving Goals

The source of a bloodstream infection reported in NHSN can be at many sites; the hemodialysis catheter being just one cause. One of the barriers faced was in identifying the most likely source of the infection in patients with multiple potential sites. Because of this, the Network took a broad approach, providing education on CDC-developed catheter care and infection control protocols and providing education to nursing home staff on how to care for a patient with a dialysis catheter.

Barriers related to reducing blood transfusions for patients in the Network's service area related to communication problems between the dialysis providers and the nursing home facilities. The Network implemented interventions to enhance communications between both providers so that when they identify a patient whose red blood cell count is trending down, they can work collaboratively to troubleshoot and potentially prevent a blood transfusion.

Best Practices Spread to Achieve Goals

The Network worked with dialysis providers that offer dialysis in a nursing home setting by sharing best practice data regarding the use of red blood cell stimulating medications administered with greater frequency (e.g., three times per week rather than long-acting medication administered one time per week) for nursing home patients.

With the frequency that a nursing home patient's condition changes as well as the potential for missed doses, dialysis providers in the nursing home setting have achieved more success in maintaining the patient's hemoglobin using a medication that is given more frequently. We also reviewed best practices related to improved communication between providers to improve care coordination.

Telemedicine

May 2022-April 2023

Project Overview

The choice of home modality enhances a patient's quality of life and is more convenient than traveling to an in-center clinic three times per week. The Network prioritized efforts to improve rural patients' access to home therapies and to their interdisciplinary care team by increasing the number of telemedicine visits for this population.

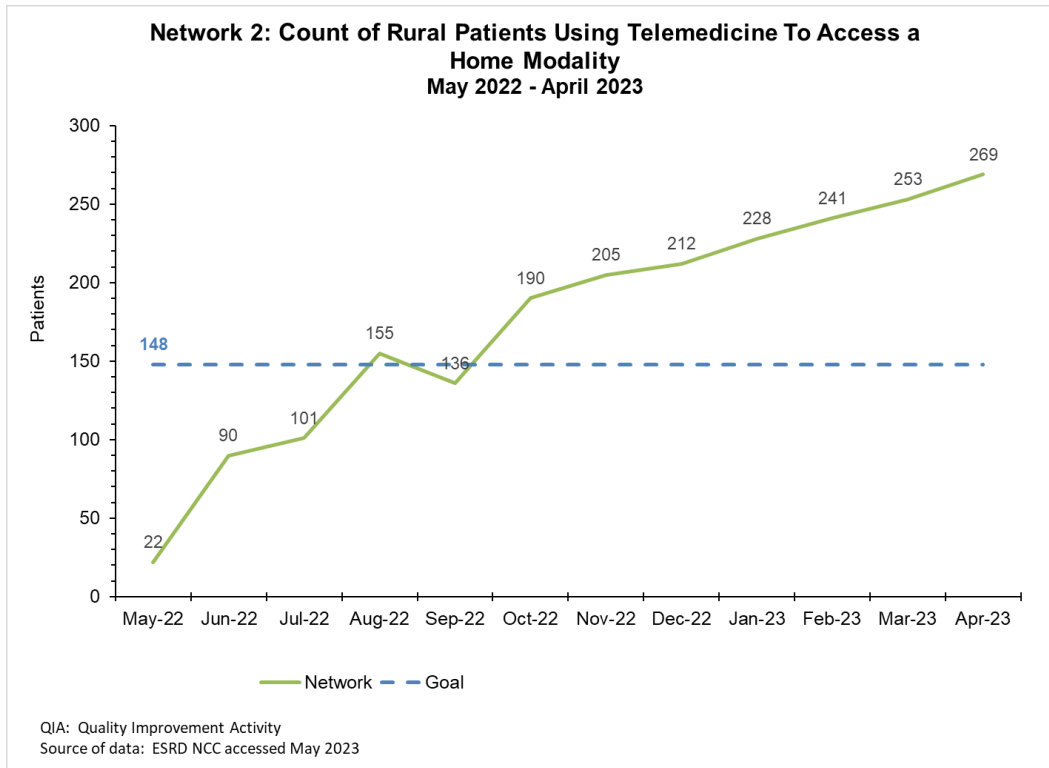
The goal was to increase the number of telemedicine visits by 3% in facilities that served a rural population. Increasing the use of telemedicine can help reduce the burden to patients who live in rural areas and must travel long distances to visit with their care team and would extend access to home care for that vulnerable population.

Interventions

The Network worked to identify facilities that cared for rural patients based on their zip codes and worked with this group of facilities as a community coalition to share information, interventions, and resources to increase use of telemedicine with their rural patients throughout the performance period. One of the resources the Network shared was the Institute for Healthcare Improvement's white paper, titled, *Telehealth: Telemedicine and the Challenge of Diagnostic Accuracy*, to help providers conduct telemedicine visits with home dialysis patients. This paper details how virtual visits allow physicians to see the patient in their environment, and if planned for and executed properly, can increase diagnostic accuracy. More than 80% of the facilities in the community coalition read this article and stated they would use the information from the article in their practice. Based on the data provided by these facilities 2,172 stakeholders or partners would be given this article as a vetted resource.

Outcomes

Working closely with the dialysis facilities in the community coalition, the Network 2 team exceeded the goal to increase use of telemedicine visits in its service area by 3%, reaching 184% of the goal, for a total of 269 rural telemedicine visits during the performance period.



Barriers to Achieving Goals

An ongoing issue cited by facility staff was patients' difficulty using the technology. Staff reported the most common barriers as: patients having log-in issues; problems setting up a profile to use an application; and once able to access the application, patients had problems navigating through the application. To mitigate these issues, which became barriers to the use of the technology, the Network team worked with high performing facilities to share the following tips with other facilities in the community coalition:

- *Use a telehealth platform that does not require a patient login or account set up.*
- *Give all home patients a tablet computer (e.g., iPad, Surface, etc.) – and send the telehealth link to them directly.*
- *Encourage patients to partner with a younger person to guide them through the process.*
- *Schedule pre-visit practice sessions to work out any issues before the visit.*

Best Practices Spread to Achieve Goals

The Network created a toolkit, which included both patient- and provider-facing resources to provide education on the value and use of telemedicine. Two of the resources were checklists that patients and providers could use to better prepare for a successful telemedicine visit. These were assembled from best practice tips that were gathered from high-performing facilities. These tips were shared throughout the performance period via our IPRO Learn learning management system platform. Examples of provider best practices shared are listed below:

- Work with patients to learn to use telehealth while they are in training for home dialysis.

- Spend extra time with patients early in their treatment to allow them to reach a comfort level in using telehealth.
- Educate physicians and all professional staff on how to use the telehealth platform. teach professional staff to use screen share to discuss lab results, etc.
- If there is no internet access in the rural area in which the patient lives, suggest that they drive to a location closer to their home where they can get a signal, and conduct the telehealth visit at that location, rather than driving the full distance to the clinic.
- Use a checklist to have the visit planned out and well organized.
- Teach patients how to use the camera to share physical concerns.

Pneumococcal Vaccinations (PCV13 & PPSV23) May 2022-April 2023

Project Overview

Pneumococcal disease is a serious infection caused by *Streptococcus pneumoniae* bacteria, causing contagious and potentially severe illness, including pneumonia, meningitis, and sepsis. The Centers for Disease Control and Prevention (CDC) estimates that more than 150,000 hospitalizations from pneumococcal disease occur annually in the U.S. According to the CDC, an estimated 30,300 cases and 3,250 deaths from invasive pneumococcal diseases (bacteremia and meningitis) occurred in the United States in 2019.

The Network worked to increase the vaccination rate for individuals with ESRD residing within its service area working to achieve the following goals:

1. Achieve a 10% increase in the number of dialysis patients receiving a PCV 13, for a 20% total increase from the baseline (May 2021- April 2022) by the end of performance period (April 2023).
2. Work to ensure 90% of dialysis patients receive a pneumococcal polysaccharide vaccine (PPSV 23)
3. Achieve a 10% increase in the number of patients receiving a booster PPSV 23 from the baseline to the end of Option Period 1. (Baseline May 1st, 2021 – April 30th, 2022)
4. Work to ensure 85% of dialysis patients over age 65 receive a PPSV 23 by the end of the performance period.

Interventions

Using the educational platform, IPRO Learn, the Network provided facilities with resources and interventions to support implementation of effective strategies aimed at increasing patients' vaccination rates. The Network focused its approach on providing education to patients on the importance of pneumococcal vaccination, with a goal to increase the number of PCV 13 and PPSV 23 vaccines for patients with ESRD. Special attention was given to increasing vaccines for patients 65 years and older.

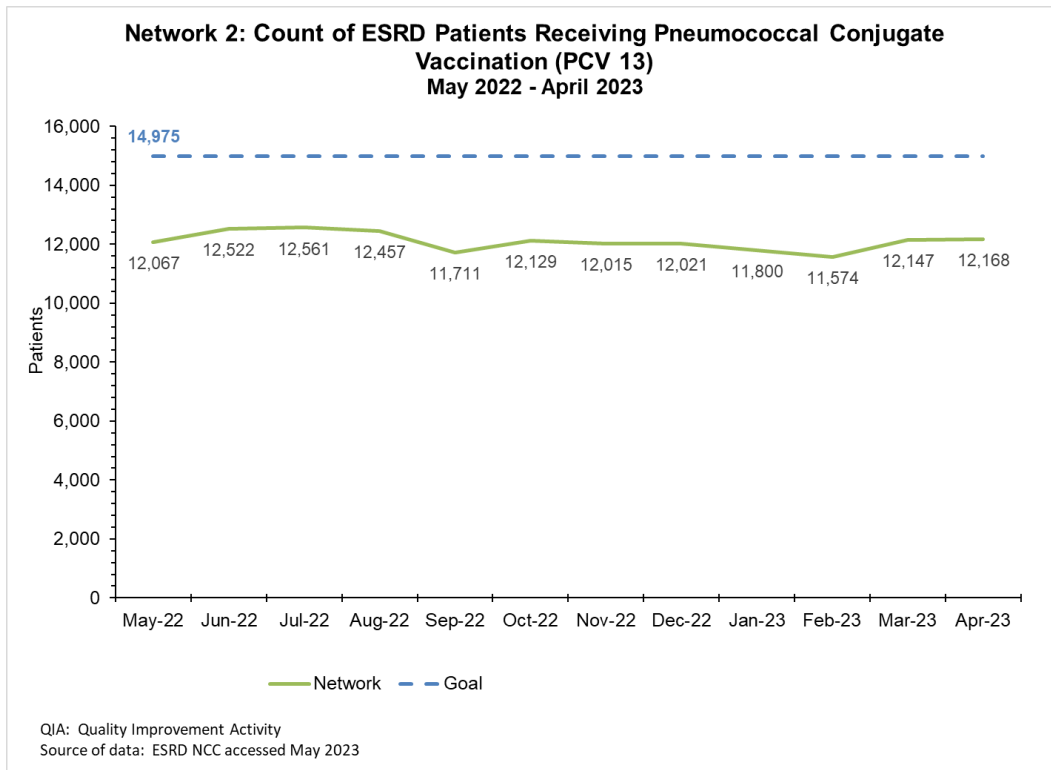
The Network created and distributed the *Get the Vaccines You Need!* educational pamphlet on the recommended vaccines for the adult ESRD population. In addition, the Network promoted *the Improving Vaccination Rates Toolkit* of resources on its IPRO Learn platform, which has a page of pneumococcal vaccination information covering education about the vaccine, the CDC's *Pneumococcal Vaccination*, a frequently asked question flyer produced by the CDC called, *Pneumococcal Conjugate Vaccine: What You Need to Know*, a PCV 13 and PCV 23 dosing algorithm produced by the CDC, and a guide on how to enter pneumococcal vaccinations into the ESRD national database, the End Stage Renal Disease Quality Reporting System (EQRS).

The Network's *Improving Vaccination Rate Toolkit* offered facilities easy access to a one stop shop of pneumococcal vaccination resources. When facility staff were asked about the usefulness of the interventions, tools, and resources made available by the Network, 85 % of

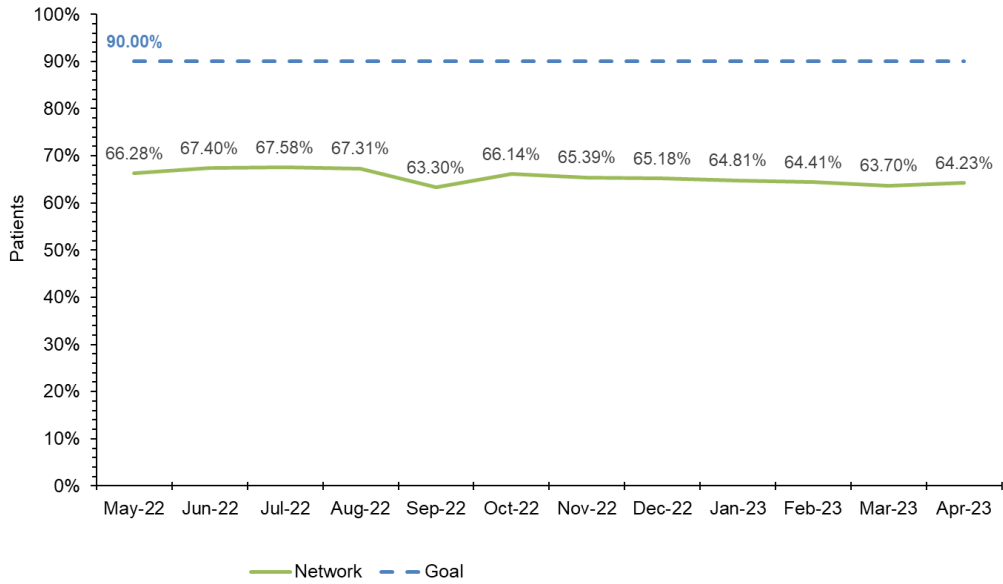
facilities stated they would use resources to help with vaccination uptake within the Network’s service area.

Outcomes

In September 2022, the CDC released new pneumococcal guidelines to the community. These guidelines were updated to reflect new pneumococcal vaccinations that completely revised the vaccination dosing protocols for which the CMS goals were written. The Network encouraged ESRD facilities to adhere to the CDC pneumococcal guidelines to ensure patients were fully vaccinated by the current standards. CMS removed the outcome measures for pneumococcal vaccine from the 2022 – 2023 performance period for all Network programs since these goals did not align with the new standards.

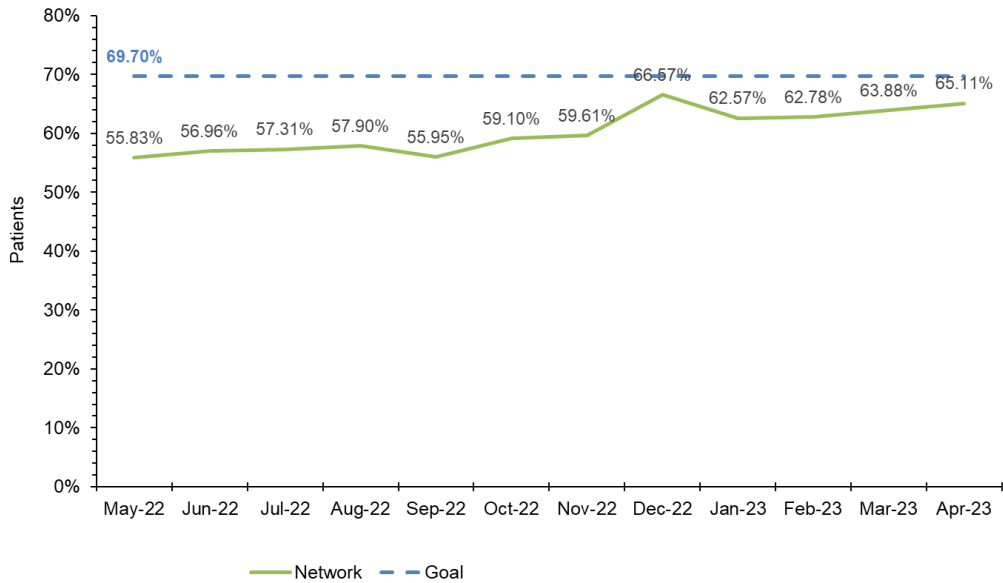


**Network 2: Percent of ESRD Patients Receiving an Initial Pneumococcal Polysaccharide Vaccination (PPSV 23)
May 2022 - April 2023**

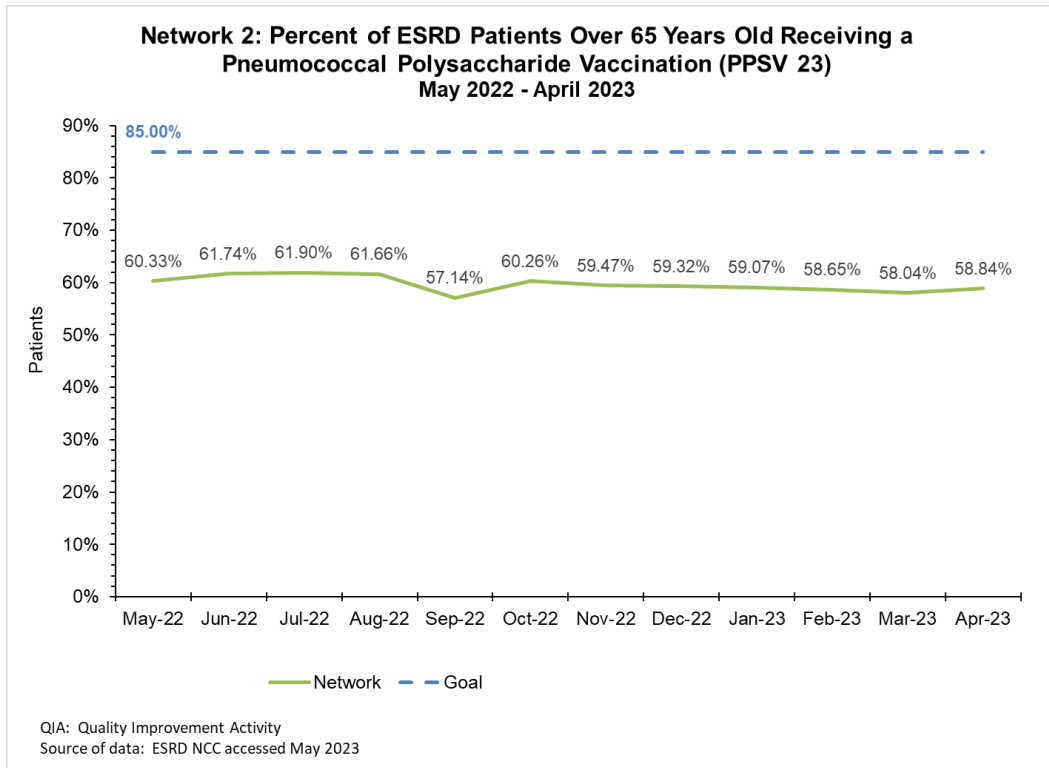


QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023

**Network 2: Percent of ESRD Patients Receiving a Booster Pneumococcal Polysaccharide Vaccination (PPSV 23)
May 2022 - April 2023**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2023



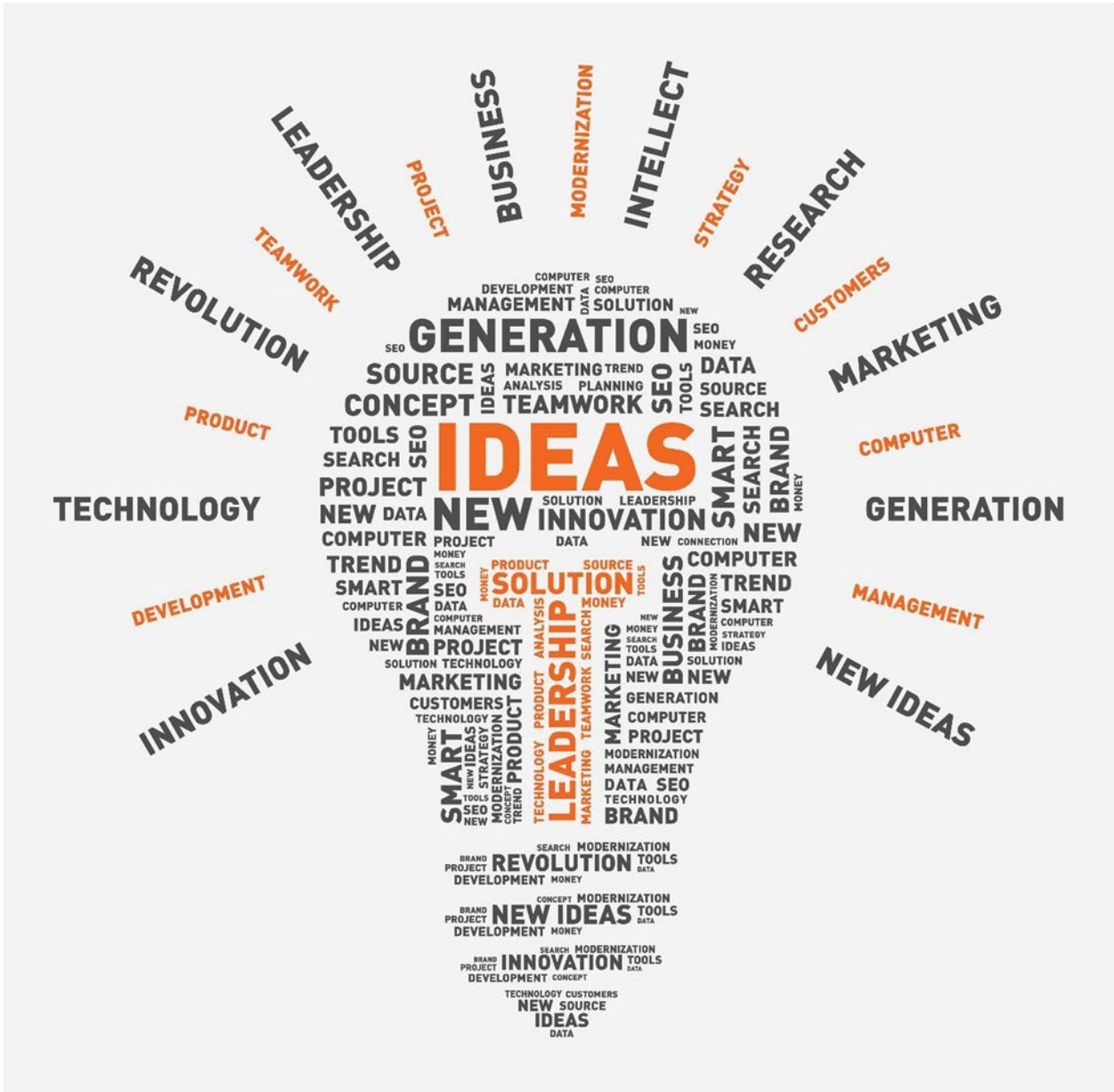
Barriers to Achieving Goals

The change in CDC guidelines for pneumococcal vaccine administration in the ESRD population prevented the Network from working toward the stated goals for the performance period. To address identified primary barriers, the Network encouraged adherence with the new CDC guidelines and worked to improve data accuracy in EQRS.

Best Practices Spread to Achieve Goals

Using the IPRO Learn platform discussion board, the Network facilitated discussions regarding best practices that were occurring in the community. Some best practices shared in this forum included providing the *Vaccine Information Statement (VIS)* sheet to any patient who received the pneumococcal or other vaccinations to provide detailed information on the vaccine. VIS sheets were given to all patients who were offered the vaccine per CDC/CMS rules. One facility noted that all patients were given the VIS sheet specific to the vaccine they accepted or declined/refused. Facilities indicated that sharing IPRO resources via their monthly newsletters was an ideal way to distribute information to patients.

The Network also contacted all top performing facilities in the region and shared best practice tips they provided via a poster session on our IPRO Learn site. These best practices were then featured in our biannual best practice calls series to reach all providers in the service area.



ESRD Network Recommendations

Facilities that Consistently Failed to Cooperate with Network Goals

With the pandemic drawing to an end the Network has garnered the support of facilities throughout its community to aid in the implementation of Network initiatives and to collaborate in meeting Network goals. The Network did not identify any facilities in its service area that failed to cooperate with the goals.

Recommendations for Sanctions

The ESRD Network did not recommend any facility for sanctions.

Recommendations to CMS for Additional Services or Facilities

In working with the facilities across the region the Network identified these additional services which would benefit our provider community:

1. Creating a mechanism to support reimbursement to grow self-care dialysis facilities in the densely populated urban areas would help to link patients to the benefits of a home dialysis prescription who have physical constraints and in turn expand home dialysis referrals/acceptance.
2. Improving the availability of transportation services for dialysis is a consistently requested additional service that facilities cite would improve their process.
3. Expanding transplant services and offering home dialysis to emergency Medicaid recipients was another frequently requested additional service for the community.

ESRD Network COVID-19 Emergency Preparedness Intervention

To ensure that the dialysis community had the tools, information and supplies needed to sustain operations during the pandemic, the Network monitored and communicated information released by the New York State Department of Health (NYSDOH), and tracked issues such as staffing shortages, nursing strikes, and supply shortages. The Network additionally collaborated with the New York State Office of Emergency Management (OEM) to assess reductions in staff, availability of personal protective equipment (PPE), and implementation of infection prevention measures. In the 2023 calendar year, the Network received the following report of COVID-19 cases:

Network 2 Service Area	Sum of COVID-19 Positive(+) Patients	Sum of COVID-19 Positive(+) Staff
New York	13,395	252

To assist in preventing the transmission of COVID-19 within the dialysis population, the Network reinforced infection control guidance through 1:1 technical assistance and distributed resources based upon the current Centers for Disease Control and Prevention (CDC) recommendations for dialysis facilities. These included screening for COVID-19, personal protective equipment (PPE) and cleaning and disinfections while providing 1:1 technical assistance to facilities who trigger increased hospitalizations and completing an environmental scan to identify the true root cause to help minimize COVID-19 impact within the ESRD population.

Due to the impact of COVID-19, many professionals transitioned out of the healthcare field, leaving dialysis units with a shortage of technicians and nurses. As the pandemic comes to an end, preparedness activities become less frequent; however, many facilities in the Network service area were forced to suspend services temporarily or permanently. The Network provided 1:1 technical assistance to providers coping with staffing shortages, including assisting with transitioning patients to nearby facilities. The Network strongly advocated for practitioners to be transparent with patients and their support networks regarding staffing shortages, including how it could impact treatment times and transportation.

The Network provided facilities with the *CMS Checklist for Dialysis Facilities in COVID-19 Hotspots*, available through IPRO learn and the ESRD Website. This checklist educated facilities on ways to perform self-assessments to ensure the facility is prepared to prevent the spread of COVID-19, which also provided guidance on routine infection control and reference regarding outpatient dialysis facilities having established policies and practices to reduce the spread of contagious respiratory pathogens. The Network conducted 1:1 technical assistance to facilities to support and provided strategic ways to navigate through the pandemic.

ESRD Network Significant Emergency Preparedness Intervention

During the performance period, the Network documented all effects on facility operations due to emergency events using its Emergency Operational Status Report. This information was combined with data from the End Stage Renal Disease Quality Reporting System (EQRS), Critical Asset Annual Survey data, and information provided during 1:1 technical assistance and reported to Kidney Community Emergency Response (KCER)

The Network developed and released the ESRD Emergency Mobil Hub Application in September 2022. The application allows patients and their support systems to subscribe to receive notifications regarding emergencies in their area. It additionally allows patients to store information regarding medications, preferred emergency contact and prepare an emergency to-go bag. Network 2 currently has 153 users in New York.

Situations arising from the following events affecting dialysis facilities and patients were addressed by the Network during the performance period:

- Weather-Related Events: 36
- Emergent Events: 19
- Altered Schedule: 49
- Staff Shortage: 35
- Temporary Closures: 40
- Permanent Closures: 4

In November of 2022, Buffalo, New York, and the surrounding area received, in some areas, up to 77 inches of snow within a 36-hour period. Prior to the onslaught of the storm, as predictions become more ominous, the Network convened a meeting to conduct a first-level situational assessment. The meeting included the public health emergency representative from the Western Region of New York along with representatives from the Western Region Hospital Program and the New York State Department of Health.

The Network issued an Emergency Weather communication to all dialysis facility staff in New York State and alerted patients in the Network's service area who were using the ESRD Emergency Hub Mobile Application. The NW also contacted all transportation entities in the area to better understand the realities of planning for the following day. Due to unanticipated rates of snow fall and the subsequent ban on driving that was announced, some staff and patients were forced to spend the night at dialysis clinics. Patients received assistance the following day from emergency personnel. The Network remained in contact with the facilities most impacted by the storm.

Between December 22 and December 28 of 2022, the Erie County region received a record amount of snow (up to four feet, with drifts over 10 feet) and extreme freezing weather. A driving ban further affected the ability to transport patients to outpatient dialysis centers, resulting in many hospitalizations. Some clinics were forced to shelter in place over the holiday weekend due to lack of transportation. The Network issued a Winter Weather Advisory,

reminding facilities to prepare for power outages and difficult travel throughout the holiday weekend and providing facilities with resources to review with patients prior to a weather event. An emergency message was sent to patients using the ESRD Emergency Hub. The Network submitted a daily Emergency Situation Status Report reflecting the closures/reopening of clinics as the situation evolved and continued to remain in touch with facility leadership and staff, the New York State Department of Health and KCER. The Network also made calls to the Snow Line, requesting that they pick up patients who had not received treatment since the previous week.

Acronym List Appendix

This appendix contains an [acronym list](#) created by the KPAC (Kidney Patient Advisory Council) of the National Forum of ESRD Networks. We are grateful to the KPAC for creating this list of acronyms to assist patients and stakeholders in the readability of this annual report. We appreciate the collaboration of the National Forum of ESRD Networks especially the KPAC.