



End-Stage Renal Disease
Network of New York

2021 Annual Report



New York City

This report will cover quality improvement efforts led by the ESRD Network from January 1, 2021 – May 31, 2021 and the Base Year of Task Order Number 75FCMC21F0002, June 1, 2021 – April 30, 2022.

July 2022 - Revised February 2025
Prepared by:
IPRO ESRD Network of New York
<http://esrd.ipro.org>

Submitted to:
U.S. Department of Health and Human Services (HHS)
Centers for Medicare & Medicaid Services (CMS)
for Contract Number 75FCMC19FD0029

Table of Contents

ESRD DEMOGRAPHIC DATA	3
ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA	12
ESRD QUALITY IMPROVEMENT ACTIVITIES	16
Transplant Waitlist Quality Improvement Activity through May 2021	16
Transplant Waitlist & Transplanted Quality Improvement Activity June-April 2022	19
Home Therapy Quality Improvement Activity through May 2021	23
Home Therapy Quality Improvement Activity June-April 2022	26
Influenza June-April 2022	28
COVID Vaccinations Patients and Staff June- April 2022	30
Data Quality (Admissions, CMS Form 2728, CMS Form 2746) June-April 2022	34
Hospitalization (Inpatient Admissions, ED Visits, Readmissions and COVID-19 Admissions) June-April 2022	39
Depression June-April 2022	44
Nursing Home June 2021-April 2022	45
Telemedicine June-April 2022	48
Vaccinations Pneumococcal-23 and Staff Influenza June-April 2022	50
ESRD NETWORK RECOMMENDATIONS	53
Facilities that Consistently Failed to Cooperate with Network Goals	53
Recommendations for Sanctions	53
Recommendations to CMS for Additional Services or Facilities	53
ESRD NETWORK COVID-19 EMERGENCY PREPAREDNESS INTERVENTION	55
ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION	56
ACRONYM LIST APPENDIX	57

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 194,000 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 National Quality Strategy's three broad aims and the Centers for Medicare & Medicaid Services' (CMS) priorities for the ESRD Network Program. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

As the fourth most populous state in the country, 19.8 million people resided in New York State in 2021 (a 2% decrease from 2020). New York City (NYC) has the highest population density of any major city in the United States, with over 27,000 people per square mile. More than 90% of the state's population is concentrated within New York City and its surrounding counties on Long Island and the Hudson Valley, and an estimated 65% of the Network 2 patient population reside in NYC. The dramatic variance in population density between upstate and downstate New York impacts the availability of, and patient access to, healthcare services.

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 of and satisfaction with care, and quality of care.

According to the ESRD National Coordinating Center (NCC), as of December 31, 2021, the ESRD prevalent patient population in New York State was 47,258, comprising 5.6% of the total national ESRD patient population.

The population of the five boroughs of NYC— Bronx, New York (Manhattan), Richmond (Staten Island), Kings, and Queens counties— was 8.8 million (as of July 1, 2021) (a 1.6% decrease from 2020), according to the U.S. Census Bureau estimates. (The borough of New York - more

commonly known as Manhattan - experienced a 6.9% population exodus due to economic restructuring caused by the COVID-19 epidemic between April 2020 and July 2021.)

New York State's population is rich in ethnic, racial, religious/spiritual, cultural, and lifestyle diversity. According to U.S. Census Bureau estimates for 2021, New York State's population was (virtually identical to that of 2020) 69.6% white, 17.6% Black or African American, 9% Asian, 1.0% American Indian and Alaskan Native, and 0.1% Native Hawaiian; 2.7% of the population identified with two or more races. The Hispanic or Latino population of the state was approximately 19.3% in 2021, according to the same source.

The Network's activities supported over 29,036 patients reported as receiving dialysis treatment for ESRD as of December 2021. There were over 18,222 transplant patients in the Network's service area as of December 2021. In New York State renal patients were served by 361 Medicare-certified dialysis facilities and 14 transplant centers, including seven Veterans Affairs (VA) hospitals. During 2021, 18 dialysis facilities in New York State became Medicare-certified.

Throughout the reporting period, the IPRO ESRD Network 2 team actively promoted the value of home modalities and transplantation: These efforts contributed to improved care for ESRD patients and a savings of \$16M for the U.S. healthcare system in 2020 (Source: ESRD NCC Dashboard, October 2020) This outcome exceeded CMS' expectations for home initiations (reaching 124% of the home initiations quality improvement activity (QIA) goal during the height of the COVID-19 pandemic.

In 2021, the Network continued its practice to identify and implement innovative ways to drive kidney care improvements, pairing cutting edge technology with high-level subject matter expertise has allowed us to create and sustain positive change across our Network service area. This was exemplified by the Network's work in co-founding Project Dialysis and Transplant ECHO, the first kidney transplant ECHO Hub in New York State. This effort touched 86% of the transplant centers and 25% of dialysis providers in the Network's service area and contributed to a 19.3% growth in the transplant waitlist in 2020. This improvement placed Network 2 at number four in the nation for percent of patients on the UNOS transplant list, with 1,293 transplants performed in New York State in 2020. This is particularly noteworthy considering that New York City was an epicenter of the COVID-19 pandemic in 2020.

IPRO ESRD Network 2 is a recognized leader in kidney care emergency response: Throughout the COVID-19 pandemic, Network staff provided to the New York State ESRD community educational events and resources highlighting the importance of following recommended practices to reduce infections and hospitalizations. These efforts resulted in a 0.47% COVID-19 infection rate in New York State Network, as compared to the national infection rate of 10.97% during the same timeframe. In light of these successful outcomes, Network 2 provided national COVID-19 spotlight presentations to CMS leadership, the Forum of ESRD Networks, KCER, and renal care providers, on the promising practices and emergency response and recovery processes implemented.

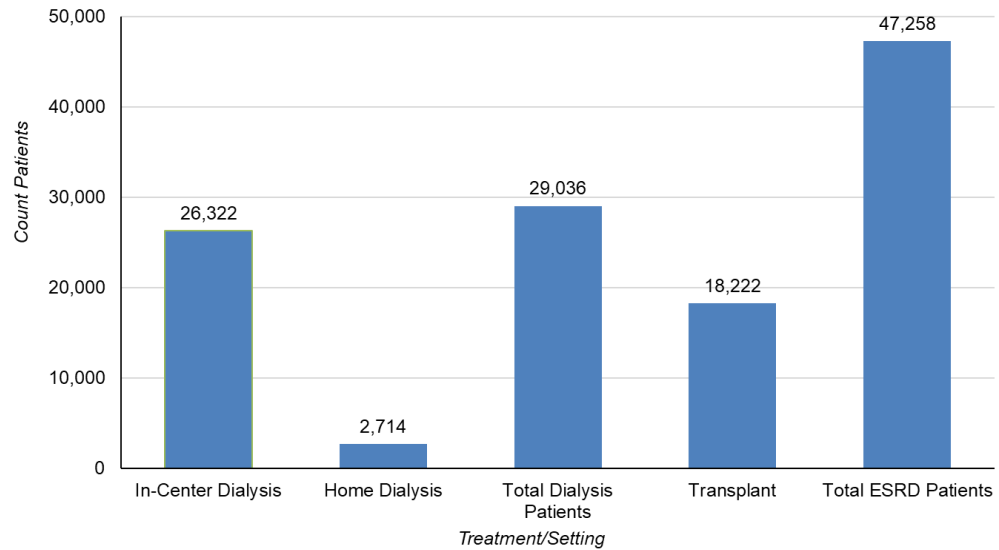
Throughout the reporting period, the Network's patient and family engagement efforts were grounded in providing patients and families with timely and relevant services to address their needs. To minimize pandemic-related social isolation and mitigate mental health (MH) issues during the COVID-19 pandemic the Network initiated bi-weekly virtual patient support groups and patient-designed educational MH webinar sessions, offering both options to patients across the Network service area. The bi-weekly virtual patient support groups provided peer-to-peer mentoring and one-on-one interactions. The Network hosted two virtual game nights using Network 2- developed Bingo and Jeopardy-inspired educational programs to encourage direct patient interactions during a time of social distancing. These and other patient activities facilitated a change in the mindset of our providers, who recognized the benefits of active and engaged patients, demonstrating how addressing mental health leads to improved health outcomes.

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. In 2021, the Network's PFR Alliance grew to include 127 active members, with 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.

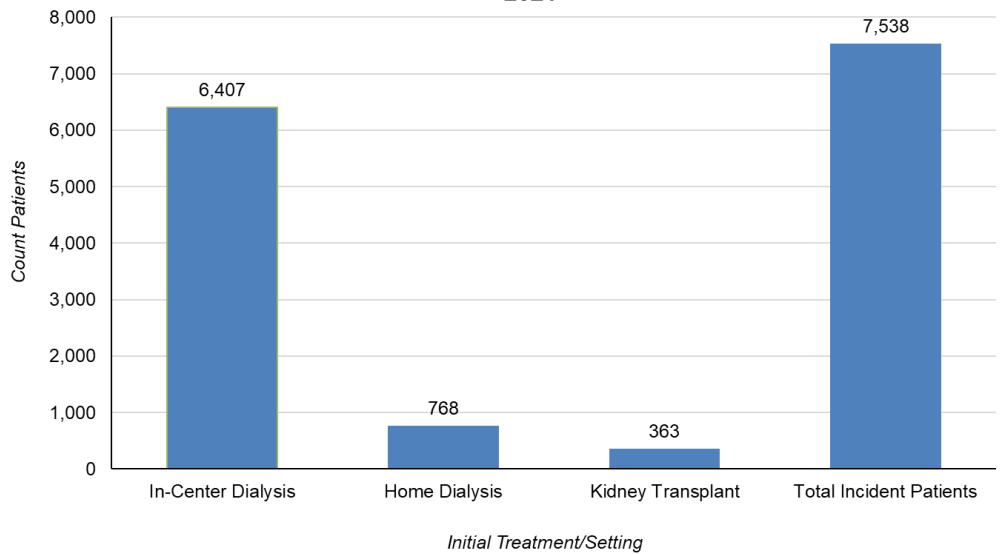
During the reporting period, the Network worked in collaboration with its Medical Review Board, PFR Alliance, PAC, Education Committee, and Community Coalitions to develop and implement quality improvement projects aligned with the CMS-identified goals for the ESRD Network program. The Network deployed focused interventions that targeted patients, dialysis staff, transplant programs, and renal community stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of life for ESRD patients are detailed in this report.

Network 2: Count of Prevalent ESRD Patients by Treatment/Setting 2021



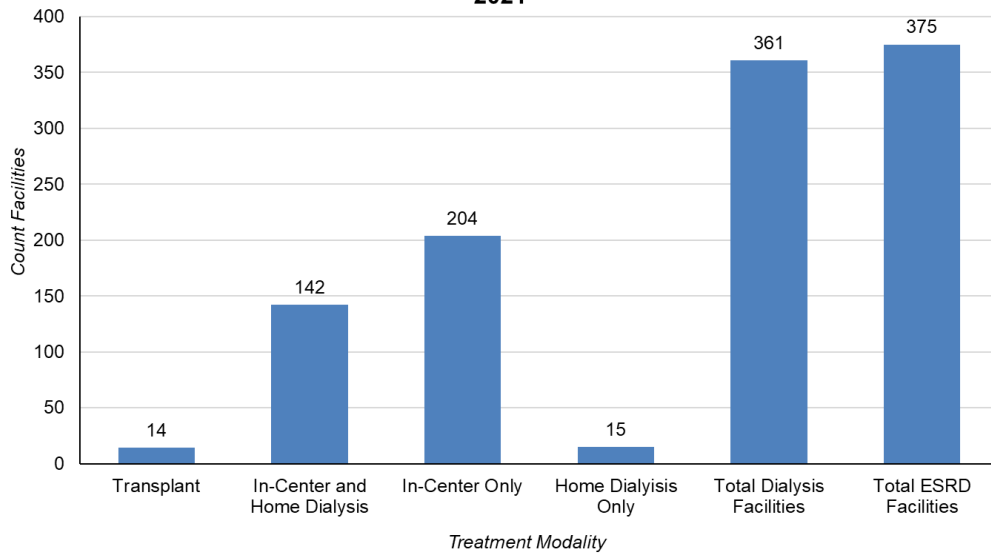
Total Dialysis Patients = In-Center Dialysis + Home Dialysis
 Total ESRD Patients = Transplant + Total Dialysis
 SNF dialysis patients are not shown due to small numbers.
 Source of data: EQRS May 2022

Network 2: Count of Incident ESRD Patients by Initial Treatment/Setting 2021



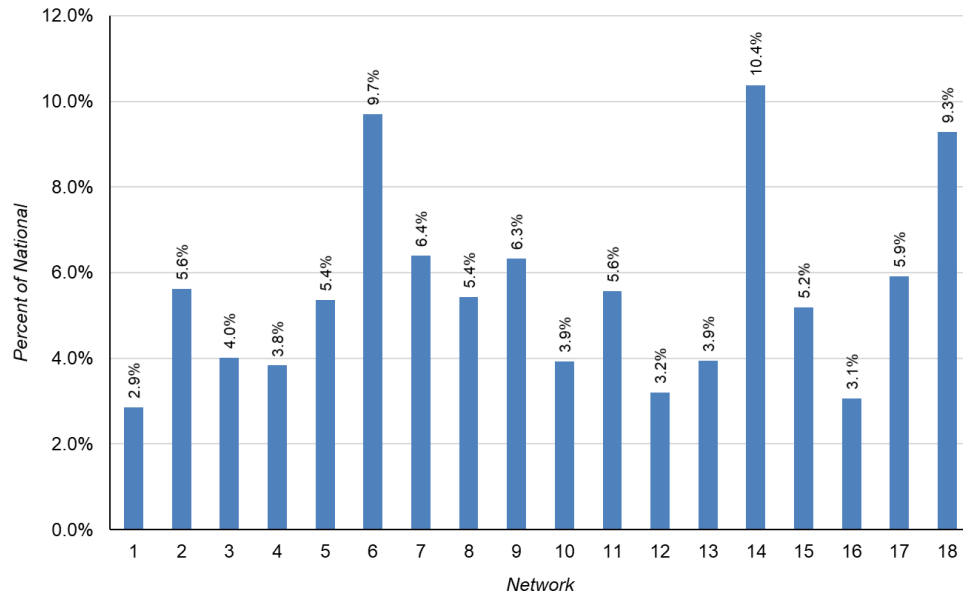
Total Incident Patients = In-Center + Home + Kidney Transplant
 Source of data: EQRS May 2022

Network 2: Count of Medicare-Certified Facilities by Treatment/Setting 2021



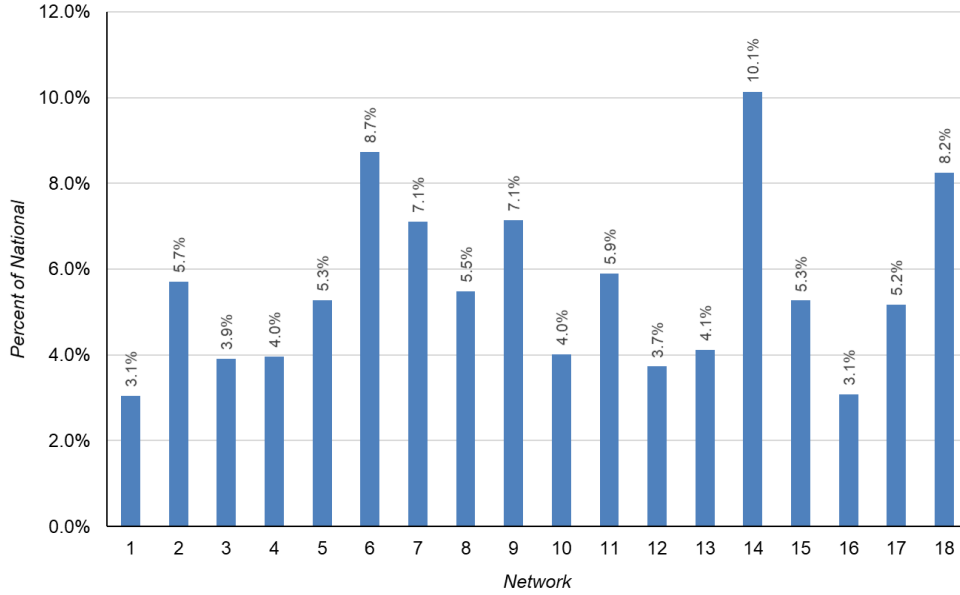
Total Dialysis Facilities = In-Center and Home Dialysis + Home Dialysis Only + In-Center Only
 Total ESRD Facilities = Transplant + Total Dialysis Facilities
 Source of data: EQRS May 2022

Percent of National Prevalent Dialysis Patients by ESRD Network 2021



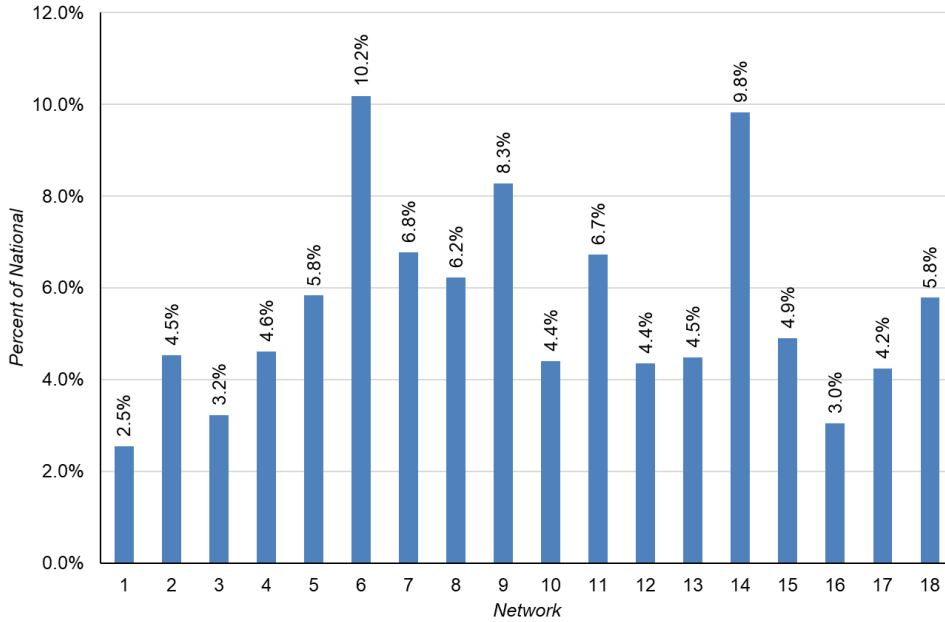
National total dialysis patients: 516,929
 Source of data: EQRS May 2022

Percent of National Incident Dialysis Patients by ESRD Network 2021



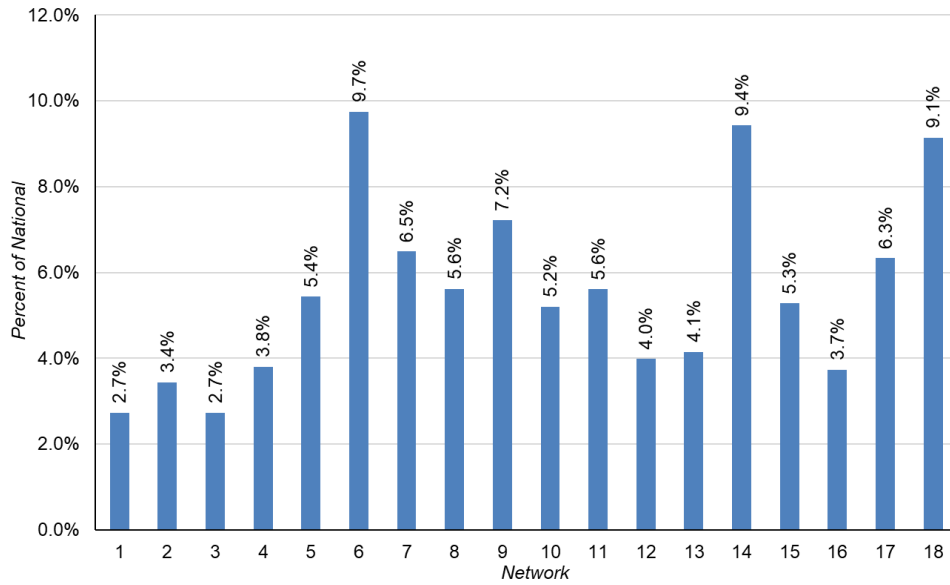
National total incident patients: 132,071
 Source of data: EQRS May 2022

Percent of Medicare-Certified Dialysis Facilities by ESRD Network 2021



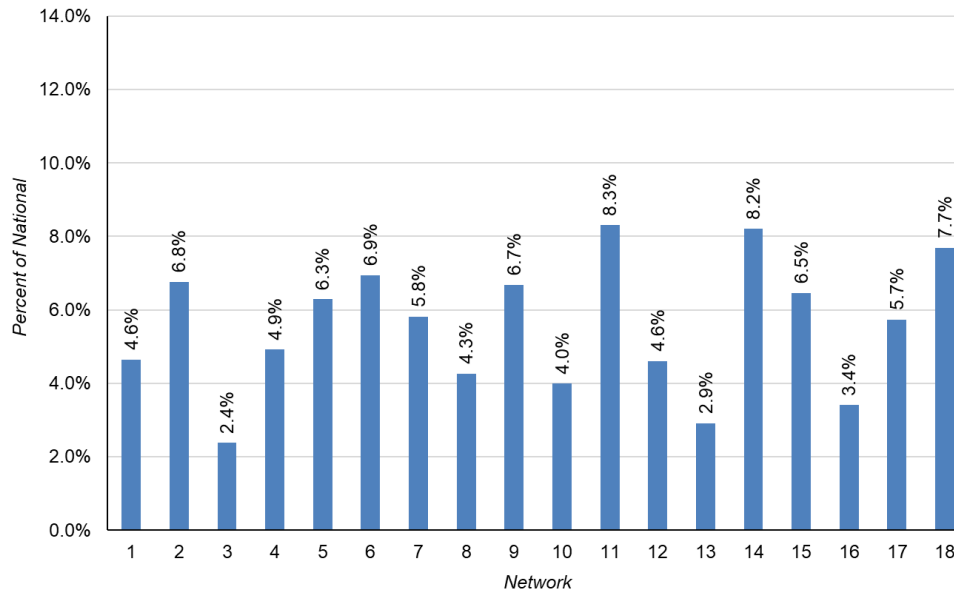
National total ESRD Medicare-certified dialysis facilities: 7,969
 Source of data: EQRS May 2022

Percent of National Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network 2021



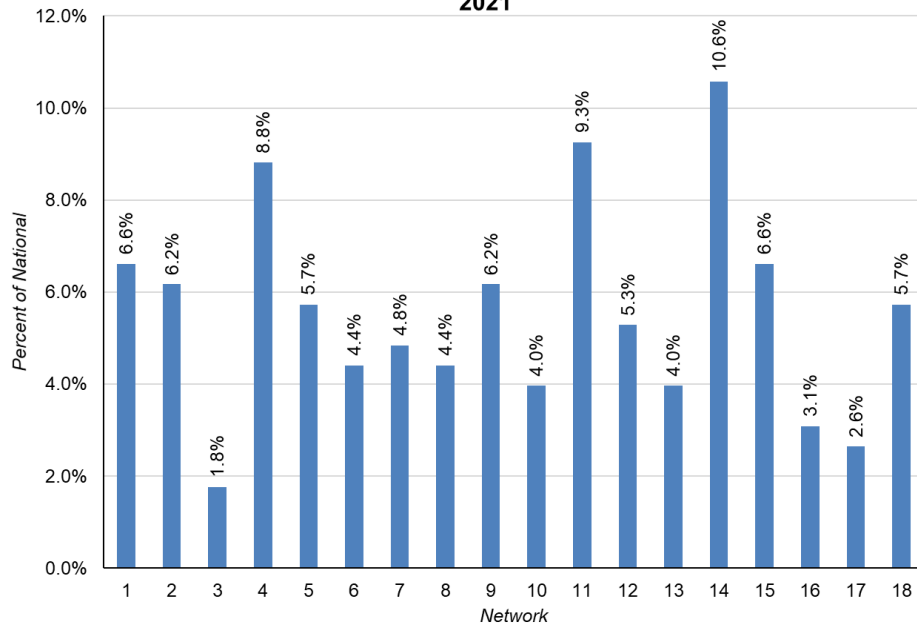
National total home hemodialysis and peritoneal dialysis patients: 79,071
 Source of data: EQRS May 2022

Percent of National Transplant Patients by ESRD Network 2021



National total transplant patients: 269,424
 Source of data: EQRS May 2022

Percent of Medicare-Certified Kidney Transplant Facilities by ESRD Network 2021



National total ESRD Medicare-certified kidney transplant facilities: 227
Source of data: EQRS May 2022

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

The Network collaborated with facilities to identify and mitigate barriers and challenges that inhibit patients from receiving the highest quality of care. In 2021, the Network reported 231 patient grievance cases involving: Immediate Advocacy (31), Quality of Care Grievance (2), Facility Concerns (169), and General Grievance (29). A review of the grievance cases from this time period reveals the most common reasons for grievances to be environment (10 cases), staff-related concerns (33 cases), and treatment-related concerns regarding the delivery of care (13 cases). For each case, the Network advocated for each individual patient and highlighted their right to be an active participant in his/her healthcare. The Network continuously collaborated with different stakeholders to ensure the patient perspective was considered in every service provided by the facility and the Network.

Access to Care and Involuntary Discharge (IVD) Cases

Access to care cases include involuntary discharges, involuntary transfers, and failures to place. An involuntary discharge is initiated by the treating dialysis facility without the patient's agreement. An involuntary transfer occurs when the patient's facility temporarily or permanently closes (i.e. due to a merger, an emergency, a disaster situation, or other circumstance) and the patient is dissatisfied with the transfer to another facility. A failure to place occurs when no outpatient dialysis facility will accept an ESRD patient for routine dialysis treatment.

In 2021, the Network received 14 involuntary discharge cases. These cases were a result of: an immediate severe threat (10), non-payment (1), termination by a physician (1), and ongoing disruptive behaviors (1). Following each discharge, the Network provided technical assistance to help facility staff effectively support discharged patients' access to treatment within a facility or a hospital setting.

In 2021, the Network averted 27 involuntary discharges. These discharges were prevented through monthly check-ins with facility staff and promoted a strong collaboration between the Network and facility staff. Check-ins consisted of providing educational resources focusing on patient rights, involuntary discharges, and the inclusion of social support for patients in care plan meetings. Additionally, the Network advised facilities on identifying patient strengths, incorporating a peer mentor program if none existed, and identifying external factors that may have inhibited a patient's ability to be compliant with their overall treatment plan.

Network Assistance and Quality Improvement

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 facility staff and patients. 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 exercising de-escalation and 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.

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

- Increasing patient awareness of the Network and the educational resources available,
- Increasing use of **IPRO Learn** modules,
- Providing support to 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 mental, emotional and/or psychosocial issues.

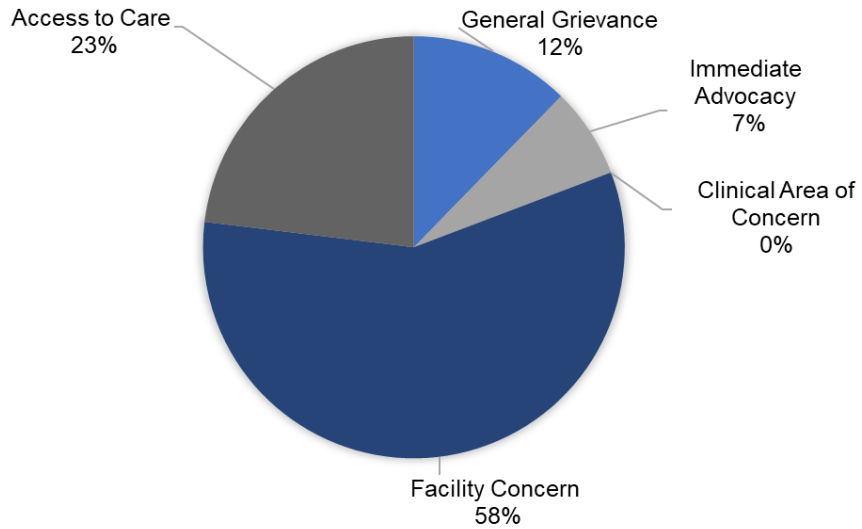
While each intervention focused on a different topic, all Network-implemented interventions incorporated the basic elements of quality improvement:

- An environmental scan/needs assessment of dialysis facility 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 facilities with the following resources:

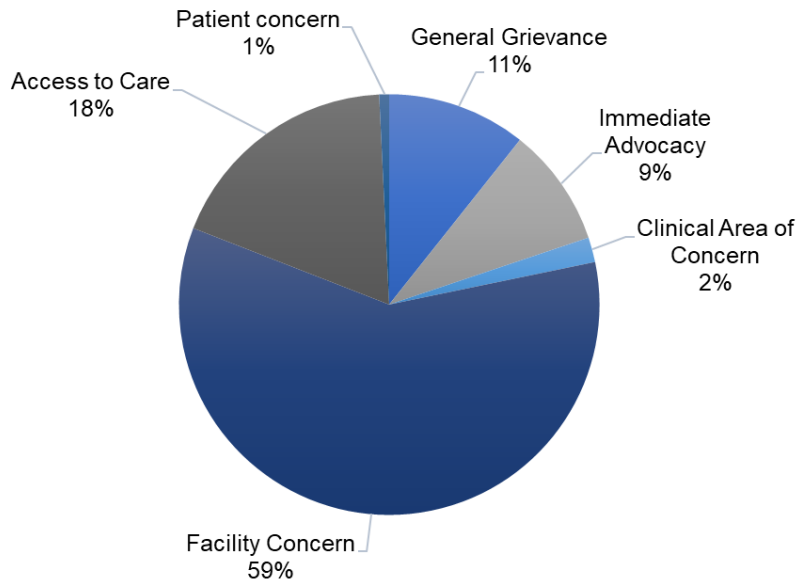
- The *Dialysis Patient Grievance Toolkit* created by the Kidney Patient Advisory Council (KPAC) of the Forum of ESRD Networks includes resources to support patients' understanding of how and when to escalate issues to a grievance,
- Grievance preparation worksheets and a poster to create awareness of the educational resources available to dialysis patients, with a focus on improving communication among patients and staff early in the grievance process,
- A poster and flyers, *What the Network Staff Can and Cannot Do*, that outline clearly defined parameters of the support that the Network is able to provide, as well as a list of the types of support that the Network is not able to provide,
- Crisis Prevention Institute (CPI's) *Top 10 De-Escalation Tips* resource to provide strategies to help clinic staff take a constructive, positive, and empathic approach to deescalating conflicts with patients.

Network 2: Percent of Jan-May 2021 Grievances and Non-Grievances by Case Type



Source of data: Patient Contact Utility (PCU) accessed April 2022

Network 2: Percent of Jun 2021-Apr 2022 Grievances and Non-Grievances by Case Type



Source of data: Patient Contact Utility (PCU) accessed May 2022

ESRD QUALITY IMPROVEMENT ACTIVITIES

Transplant Waitlist Quality Improvement Activity through May 2021

Due to the COVID-19 pandemic limiting provider staffing and procedures, along with contract goal adjustments, the Network worked toward the goals of this quality improvement activity but was not evaluated on results through May 2021. The new contract June 2021-April 2022 the Networks focused on Quality Improvement Goals.

The Network was tasked with continuing to provide educational materials to patients and dialysis facility staff to maintain communication in an effort to increase the number of patients on the transplant waiting list during the COVID-19 pandemic. The pandemic caused reductions in provider staff and in the number of transplant procedures being performed.

Project Overview

During early spring 2020, New York City quickly became the first epicenter of the COVID-19 pandemic in the U.S. As such, transplants were halted for a period of time in NYC and slowed significantly in other areas of the state. This resulted in 200 fewer transplants performed in New York State in 2020, as compared with 2019. Many transplant centers furloughed their non-clinical employees, reduced surgeries, and stopped all evaluation services. Living donor transplants were also halted during the first six months of 2021 due to concern for healthy donors becoming exposed to the virus during transplant workup or hospital stays. During this time period the two focus areas for New York transplant centers were to only offer deceased donor transplants and to ensure the well-being of patients already transplanted or on the active waitlist.

To support the transplant centers and patient population during the public health emergency caused by COVID-19, the Network assisted the centers and patients in ensuring transplanted patients had access to necessary medications and that they were kept up to date on evolving COVID-19 guidance for those who were immunocompromised. The Network provided education to waitlisted patients regarding the requirement of COVID-19 vaccinations to maintain active waitlist status. The Network provided individual technical assistance to overcome issues with courier and lab availability to process the required annual blood samples for waitlisted patients.

Interventions

Providing education to facilities and patients about how to protect patients in a pandemic environment was a primary intervention. The Network developed educational materials and flyers to ensure that transplant patients were aware of their increased risk of infection, serious illness and death due to their immunocompromised status; and to guide them in taking precautionary steps to protect their health. This was done by sharing posters for patients to use at the entrance of their homes to advise visitors that a high-risk person lived there and sharing guides on how to keep safe in a multi-generational household. The Network supported the use of remote options like telemedicine for physician visits. When supply chain shortages reduced the availability of medications for immunocompromised patients, Network staff worked with

the transplant centers to identify replacements or alternate sources, why also encouraging the centers to share this information across the transplant patient population. For those patients on the waitlist the Network shared information on the need for them to receive COVID-19 vaccinations to maintain active waitlist status and provided factual data to overcome hesitancy issues. The support provided for lab sample issues was done through individual instances of technical assistance offered whenever the Network became aware of potential issues or concerns.

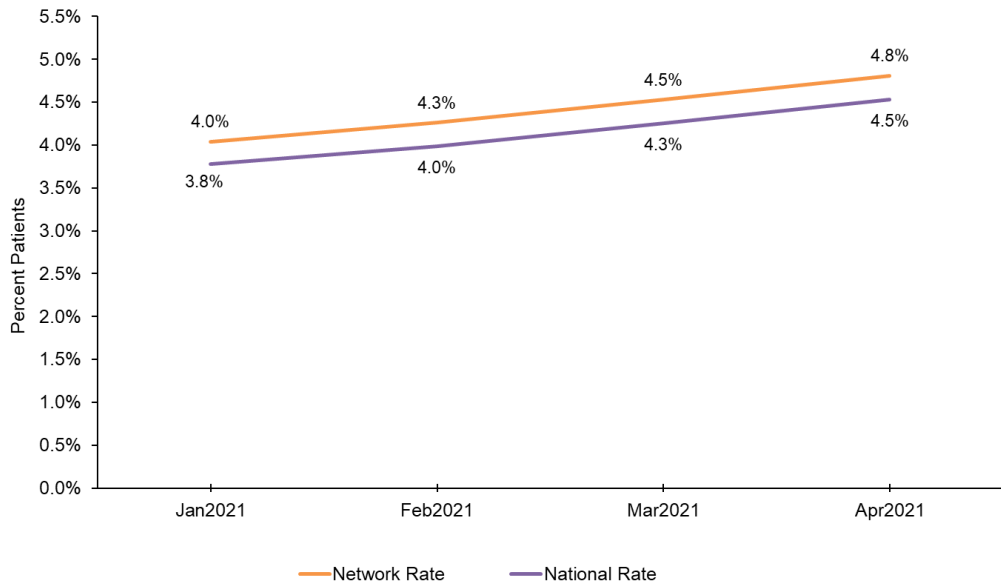
Barriers to achieving goals

Inconsistent communication with transplant candidates was a major barrier during this time period. Due to the limited availability of staff, many patients were unable to maintain ongoing communication with their transplant centers. The evolving nature of many of the pandemic challenges, including shortages of various medications, made it difficult to keep recommendations current. COVID-19 vaccination hesitancy also proved to be a barrier as vaccination is required to maintain an active status on the waitlist.

Best practices spread to achieve goals

Transplant centers' implementation of telemedicine allowed them to continue working closely with their transplant population and was a best practice the Network supported and promoted during the pandemic. Network staff also worked closely with each transplant center to share information essential for this at-risk group. The Network offer a newsletter, first distributed weekly, and then monthly, which featured updates related to the evolving pandemic. The newsletter shared Centers for Disease Control and Prevent (CDC) guideline updates, CMS regulatory news, Kidney Community Emergency Response (KCER) coalition and other emergency channel updates with both transplant centers and dialysis facilities. A best practice that transplant centers instituted was to maintain active check-in calls with their current waitlisted patients to provide updates and mitigate barriers.

**Network 2: Percent of Patients Added to the Transplant Waitlist
January 2021 - April 2021**



QIA: Quality Improvement Activity
Source of data: ESRD NCC TXQIA accessed May 2021

Transplant Waitlist & Transplanted Quality Improvement Activity June-April 2022

Project Overview

Network 2 acts as a support and champion for patients regardless of age, sex, or ethnicity and focuses on support for those patients with common comorbid conditions, including diabetes and hypertension. These efforts are guided by the Executive Order on Advancing American Kidney Health (AAKH) goal to have 80% of new ESRD patients either receiving dialysis at home or receiving a transplant in 2025. The Network's goal was to increase the number of patients on the United Network for Organ Sharing (UNOS) waitlist and increase the number of transplants in the Network service area by at least 2%.

The Network encouraged selected coalition facilities to conduct Plan-Do-Study-Act (PDSA) for all implemented interventions, including those promoted by the ESRD National Coordinating Center (NCC) Transplant Learning & Action Network (LAN). The Network incorporated human centered design (HCD) practices in the development of patient-centered activities, support of Quality Assessment Performance Improvement (QAPI) plans, and the creation of a foundational premise for support groups and patient plans of care.

The Network facilitated participation and collaboration across all healthcare entities to create a culture of support and knowledge about transplantation. Patient Facility Representatives (PFRs), Patient Advisory Committee (PAC) members, and Patient Subject Matter Experts (PSMEs) were recruited to collaborate with the Network on the development of educational content and resource material. Additionally, patient feedback was requested to test the effectiveness of planned interventions. The Network's activities resulted in 1,468 patients being added to the transplant waitlist - a 3% increase compared to 2020 baseline data; and achieved 1,424 patients receiving transplants - a 23% increase compared to 2020 baseline data.

Interventions

To create a one-stop location for facility staff to: complete QIAs, participate in on-line discussions, post questions for project leads, and have 24/7 access to continuing education programs, educational videos, webinars, and QIA resources and tools the Network launched **I PRO Learn**, an electronic learning management platform build on open-source software.

Each month, via **I PRO Learn**, facilities were assigned activities that aligned with coalition PDSA cycles to support individual facility efforts toward increasing the number of their patients on the transplant waitlist and the number of patients receiving transplants. The Network worked diligently to promote use of **I PRO Learn** since its launch in September 2021. As of the end of the reporting period, more than 50% of the facilities in the Network's service area were using the platform on a consistent, monthly basis.

Network staff continued to work on improving the waitlist and transplant referral rates by establishing and improving communication across transplant center and dialysis facility staff and providing resources to help patients move through the five steps to become listed on the transplant waitlist.

The Network continued a close partnership with the New York Center for Kidney Transplantation (NYKidney), a transplant-focused stakeholder group dedicated to enhancing the quality of kidney transplant services. The Network also fostered new relationships with transplant centers and dialysis facilities to develop new educational resources and opportunities to overcome barriers faced by front-line staff. With the help of NYKidney and other stakeholders, Network staff provided facilities and patients with a collection of tools and resources to support dialysis staff, led activities aimed at improving communication across transplant center and dialysis facility staff, and provided resources to guide patients through the five steps to become listed on the transplant waitlist. The Network also collaborated with coalition members, transplant centers, and dialysis facilities to develop compelling content to help facility staff guide patients toward consideration of transplant as a treatment option. Content consisted of educational videos, frequently asked question guides, and knowledge assessment activities that were shared via email and through **I PRO Learn**.

The Network distributed educational materials and toolkits for patients and dialysis facility staff that focused on increasing patient understanding about the basics of transplant, provided tips on how to shorten their wait time while on the waitlist, and encouraged patients to consider the possibility of living donation.

To address health inequities in the ESRD population and their effect on patient interest in transplant, the success of getting on the transplant waitlist, and the ability to stay active on the waitlist, the Network implemented a discussion forum for dialysis facility staff. The forum provided a space in which facilities could share their barriers and best practices related to patients having access to and from pre- and post-transplant appointments and served to foster a community of practice amongst facilities. Issues related to health literacy were addressed by the Network through the Health Literacy Toolkit module presented on **I PRO Learn**, which taught the fundamentals of health literacy, how to assess a patient for low literacy, and how to communicate effectively with patients once they know their literacy levels.

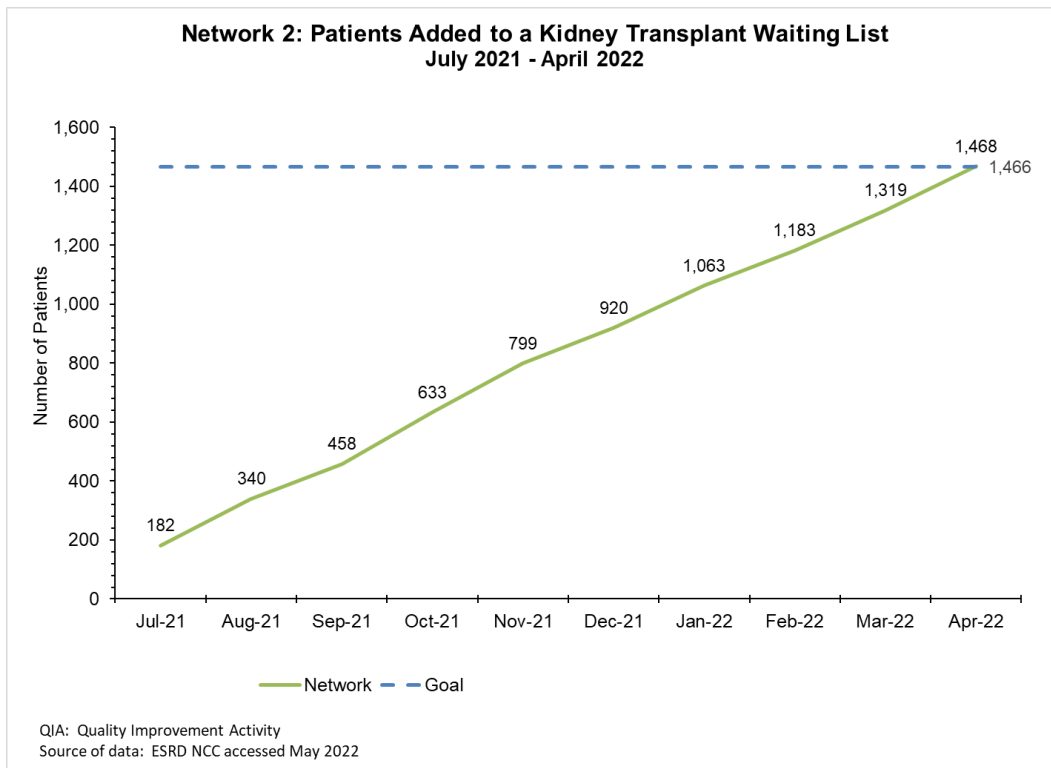
Barriers to achieving goals

The pandemic resurgence and the resulting increase in staff turnover and shortages negatively affected Network strategies to increase rates of waitlisting and transplant. High rates of staff turnover resulted in facilities hiring individuals for senior staff positions who were: not familiar with the work of the Network, were unaware of the importance of presenting transplant as a treatment option, lacked knowledge of social work relative to dialysis patients gained only through experience, were unfamiliar with CMS goals and initiatives, and lacked knowledge of best treatment choices, such as transplantation.

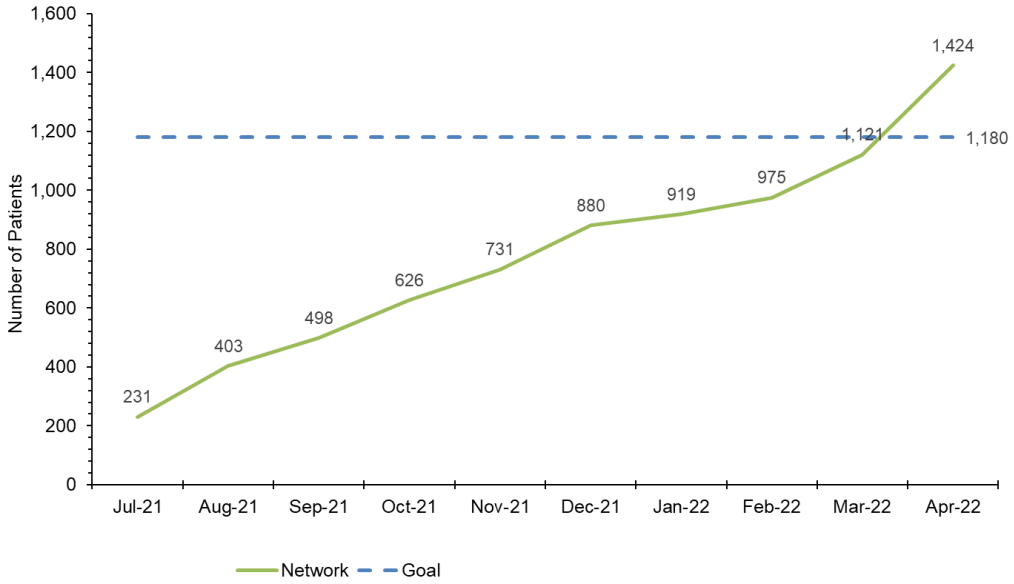
This led to fewer patients being informed about the option of transplant prior to starting dialysis, lack of consistency in communication of the waitlist guidelines, and exacerbation of the effects of social determinants of health in hindering patients' interest in and access to transplant as a modality choice.

Best practices spread to achieve goals

Despite the challenges faced in 2021, Network 2 added 1,468 patients to the transplant waitlist, and 1,424 patients received a kidney transplant. This success was due, in part, to the Network’s continued collaboration with transplant centers to help streamline referrals, increase the use of telemedicine and Network resources to complete the work-up process, and the implementation of workflows to keep patients on the waitlist. These best practices were shared quarterly with all facilities in the Network service area via a live webinar, and they are featured on the **IPRO Learn** platform. Other noted best practices included providing education and resources to the patients, caregivers, and facility staff about the Kidney Donor Profile Index (KDPI) and Estimated Post Transplant Survival Score (EPTS) to increase acceptance of organs that would otherwise be discarded; providing tools to dialysis facilities and transplant centers to educate patients in making informed choices about their treatment options; and encouraging streamlined referral processes.



**Network 2: Patients Receiving a Kidney Transplant
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

Home Therapy Quality Improvement Activity through May 2021

Due to the COVID-19 pandemic limiting provider staffing and procedures, along with contract goal adjustments, the Network worked toward the goals of this quality improvement activity but was not evaluated on results through May 2021. The new contract June 2021-April 2022 the Networks focused on Quality Improvement Goals.

Project Overview

Facility participation in all quality improvement activities was curtailed in the first quarter of 2020. Based on the 2020 baseline data, the Network transitioned 959 patients to a home therapy in 2020 and 765 incident patients were started on a home modality. During this time, the Network was tasked with continuing to provide educational material, to include the *ESRD NCC Home Modality Change Package*, to disseminate dialysis facility staff and patient education, and to promote collaborative communications, all with a goal to increase the number of patients dialyzing at home.

Interventions

The Network continued to focus on providing education on home modalities to dialysis professionals, patients, and caregivers, as a safer option to congregate care during the pandemic. Every effort was made to continue to migrate patients to a home therapy and to maintain home treatments for patients actively dialyzing at home. During the peak of the pandemic, home program staff were often diverted to assist with screening and triage responsibilities and to step in where needed due to staffing shortages. The Network worked to mitigate barriers that impacted home training staff and suggested alternate solutions to continue the expansion of the use of home modalities e.g., pre-emptive home starts and consolidating home referrals to key programs that would maintain staffing to ensure active home training continued.

To support patients who were already receiving dialysis through home modalities, the Network served as a liaison, ensuring the availability of supplies and on-time deliveries. With drops in supply availability and logistical failures occurring throughout the state, in particular the down state region, the Network focused on identifying alternate suppliers and carriers to share with ESRD providers who were experiencing difficulties, which in turn supported continued delivery of necessary equipment and solutions for patients to stay home and safe. This technical assistance occurred on a 1:1 basis.

Telehealth was promoted as a way to provide clinic visits with the health care team, while maintaining social distancing and reducing the risk of exposure to COVID-19. A webinar for patients to *Meet with your Healthcare Team in the Comfort of Your Home* introduced the topic to patients. The webinar *Healthy at Home* provided information to dialysis facility staff on the regulations and waivers enacted during the pandemic to promote telemedicine, the benefits of telemedicine for both patients and physicians, scheduling, use of technology, and best practices identified across the nation. During one of the educational activities, a Network 1 patient presented their perspective on the best ways to motivate other patients to participate in telemedicine visits, and preferred strategies to assist them with technology issues.

The Network also developed and distributed checklists for both patients and facility staff; each checklist provided steps and guidelines for a successful technology-based clinic visit.

Barriers to achieving goals

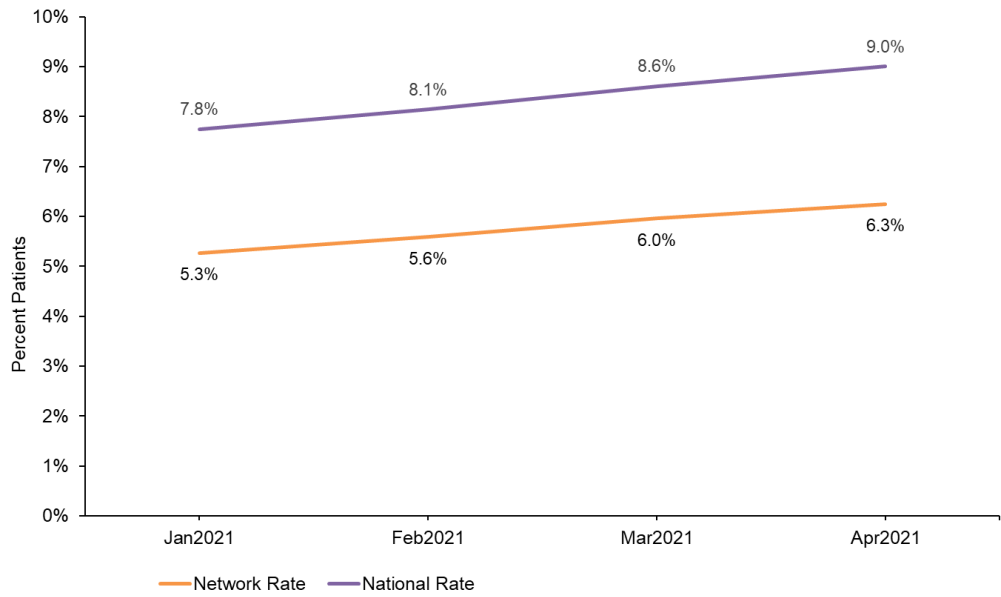
The emergent need to prevent the spread of COVID-19 led to the initiation of an intense triage process, addition of isolation capabilities, and increased communication protocols among all care providers and the dialysis centers. These processes required additional staffing to operationalize, and one of the few areas where procedures could be put on hold was recruiting and training patients for home therapy. That being the case, much of the infrastructure to support home growth was repositioned to help with these additional operationally critical tasks. This change in staff function and assignment was the number one barrier identified at the onset of the pandemic.

The Network advocated that to support home modalities dialysis facility leadership needed to preserve one central home program to manage all home referrals so that staff who were intact in that facility could continue to support the growth of home modalities.

Best practices spread to achieve goals

Many facilities used the pandemic as an opportunity to emphasize the benefits of dialyzing at home, from a safety perspective. This ongoing advocacy for home therapy promoted continuation of referrals. Another best practice that helped to continue home growth was the use of alternate education methodologies, e.g., patient advocates, transitional care units and a program which provided patients using hemodialysis as their current modality a short time trial to "feel the difference" of home hemodialysis. Not all of these methodologies were used by each facility as an option to educate on home modalities, their use was dependent on facility staffing and organizational approval. By emphasizing the inherent safety benefits to dialyzing at home during the pandemic and advocating for the use of alternate forms of education for the patient, the Network worked to increase the use of home modalities where possible.

Network 2: Percent of Patients Starting Home Dialysis January 2021 - April 2021



QIA: Quality Improvement Activity
Source of data: ESRD NCC HTQIA accessed May 2021

Home Therapy Quality Improvement Activity June-April 2022

Project Overview

The rate of patients starting home modalities has been lower than the national average in Network 2, and this has been a key focus area for improvement across the state of New York. A Home Program Coalition was formed to improve growth in both transitioning incenter patients to a home therapy as well as starting new patients on home modalities. The Network sought to create a community of practice that would foster a “pro home” culture across the state to build momentum in reaching national home growth rates.

Interventions

The Network has the largest number of independent dialysis providers of any Network in the nation. This unusual demographic leads to a decentralized approach to home program growth, with multiple independent entities attempting to create the infrastructure and pro home culture necessary to increase growth. By uniting these providers in a bigger cause, the Network created a campaign to spread and share best practices, drive benchmarking, and raise the bar across this diverse group. The Network aimed to spread a pro home culture through staff training at all levels of the care continuum, including chronic kidney disease (CKD) education programs. The Network encouraged facility staff to review the benefits of home therapy with patients and to dispel myths and misinformation associated with home dialysis. The Network created a toolkit consisting of a variety of educational materials and verified best practices to help facilities explain to patients the benefits of choosing a home modality.

This toolkit was offered in **IPRO Learn**. Each month Network staff presented to participating providers a review of either an educational offering or resource in an effort to increase their awareness of the full extent of materials available. Many of the tools and resources shared received a >85% approval rating from the staff, indicating that they would adopt or adapt the tool for use at their facility. Those that were not rated at 85% or better were evaluated for improvement or removed from the Network assembled toolkit, to ensure that only the most relevant materials were offered to providers.

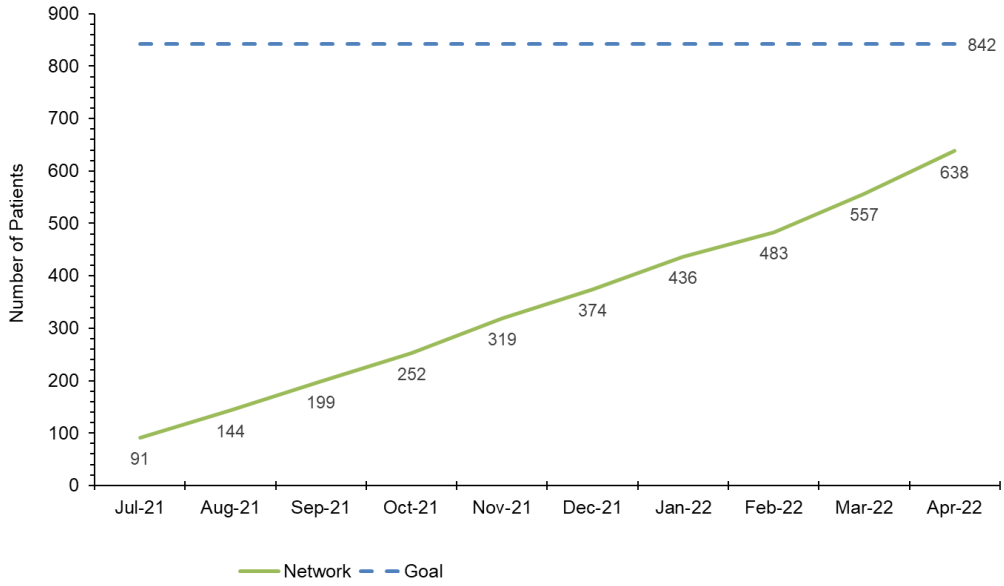
Barriers to achieving goals

The diverse provider population in the Network 2 service area caused a fractured approach to growing home therapies, with each individual entity having to create its own infrastructure and referral patterns to grow a home program. This demographic, coupled with home staff being temporarily moved to fill in gaps caused by the staffing shortage that impacted all healthcare providers in 2021, led to a challenging year for improving home growth rates. The Network gathered and initiated work with home program leaders throughout the Network 2 region. Their focus within the first year was to complete a root cause analysis.

Best practices spread to achieve goals

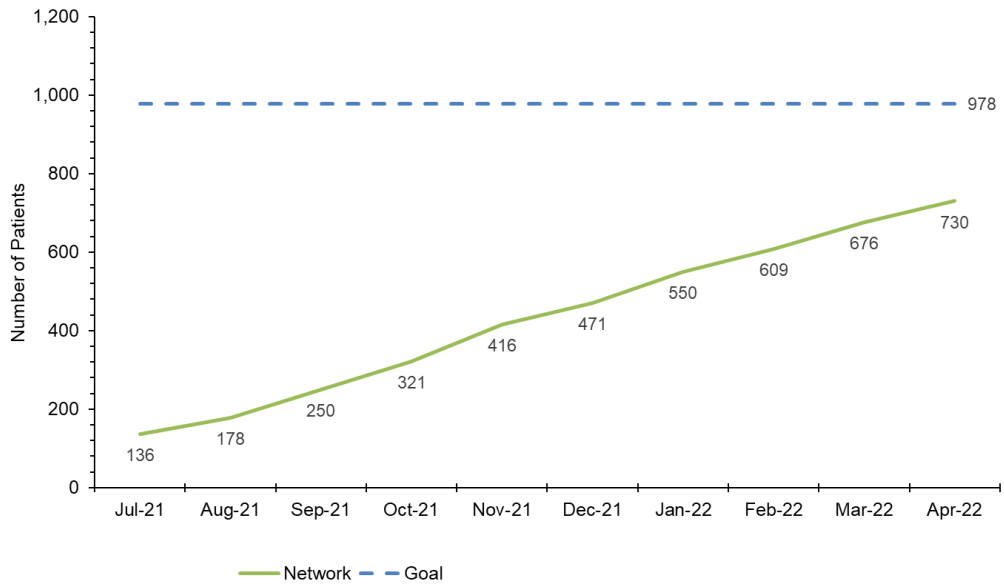
The practice of identifying home patient navigators within the patient population was an identified best practice in growing home therapies in the Network’s service area. The Network designed and provided customized educational programs to guide these patient peer mentors/navigators in helping to promote home therapy to other patients.

**Network 2: Incident Patients Starting Dialysis Using a Home Modality
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

**Network 2: Prevalent Patients Moving to a Home Modality
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

Influenza June-April 2022

Project Overview

The ESRD population is immunocompromised and at risk of contracting influenza and other vaccine-preventable illnesses. According to the Centers for Disease Control and Prevention (CDC), 1,000 people on dialysis die each year from influenza. The Network worked to increase the vaccination rate for influenza to 85% of the eligible patient population during the period. Data were reported by facilities in the End Stage Renal Disease Quality Reporting System (EQRS). Allowable exclusions were patients with medical contraindication or those with a history of severe allergic reaction. The Network achieved a patient vaccination rate of 71%.

Interventions

The Network worked with facilities to improve their ability to accurately document influenza vaccines in EQRS. The Network conducted an environmental scan of facilities with less than 70% of the census vaccinated against influenza and requested them to report their barriers to achieving a vaccination rate of 85% for their patients. Technical assistance focused on helping overcome staff and patient vaccination hesitancy, by providing one-on-one coaching to facilities to address additional barriers, which included patients' distrust of the healthcare system, contradictory information about vaccines and religious beliefs.

The Network sent influenza progress reports to each facility identifying patients that remained eligible for vaccination so the facilities could provide documentation regarding patient exclusion or vaccinate the eligible patients. This report allowed facilities to investigate all remaining unvaccinated patients and act accordingly.

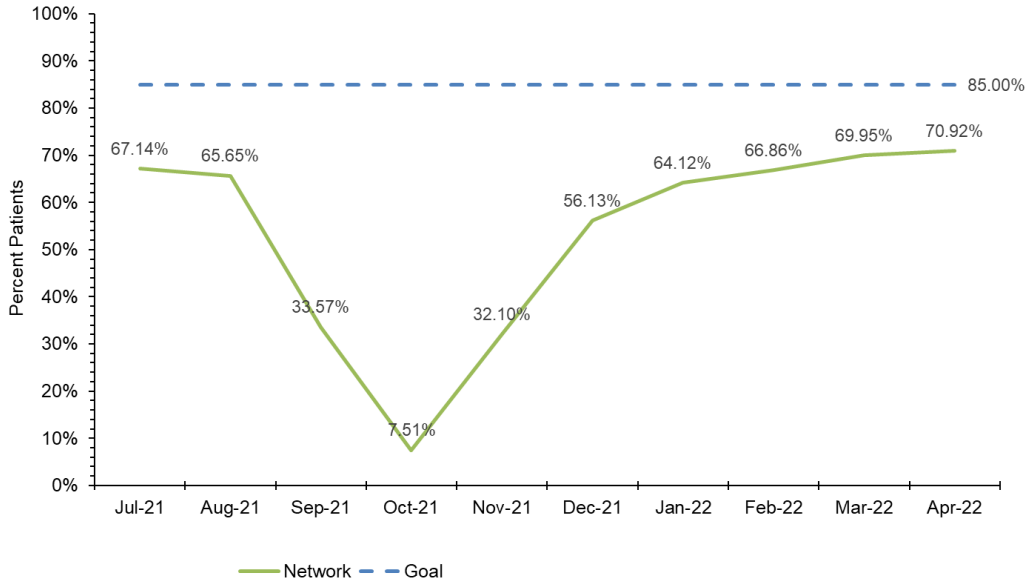
Barriers to achieving goals

Accurately capturing patient influenza vaccines that were given to patients by other providers was an ongoing issue. To mitigate this barrier facilities were provided a booklet to assist patients in gathering vaccine information. Another barrier was that many patients who received the COVID-19 vaccination did not want multiple vaccinations, and some believed that the measures they were taking to prevent COVID-19 transmission would negate the need for a flu vaccine.

Best practices spread to achieve goals

Best practices for increasing the influenza vaccination rates in patients and staff included dialysis facility staff conversing with their patients to better understand them and providing one-on-one coaching about the benefits of the influenza vaccine. These conversations assisted facilities in spreading factual information on vaccine efficacy and safety while also combating staff and patient hesitancy. Those facilities that had pro-vaccine champions and PFRs were found to have a higher rate of vaccinations in the patient population. Additionally, medical directors who participated in structured "vaccine days" helped bolster vaccination rates in facilities. Using information from its environmental scan made it possible to conduct rapid cycle improvement and to distribute a frequently asked questions document aimed at combating misinformation about vaccinations identified by the scan.

Network 2: Percent of Patients Receiving an Influenza Vaccination July 2021 - April 2022



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

COVID Vaccinations Patients and Staff June- April 2022

Project Overview

The average age of a person on dialysis is 62 years. Due to age and compromised health status, people on dialysis and who have received kidney transplants are at a high risk for serious illness and death related to COVID-19. People with ESRD who contract COVID-19 have a 50% likelihood of hospitalization and 20-30% likelihood of death.

Dialysis is a lifesaving, essential treatment that must be done three times per week for most patients. Because these services are nonelective and cannot be delayed, dialysis clinics serve patients whether they have COVID-19 or not. This creates a high-risk environment for dialysis patients and healthcare personnel and underscores the importance of vaccination to protect everyone in these clinics.

The Network worked to ensure that 80% of all patients treated in dialysis facilities were vaccinated against COVID-19. Patients with a history of severe allergic reaction to previous vaccination and those whose physicians had advised them not to receive the vaccine were considered ineligible and were excluded from the remeasurement data.

CMS mandated dialysis facilities to document staff COVID-19 vaccination rates in NHSN. As of April 2022, the Network's efforts resulted in an 76% COVID-19 vaccination rate among patients, according to the CDC's National Healthcare Safety Network (NHSN). The rate of COVID-19 vaccine declination was less 0.125% of patients.

The documentation and timely reporting of staff vaccination rates has lagged behind the reporting of patient vaccinations at the April 2022 remeasurement due to the challenges faced by facilities and dialysis organizations. On April 14, 2022, a federal mandate was issued requiring that all healthcare providers that receive Medicare and Medicaid funding for services have 100% of eligible staff vaccinated. Dialysis personnel who did not have medical or religious exclusions were not eligible for employment after the effective date. Prior to the federal mandate, New York had state mandated requirements of 100% employee vaccination. After April 14, all dialysis facilities and transplant centers were required to show documentation of employees' vaccination status and proof of processes and policies in place to sustain a 100% vaccination rate of eligible employees. This documentation is now mandated by state surveying agencies and accreditation organizations as a requirement to maintain certification and licensure.

Interventions

The Network used **IPRO Learn** to provide on- demand educational opportunities related to COVID- 19 resources and CMS and CDC vaccination guidelines as they evolved. The Network reviewed data to determine facilities that struggled with increasing COVID-19 vaccinations and provided educational resources to combat community spread, spread in multigenerational households, and patient and staff hesitancy. Facilities with low reporting rates of COVID-19 vaccination were offered technical assistance with the required reporting applications, based on their reported barriers. After analyzing data, Network staff identified patients who remained

unvaccinated and provided a list of these patients to facilities to coach and educate on the benefits of the COVID-19 vaccine. The Network incorporated technical solutions, such as **IPRO Learn**, **Caspio**, and **Freshdesk** to encourage bi-directional communication with facilities requiring assistance.

The Network adopted the *How Did They Do That?* ESRD NCC resources, which established a call ahead culture to prevent the transmission of COVID-19 hospitalizations. The Network created a fact or fiction webinar for patients and providers to combat misinformation related to COVID-19 vaccinations, while partnering with nursing homes and infection preventionists to provide policies based on cohorts to try to reduce the spread of COVID-19. The Network was successful in advocating to get ESRD patients included in early vaccination protocols once vaccinations were being administered to essential healthcare workers at the height of the pandemic.

Barriers to achieving goals

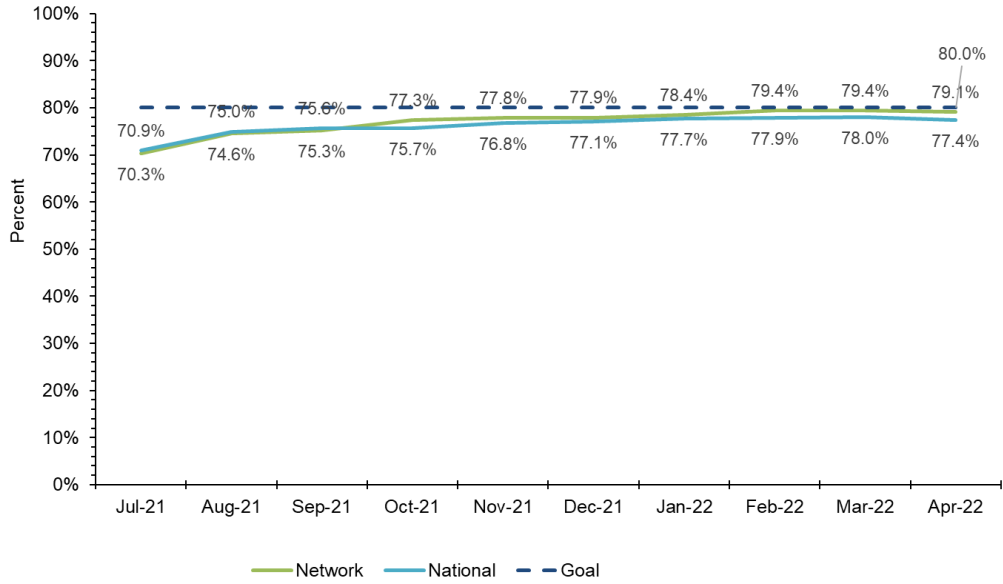
The pandemic caused increased staffing turnover and personnel reassignments, resulting in the Network having outdated contact information for facility personnel. This decreased successful communication with facilities. The Network rapidly provided facilities with access to **Caspio**, a contact management system, allowing facilities to update their contact information with the Network. Not all facilities provided self-reported data to the Network, which complicated accurate assessment of vaccination rates. Facilities that did not have leadership to drive a pro-vaccine culture had lower vaccination rates and did not pursue patients after a declination. Facilities closures and staffing shortages (which sometimes resulted in patients having to travel to another facility further from home), made it difficult for facilities to implement strategies to attain goals.

Best practices spread to achieve goals

Best practices to increase COVID-19 vaccination rates in patients and staff included:

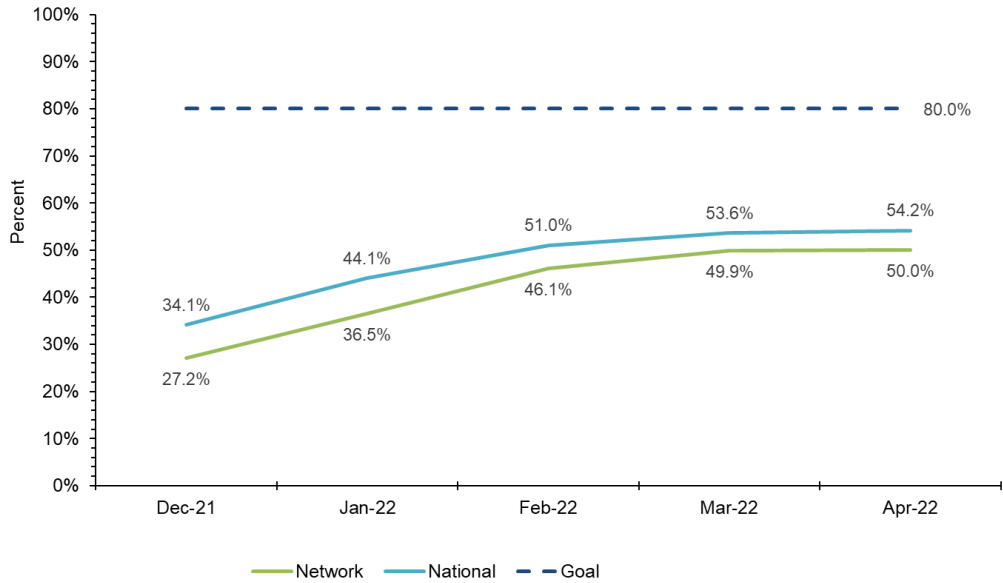
- Senior staff at facilities taking time to connect with staff and patients; some facilities did one-on-one coaching to increase uptake of vaccinations.
- Enlisting staff to be “Pro Vaccine Champions” also helped to encourage vaccinations; enlisting a PFR as a patient advocate was also effective.
- Medical directors that led the vaccine initiative were essential in the process.
- Addressing community-specific concerns and misinformation, such as vaccine side effects or risk helped facilitate better communication.
- Communicating to staff their high risk of exposure to COVID-19 and the importance of the vaccine to protect their family, friends, and their fellow co-workers from the virus.
- Promoting to facility staff the instructional video: *Grief Management for the Caregiver During the Pandemic* helped to relieve the stress related to the pandemic and loss of ESRD patients and staff and proved to be effective in promoting the benefits of vaccines during the height of the pandemic.

**Network 2: COVID Vaccination Rate (Dialysis Patients)
July 2021 - April 2022**



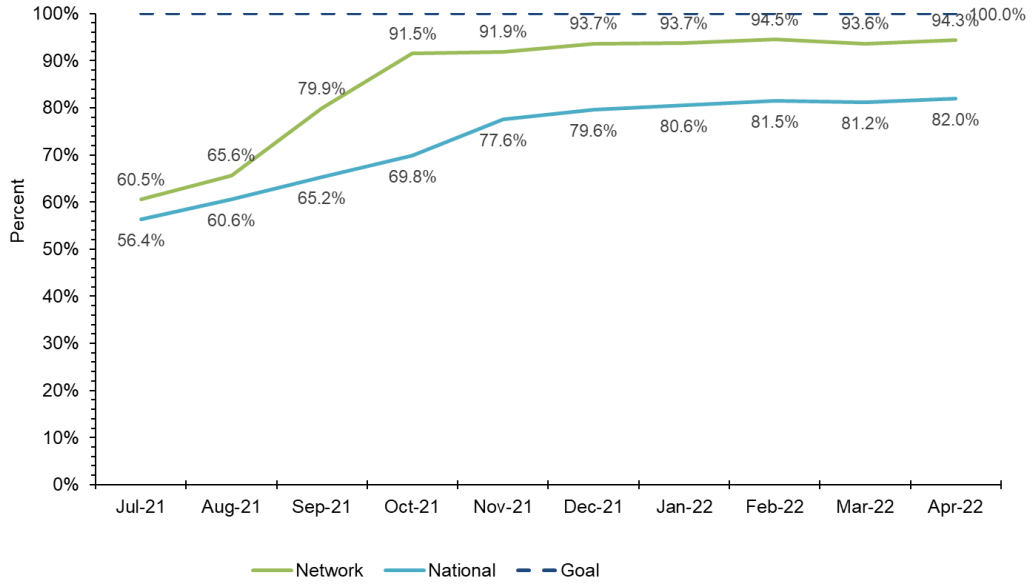
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed April 2022

**Network 2: Percent of Fully Vaccinated Dialysis Patients Receiving
COVID Vaccination Booster
December 2021 - April 2022**



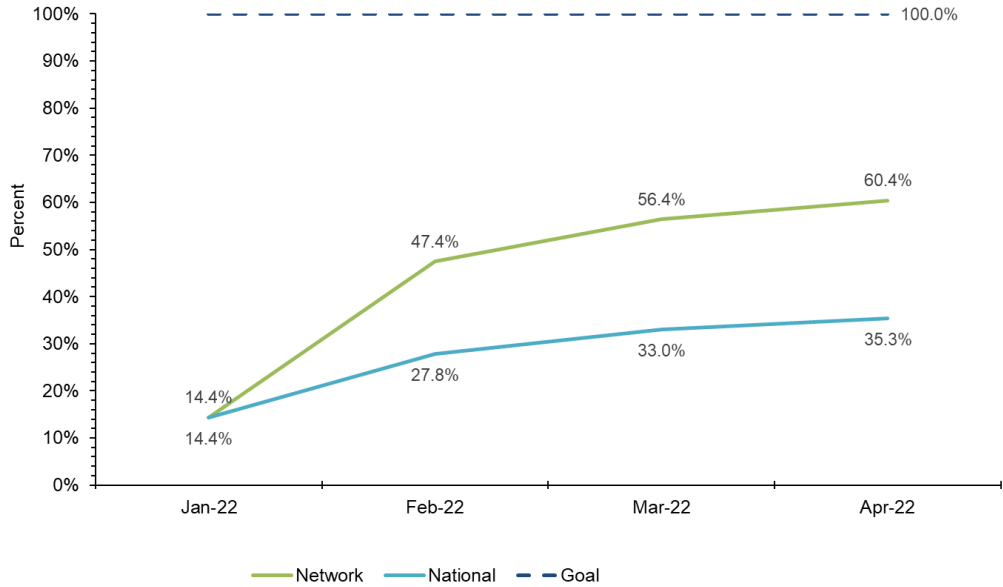
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed April 2022

**Network 2: COVID Vaccination Rate (Dialysis Facility Staff)
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed April 2022

**Network 2: Percent of Fully Vaccinated Dialysis Facility Staff Receiving
COVID Vaccination Booster
December 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed April 2022

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

Project Overview

The Network sought to attain the following goals:

- Achieve a 2% relative improvement in the rate of patient admission records from dialysis facilities entered within five days
- Achieve a 2% relative improvement in the rate of initial CMS-2728 forms submitted from dialysis facilities within 45 days
- Achieve a 2% 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.

Measure	Baseline January 2020 - December 2020	Goal (+2%)	Remeasure July 2021 - April 2022
Admissions within 5 business days	62.24%	67.72%	59.59%
2728 Forms Within 45 days	75.64%	79.49%	77.77%
2746 Forms Within 14 days	59.15%	62.62%	62.14%

Interventions

The Network sent reports of missing data to facility leadership, including the nurse manager, medical director, and administrator. This included, but was not limited to, reports on 1) Missing 2728 and 2746 Forms 2) First event, not new to ESRD 3) System discharges 4) Misaligned treatment and training, and 5) Gap reports.

The Network sent compliance reports to facilities based on their data submission compliance related to admissions, 2728, and 2746 Forms.

Contact information for all facilities, including email addresses of key personnel is maintained in the IPRO ESRD Contact Management System. The Network uses this information to communicate with all facilities in its service area and has capability to share facility specific information with all leadership staff of a facility in one email, using Adobe Mail Merge. This process allows the Network to send emails within a few hours of receiving data from the ESRD NCC.

The Network developed the Possible Duplicate / Near Match Form to assist facilities with admitting patients into EQRS, when the LDO batch system fails and facility staff are not able to admit the patient. The Network enforced “Patient Roster Verification” on a monthly basis to ensure all patients were accounted for at each facility. This topic was a recurring educational offering on **IPRO Learn**. The Network also conducted an activity in which facility staff viewed a recording on how to read and act on “Reports sent by the Network.” The Network directed facilities to conduct RCA to identify barriers to achieving the EQRS compliance goals. In addition, best practices from high-performing facilities were collected and distributed to all facilities to provide additional guidance in improving processes. All resources were available for facilities to access in the IPRO ESRD Help Desk.

Barriers to achieving goals

Communication was identified as a barrier between independent facilities and facilities of various corporations. Facilities are not always sure whether the patient will be admitted permanently or temporarily and are hesitant to admit them until 30 days have passed. Delays in admissions caused by the EQRS ‘Possible Duplicate’ error was also identified as a barrier as they required that the Network complete the admission on behalf of the facility. The inability of transplant centers to admit patients into EQRS required the Network to prioritize transplant admissions over dialysis. Challenges with staffing due to the pandemic were also identified as a major barrier in 2021. Additionally, the pandemic contributed to greater challenges in obtaining doctors’ signatures for 2728 Forms and in fulfilling the requirement to obtain cause of death and date of death information from hospitals for 2746 Forms.

Best practices spread to achieve goals

In February 2022, the Network used **IPRO Learn** to survey dialysis facilities on what they considered best practices in meeting EQRS data compliance. These best practices were shared with all dialysis facilities Network-wide under the following categories:

Teamwork & Communication

- Encouraging facilities to have their whole team responsible for compliance and submission of 2728/2746 Forms.
- Promoting good communication across facilities and corporations between the people that directly conduct the work needed to meet EQRS compliance: nursing staff inputting information into the computer, and staff that works with doctors on signing the 2728 Forms.
- Assigning a capable and responsible person to complete the task is important, as well as having a back-up person to perform the tasks whenever the primary person is unavailable.
- Defining the responsibilities involved in the Forms completion process and holding the staff member accountable for the tasks.
- Ensuring the contact person at the doctors’ offices knows about the requirement for the doctor to sign the 2728 Forms.

- Reaching out to hospitals as soon as possible to get COD (Cause of Death), or using '99 Unknown' if that information is not available, whenever the facility finds out that a patient has died.

Scheduling & Organizing

- Budgeting time to prioritize admission submission of Forms in a timely manner.
- Completing the Forms on the day of filing the care plan will help staff recall each patient.
- Creating a calendar of activities in which tasks are plotted to help the person completing Forms.
- Logging into EQRS on a weekly basis to see if there are any outstanding Forms that need to be submitted.
- Keeping organized, using checklists to ensure everything is done.
- Setting an alert and reminder of events a few days before the deadline.
- Inputting the patient into EQRS the day of admission and starting the 2728 Form that day.
- Using an Excel sheet to keep track of tasks that need to be completed.
- Checking which patients have been admitted/discharged each day and updating EQRS as needed in real-time.

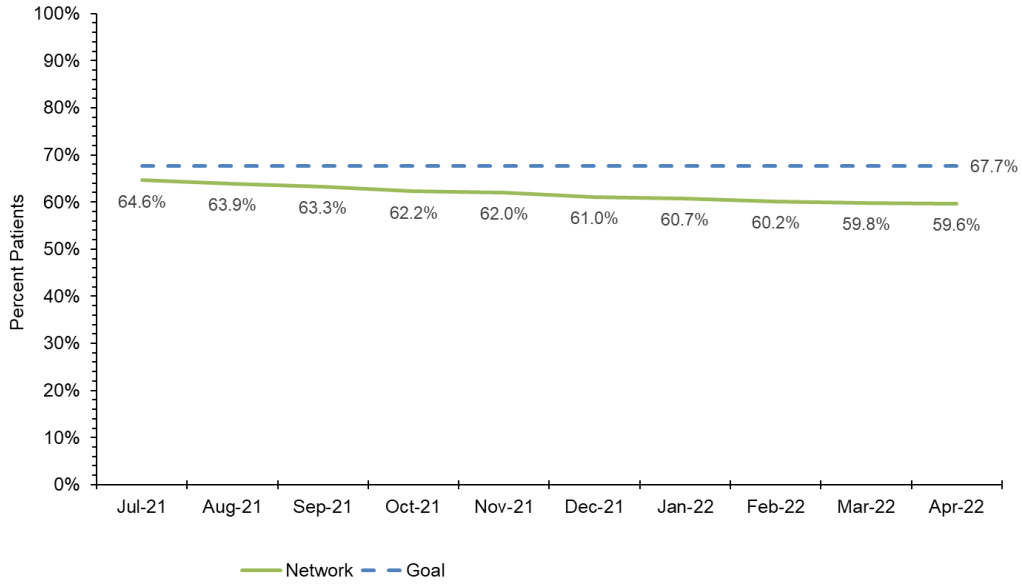
CMS Requirements & Training

- Providing re-education to staff on timely admission of data into EQRS.
 - [Admit with 5 business days], [2728 Form within 45 days], [2746 Form within 14 days]
- Making sure you have the information needed [all required fields] to submit all Forms timely.
- Promoting Network and CMS resources for new EQRS facility users to learn about expectations.

Network Staff also provided suggestions for Best Practices

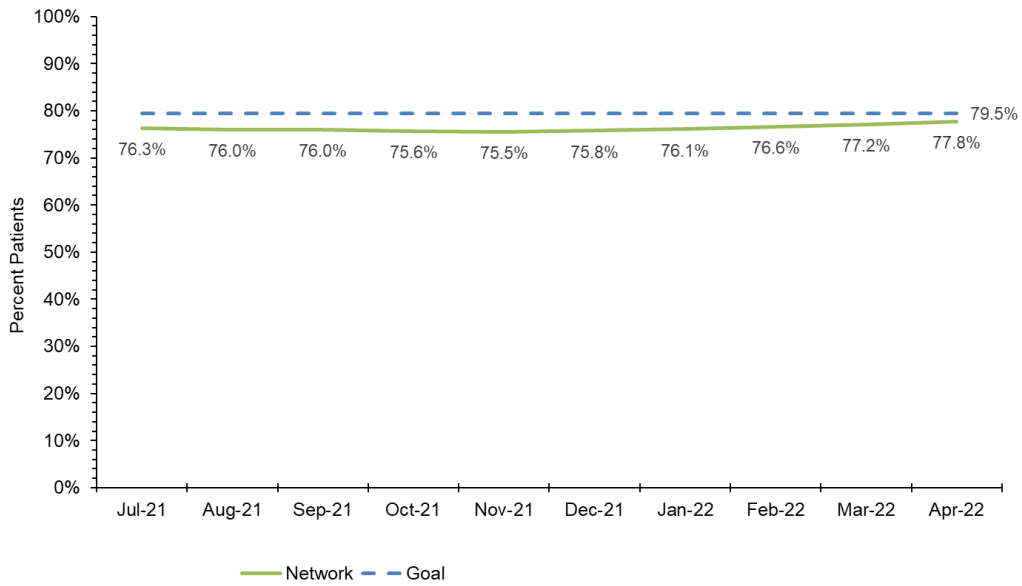
- At least two staff members per 50 patients should have access to EQRS.
- Reminders that only 2728 Form needs signature; 2746 Form does not need any signatures.
- Reviewing reports sent by the Network that show missing 2728 and 2746 Forms.
- Running the Patient Roster Report regularly to see which patients need to be admitted.

**Network 2: Admission Data Entered within 5 Days
July 2021 - April 2022**



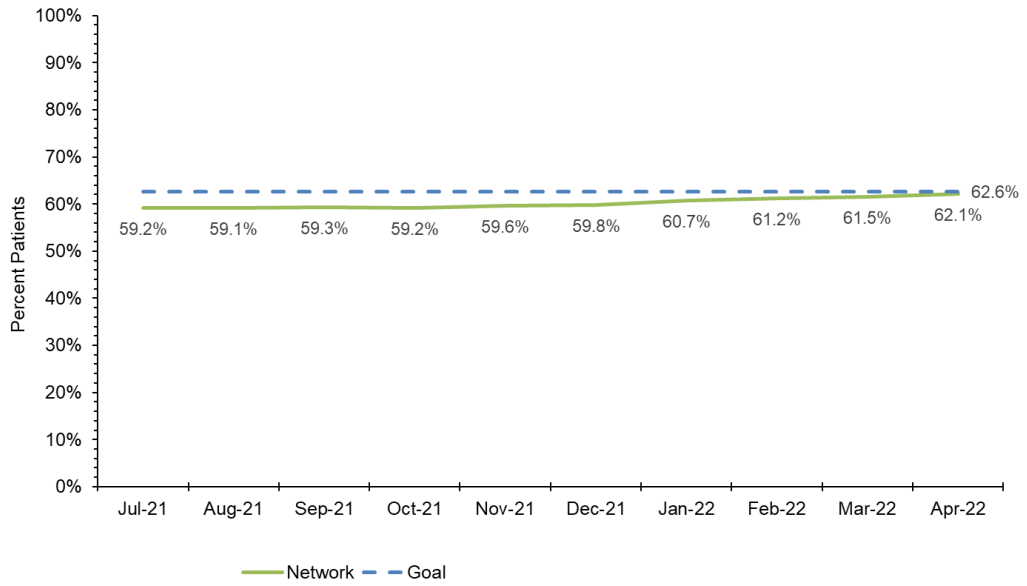
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

**Network 2: CMS-2728 Forms Submitted within 45 Days
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

**Network 2: CMS-2746 Forms Submitted within 14 Days of Death
July 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

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

Project Overview

There are numerous reasons why a dialysis patient may not be able to achieve and maintain optimal health that can lead to increased utilization of the hospital system. Health deficits that lead to hospitalizations, readmissions, and outpatient emergency room visits frequently are related to diagnosed and undiagnosed physical and mental health conditions. The Network worked with dialysis facilities to decrease hospitalizations, 30-day unplanned readmissions, and outpatient emergency room visits (non-COVID related) by 20% over the next five years. Hospitalization reasons that most frequently occur in the ESRD population, include, but are not limited to anemia, bloodstream infections, access infections and complications, high blood potassium levels, hypertension and congestive heart failure. During the base year (June 2021 to April 2022) the required reduction was 2%, with goals for reduction increasing incrementally over the five-year contract.

The baseline data for this project were collected from Medicare Claims for the period of January- December 2020. The Network reduced hospitalizations from 6,311 at baseline (BL) to 4,205 over the eleven-month remeasurement period (June 2021- April 2022). Despite best efforts the Network did not meet the reduction in readmission rate by 0.004%. The Network reduced emergency room visits by 0.698%, reported a lower hospitalization rate than the National rate, and achieved the highest emergency room visits reduction in the nation.

In addition, the Network worked to reduce hospitalizations with primary diagnoses related to COVID-19 by 25% from the baseline period of March 2020 - November 2020, as reported by Medicare Claims data. It was noted that facilities with high patient COVID-19 vaccination rates had the fewest COVID-19 hospitalizations.

The Network met the required 25% reduction of COVID 19 hospitalization, with a final reduction of 26%.

Interventions

Improving transitions between care entities was the primary focus of the Network's interventions that helped the Network decrease 30-day unplanned readmissions and emergency room visits (non-COVID 19). The Network worked with each facility to establish a Transitions Champion to assist patients transitioning from acute care to the dialysis facility. These champions assisted patients with medication education and understanding their discharge diagnoses and instructions; they also helped to arrange dialysis scheduling around transitioning patients' outpatient follow-up appointments.

To support Champions in their role, the Network provided segmented education using excerpts from the *ESRD Forum Transitions of Care Toolkit* and the *American Hospital Association Readmissions Toolkit.* The Network created an interview tool for use by the Transitions Champions to assure smooth transitions after discharge from acute care hospital stays. The

Network worked with the IPRO Quality Innovation Network-Quality Improvement Organization to learn from their years of experience in improving transitions of care.

The Network incorporated facility input and used a “what's in it for me” approach to tailor interventions to their specific needs. When the facilities identified missed treatments as a root cause of hospital admissions, the Network rapidly produced a patient facing FAQ document titled, *Don't Miss A Minute* to educate patients about the dangers of missed therapy. Additionally, facilities were provided education and strategies to decrease hospitalizations in their super-utilizer patients. Facilities were provided tools and education to prevent infection in the dialysis unit, with a focus on reducing bloodstream and access infections, rated as the number one and two diagnoses that lead to hospitalization in the Network 2 population.

Interventions aimed at reducing of COVID-19 hospitalizations focused on increasing COVID-19 vaccination rates in the vulnerable population. The Network kept facilities updated on current CDC guidelines for vaccinations and boosters. Facilities that reported COVID-19 hospitalizations were provided technical assistance to create strategies that would help to prevent spread. The Network used CDC guidelines, provided education to reduce spread in multigenerational households and to combat vaccine hesitancy, and worked to improve transitions and communication between dialysis facilities and nursing homes.

Barriers to achieving goals

During the BL period, the Network discovered that barriers to reducing hospitalizations, readmissions and emergency department visits were prevalent in rural dialysis facilities which had limited access to primary care providers and higher hospitalization rates resulting in patients seeking care at hospitals, often hospitals with no dialysis services. The Network created a dual purpose, patient-facing document containing frequently asked questions (FAQ) to educate rural patients on the benefits of having a primary care physician and a selecting hospital that could provide dialysis services so dialysis therapy would not be delayed during the transfer process to another care facility. This FAQ was essential during the COVID-19 surge in which some patients experienced delays of transfer to providers offering dialysis services due to bed shortages.

The Network identified rural facilities that had increased utilization of the emergency room for provision of non-acute care issues. Many hospitals in these rural areas did not provide dialysis services, and overuse of the acute care hospitals delayed patients' access to care and required transfer to other hospitals that could provide this specialized care. Facilities reported a lack of sufficient numbers of primary care physicians per capita.

Facilities in large urban areas were noted to have the highest readmission rates. The Network began to work with these facilities to explore factors related to health equity in these neighborhoods and helped the facilities to address social determinants of health that lead to health inequities.

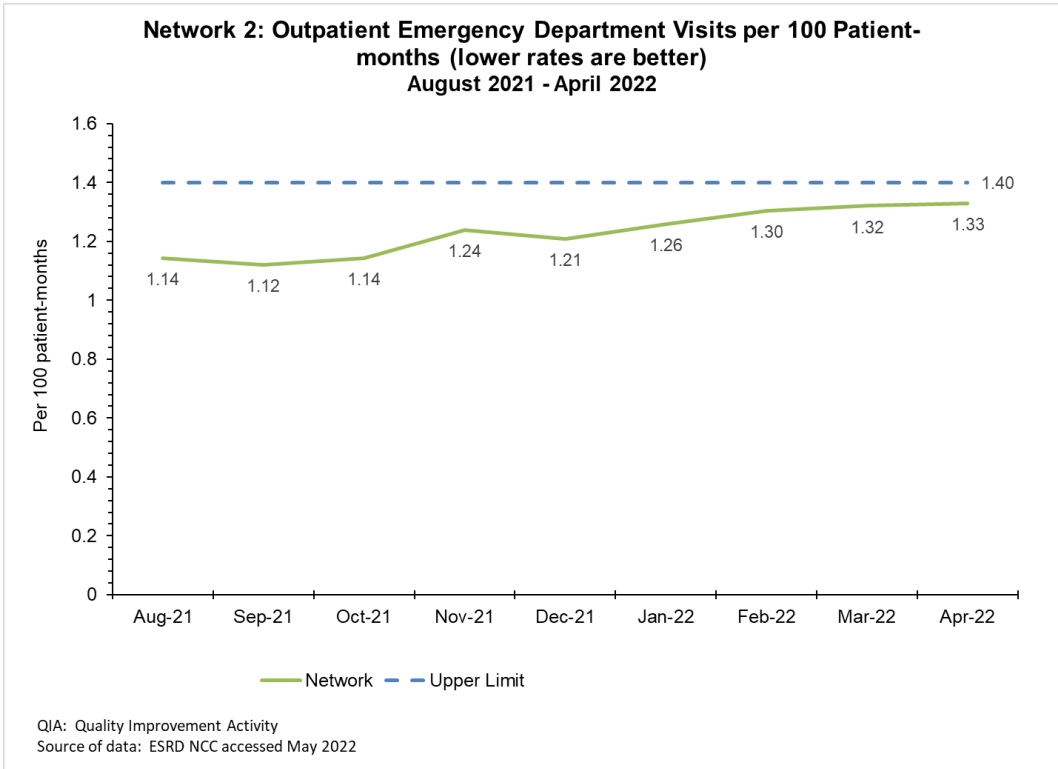
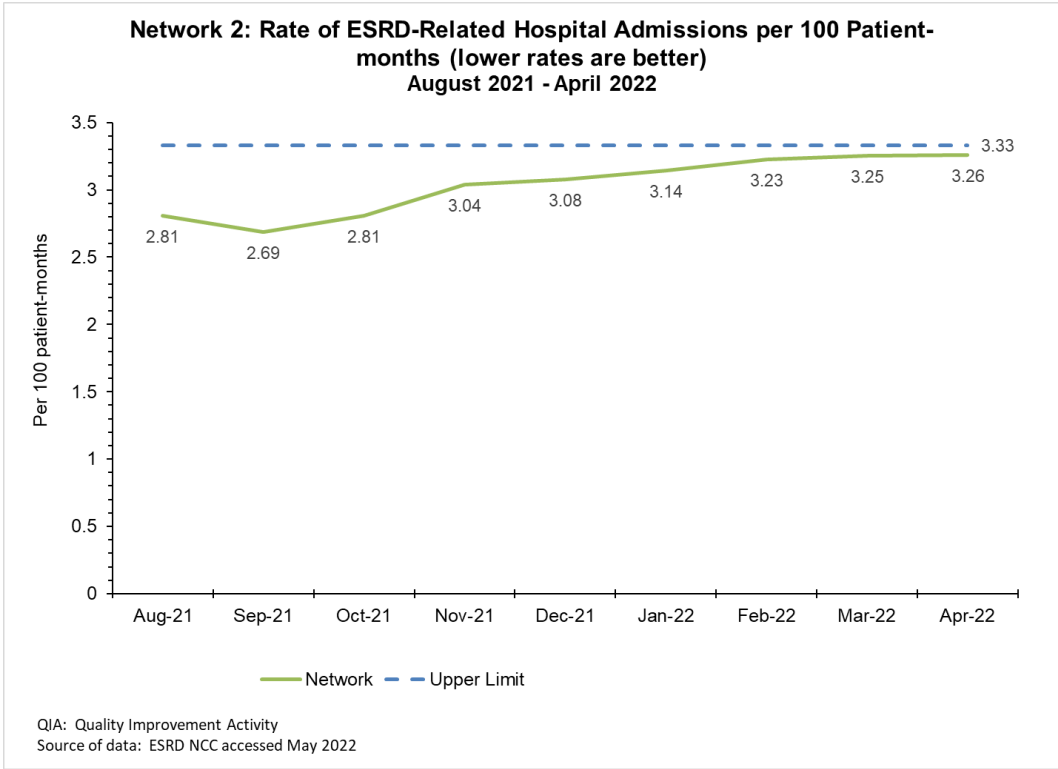
The Network's efforts were focused on reducing instances that occurred in hospitalizations, readmissions and ER visits without measuring the rate of the reduction in facilities. This error resulted in the Network not meeting the goal of unplanned readmissions by 0.0004%.

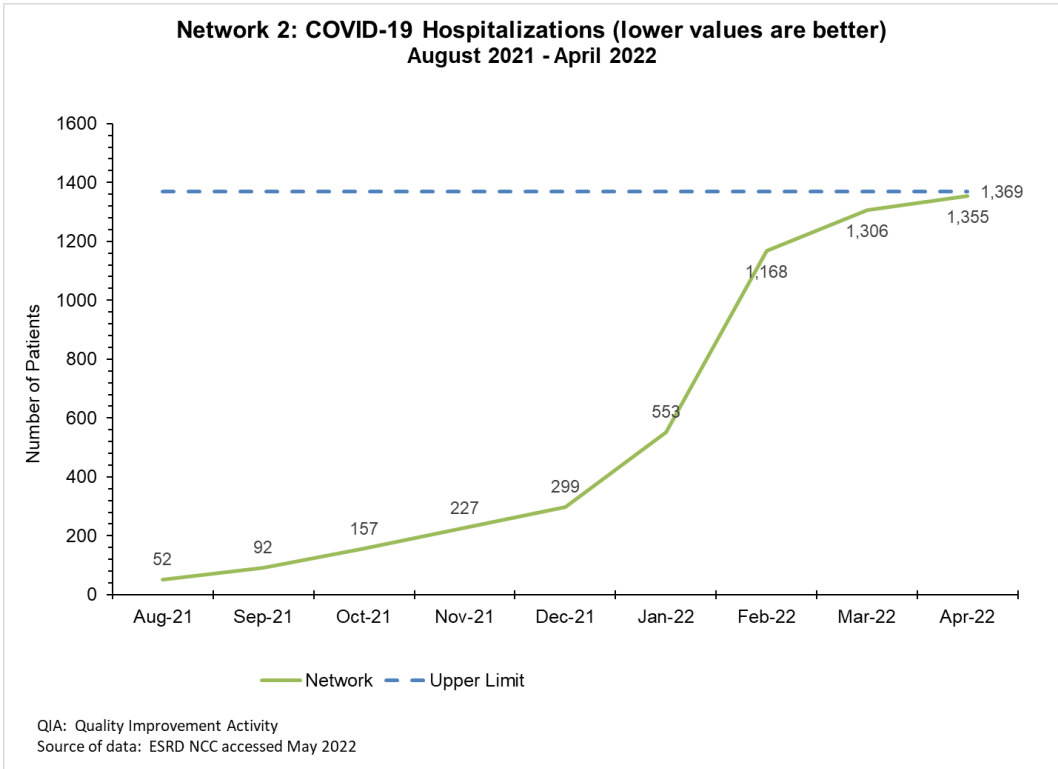
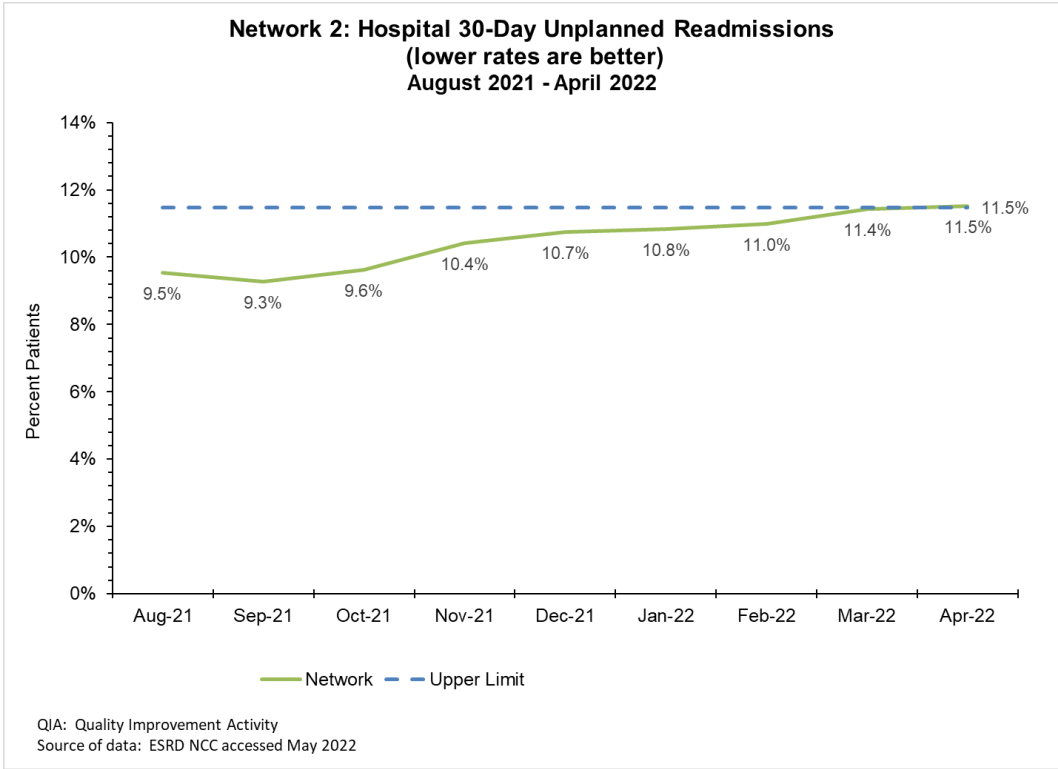
Best practices spread to achieve goals

To make the transition process easier for patients, the Network spread best practices learned from facilities within the Network service area and the literature. *Wallet Cards To Reduce Hospitalization* were distributed to patients to improve communication between dialysis facilities and hospital staff. When carried by patients, these cards provided a streamlined process to communicate dialysis plans of care to the hospital staff.

The Network learned best practices from facilities with high COVID-19 vaccination rates and shared these practices with the community. These high performing facilities incorporated the medical directors in education on vaccination, held vaccine clinic days and shared *Why I Got the Vaccine* statements from fellow patients and staff on a visual display to encourage the hesitant patients to obtain vaccinations.

Integration of patients in the Network's efforts empowered them to assist in hand hygiene and hand sanitizer audits at the facility level, which in turn led to improved hand hygiene practices that resulted in lowering infections rates and hospitalizations. The Network provided education to PFRs via **IPRO Learn** and Webex meetings, on the effects of multiple admissions, readmissions, and unnecessary emergency department visits on the ESRD population. Additionally, patients were educated on the patient facing tools created by the Network, which included *Don't Miss a Minute Wallet Cards to Reduce Hospitalization* and were encouraged to distribute the tools to their peers.





Depression June-April 2022

Due to contract goal adjustments, the Network worked toward the goals of this quality improvement activity but was not evaluated on results.

Project Overview

Research has indicated depression affects almost 40% of end stage renal disease patients (Shirazian et al. #). Factors contributing to increased rates include the psychological and biological changes which often accompany the diagnosis. Patients with depression are reported to have a lower quality of life and increased mortality. The Network worked with dialysis facilities to increase the remission rates of depression amongst patients.

Interventions

The Network focused on assisting facilities with appropriate screening documentation and ensuring screenings were being completed as required. Monthly activities focusing on a specific aspect of depression or behavioral health were assigned to the facilities and were completed in **IPRO Learn**, which housed the *Behavioral Health Toolkit*, containing several resources outlining symptoms, screenings, treatment options, and tools for additional behavioral health diagnoses. Resources include the *Dialysis Patient Depression Toolkit*, *Zone Tool: Self-Management for Depression*, and the caregiver resource *When Your Loved One is Depressed: Tips on How You Can Help*. The Network frequently spoke with facilities to provide one-on-one technical assistance to assist in creating processes for entering depression screenings and brainstorming interventions to increase patient participation in mental health services.

Barriers to achieving goals

A root cause analysis determined the top barriers preventing patients from accessing mental health were the stigma associated with seeking assistance and limited access to mental health services. Additionally, facilities found that the factors causing these barriers included denial of the presence of symptoms, lack of resources, and limited education. Barriers associated with accurate data collection and reporting in EQRS were also reported. The Network recognized more education was needed on the specific depression screening choices and their definitions.

Best practices spread to achieve goals

While several facilities noted they had a process in place for assessing and monitoring depression symptoms and treatment, the Network observed there was communication breakdown within the facility when it came to reporting depression screenings and the follow-up process. To assist facilities in reporting in EQRS and to ensure accurate reporting on a monthly basis, the Network developed the *Facility Guide to Entering the Clinical Depression Assessment in EQRS*. The Network promoted monthly resources targeting specific aspect of depression, suggesting methods for integrating education into facility culture and procedures.

Facilities integrated best practices into their screening process, including the use of educational resources for patients on depression screenings, discussing the difference between symptoms of depression and symptoms of chronic illness, and incorporating wellness screenings into patient education.

Nursing Home June 2021-April 2022

Due to contract goal adjustments, the Network worked toward the goals of this quality improvement activity.

Project Overview

Networks were tasked with achieving a 4% reduction in hemodialysis catheter infection rates in dialysis patients receiving home dialysis within nursing homes, a 2% decrease in the incidence of peritonitis in dialysis patients receiving home dialysis within nursing homes, and a 2% decrease in the rate of nursing home dialysis patients receiving a blood transfusion. The Network achieved a 3% reduction in blood transfusions, but the reduction of hemodialysis catheter infections was not achieved.

Interventions

The Network surveyed all dialysis facilities in New York to quantify the number of home modality programs in the nursing home setting and patient census. Based on the survey, the Network's Home Program Coalition included 14 for-profit facilities under one CCN and nine independent non-profit facilities providing dialysis care within a skilled nursing facility (SNF). The nine non-profit facilities submitted data to the Network in addition to using EQRS, and NHSN, and actively participated in ongoing data driven technical assistance offered to all dialysis facilities within the Network's service area. They added a service line for providing bedside peritoneal dialysis as well as hemodialysis for ventilator patients in two LTC facilities.

Each facility experienced fluctuating census as most patients were in SNFs with an average length of stay of 21 days. There were also instances of "0" census. Facilities participated in weekly technical assistance, and although they completed training, they had not been actively using EQRS and NHSN to report data due to staffing shortages and turnover.

With support from the Network Advisory Committee, the Network developed and deploy through **IPRO Learn** various education materials, including tool kits, focused educational videos, "one pager's," continuing education offerings, and knowledge assessments.

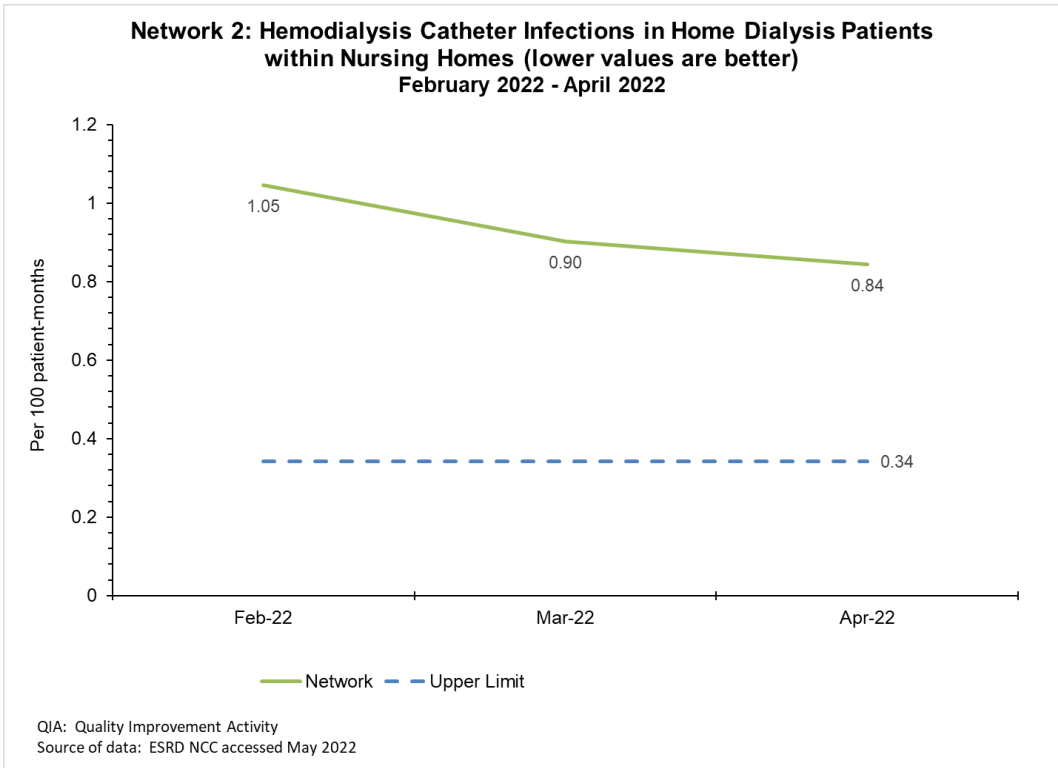
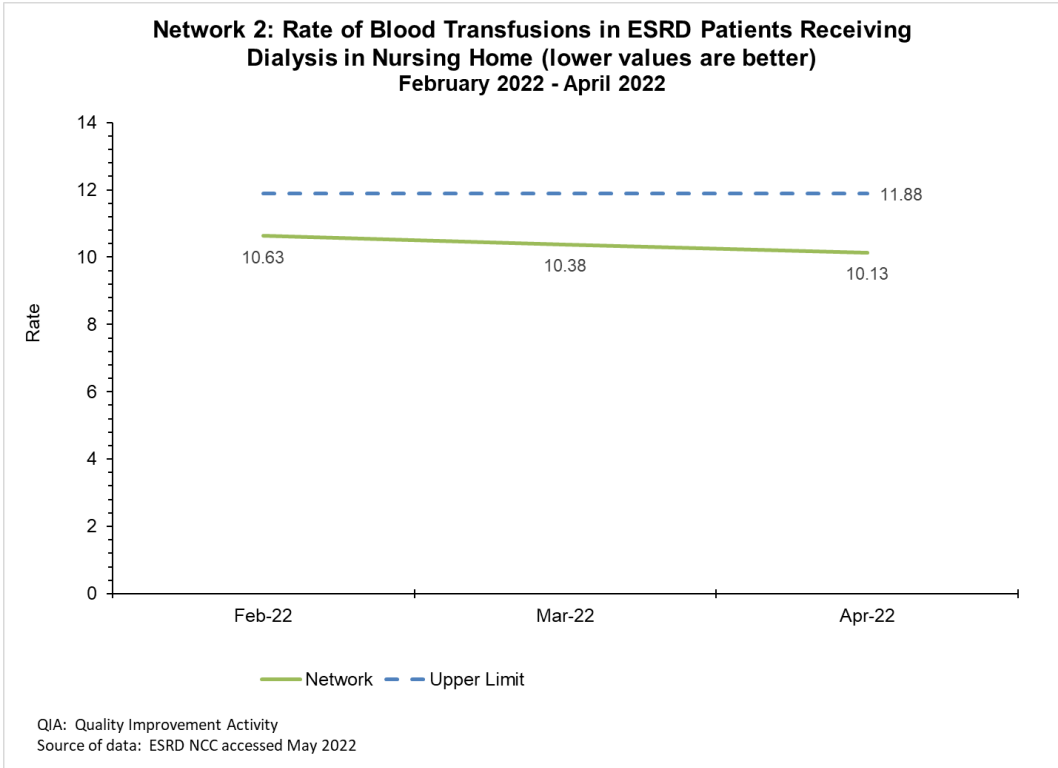
Barriers to achieving goals

The primary barrier was a lack of NHSN, EQRS, and Claims data from Coalition facilities, resulting in the need to adjust methodologies. The Network collaborated with the ESRD NCC to clarify data definitions to educate facilities on the baseline and remeasurement reports.

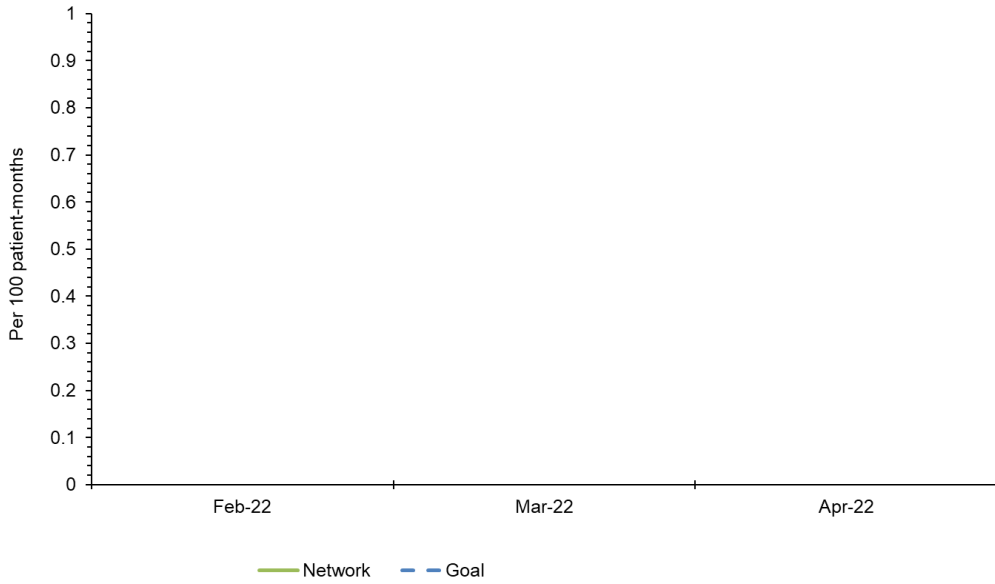
Best practices spread to achieve goals

The use of non-vetted data allowed for improved dialogue and communication on practices within the various clinics. The Network educated facilities quality of care during staff shortages, CMS requirements related to data collection for different initiatives (QIP, Compare, CC), and the value of accurate reporting to enable recognition and spread of quality practices.

The Network's success in this quality improvement activity was recognized during a best practice lecture at the April 2022 Spring Clinical National Kidney Foundation Conference.



Network 2: Peritonitis Events in Home Dialysis Patients within Nursing Homes (lower values are better)
February 2022 - April 2022



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

Telemedicine June-April 2022

Due to contract goal adjustments, the Network worked toward the goals of this quality improvement activity.

Project Overview

The Network worked to increase the number of rural patients using telemedicine to access a home modality. The goal was to increase the number of rural patients who use technology to gain access to their home modality providers by 2%. The goal was then reduced by CMS to a 0.98% increase due to the National Coordinating Center (NCC) providing data late in the project (1/2022) Patients in the Network's service area had 142 telemedicine visits at baseline and 154 at remeasurement; an 8% increase

The Network focused communications and interventions on home programs that drew from rural patient populations. The Network successfully promoted the use of telemedicine in home rural populations using the following interventions and barrier mitigation strategies.

Interventions

The Network focus on providing facilities with education on how to use a telemedicine platform for a home clinic visit, stressing the safety benefits of telemedicine use for the home patient. During our work through the year Network staff saw the use of telemedicine waning, and through an RCA process the Network identified that providers and patients were stopping use because they viewed telemedicine as a "pandemic-only" option. Once this problem was identified the Network encouraged providers and patients to continue use of this important technology. Provider resources focused on easy-to-use technologies and best practices that support telemedicine use, while the patient resources emphasized the benefits in time, cost, safety and travel reduction.

Barriers to achieving goals

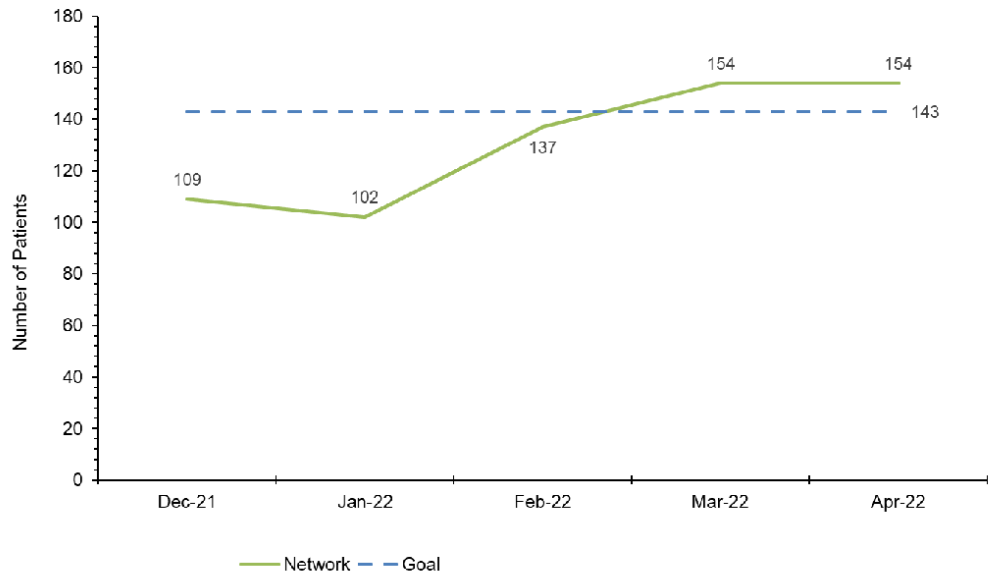
Overcoming the technology issues with providers and patients proved to be an ongoing barrier in this work. Network staff learned that with the right approach and the use of simple readily available platforms, that barrier can be overcome. Network 2 was successful in doing so and was able to support the community in expanding use of telemedicine during the year.

Best practices spread to achieve goals

Facilities that integrated telemedicine into their practice sustained its use as a normal part of their offerings to patients. These facilities provided time and practiced training sessions with patients, offered easy-to-use platforms, created reminder systems, and advocated for the use of telemedicine as equally beneficial as a face-to-face visit. The Network aimed to spread best practices and advocate for programs to fully embed these practices into their services.

The Network provided Monthly Performance Scorecards to the facilities that had rural patients receiving a home modality to inform them of the number of telemedicine visits that each rural patient on a home modality had and identified patients that they could work with to promote telemedicine as safe way for home modality patients to have clinic visits.

**Network 2: Number of Rural ESRD Patients Using Telemedicine
December 2021 - April 2022**



QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022

Vaccinations Pneumococcal-23 and Staff Influenza June-April 2022

Due to contract goal adjustments, the Network worked toward the goals of this quality improvement activity but was not evaluated on results.

Project Overview

Pneumococcal disease can lead to serious, possibly deadly, illnesses such as pneumonia, meningitis, and sepsis. Anyone can get these diseases, but some people have a higher risk. People with the highest risk include infants, people 65 years and older, and adults of any age with certain health and immunocompromised conditions such as ESRD and transplant patients.

Current guidelines for renal patients are: one PSV 13 vaccine, followed a year later by PPSV 23. The first PPSV vaccine should be followed by second and third vaccines, at five -year intervals for patients to receive a total of three PPSV 23 vaccines in a lifetime. The Network implemented strategies to increase the number of PCV 13 and PPSV 23 vaccines for patients with ESRD, with a focus on vaccine uptake for patients 65 years and older, and worked with facilities to increase the rate of influenza vaccines for facility staff to 90%.

Interventions

The Network focused on providing education to patients on the importance of pneumococcal vaccination. Tactics included presentations to the Patient Facility Representative Alliance on the benefits of the vaccine and the protection it affords against severe illness. Facility staff were given CDC guidelines and a Network-developed video *Improving Patient Outcomes with a Vaccination Plan* to facilitate documentation in NHSN of healthcare personnel vaccinations.

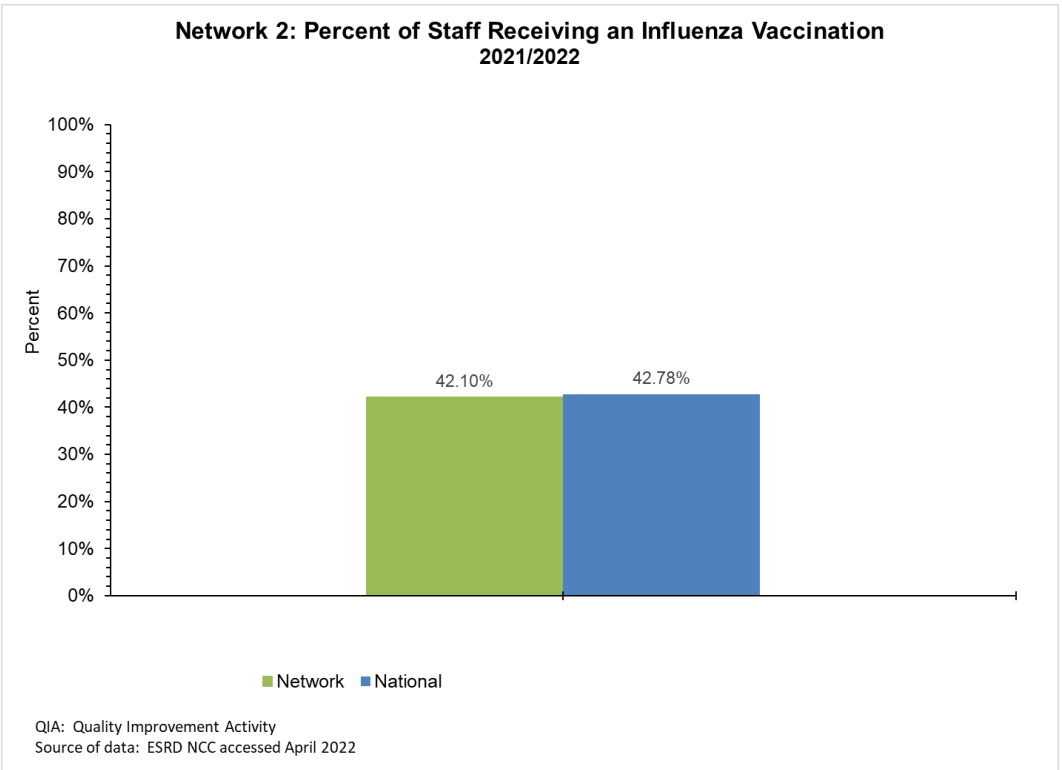
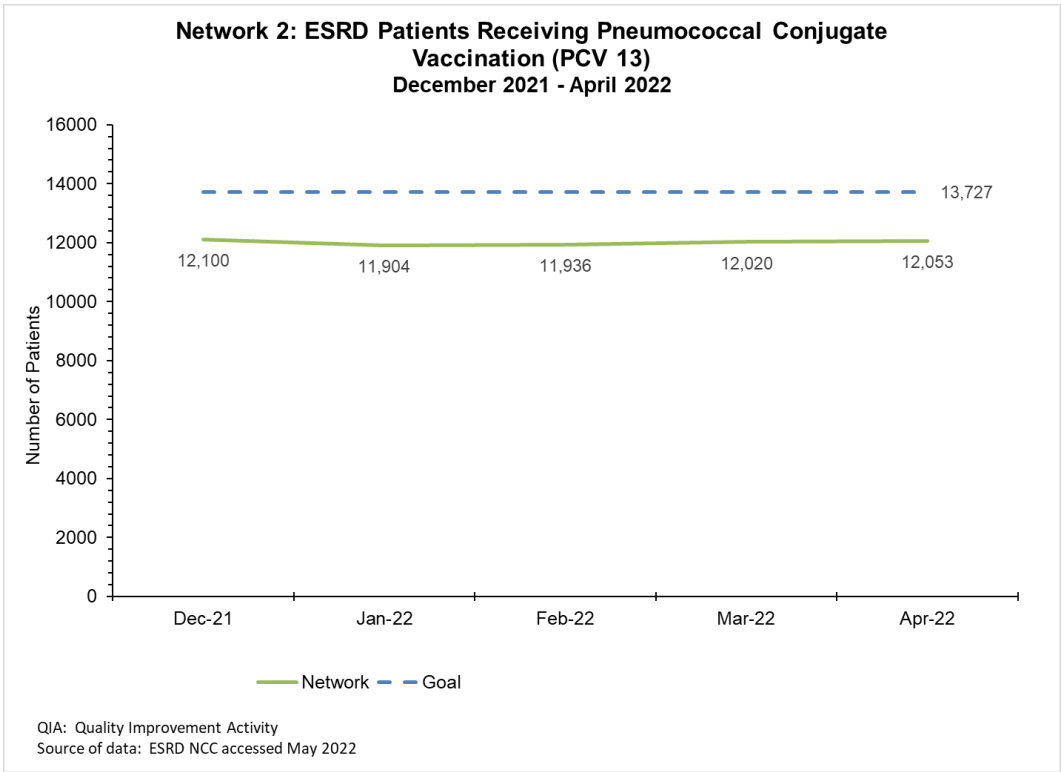
Barriers to achieving goals

The inability to monitor and track the uptake of vaccines in the community was a large barrier. Changes in CDC guidelines for pneumococcal vaccine administration caused confusion for dialysis facility staff. Capturing vaccination information from alternate sites (hospitals and outpatient clinics and pharmacies) was an ongoing challenge for the dialysis facilities. The Network identified confusion among facility staff regarding how vaccine administration dates should be recorded in EQRS. Patients and staff were hesitant about receiving multiple vaccines, and many facilities did not know how to report staff vaccinations in NHSN.

Best practices spread to achieve goals

One facility that self-reported increased vaccination rates stated that any time that a patient was hospitalized or went to their primary care physician, the facility staff asked the patient if they had obtained a “pneumonia shot,” and found that many times they had. This increased reporting accuracy for the facility. Those facilities that told patients, upon admission, that the pneumococcal vaccine was essential to maintain their health, and then provided it during the first few days of dialysis treatment, were successful in increasing their vaccination rates.

The Network launched a continuing education course in **I PRO Learn** for dialysis staff to earn a CE for learning about the benefits of vaccinations.



ESRD NETWORK RECOMMENDATIONS

Facilities that Consistently Failed to Cooperate with Network Goals

The Network has garnered facility support throughout our community to support Network initiatives and goals, even with modifications due to the pandemic. The Network did not identify any facilities in its service area who failed to cooperate with the goals.

Recommendations for Sanctions

The ESRD Network does not recommend any facility for sanctions.

Recommendations to CMS for Additional Services or Facilities

The Network would like to recommend the following services/facilities:

- Organization of a national education effort to increase nephrology education for all disciplines and promote increased interest in this professional path: Creation of a national program to recruit and build nephrology physicians, nurses, social workers, registered dietitians, and technicians, which can support increased chronic kidney disease (CKD) efforts, maintain ESRD care and advance QI initiatives in CKD and ESRD.
- Enhance surveillance of Nursing Home - Home Dialysis Providers by better CCN delineation to capture location of services and increased offering of this service line in Network 2.
- Growth of Home Support staffing to offer training and increase the number of patients receiving treatment in their homes Free up regulations to allow nursing oversight of training, but only nursing to conduct training.
- Add transportation, dental, and social support network services to overcome barriers in transplantation.

ESRD NETWORK COVID-19 EMERGENCY PREPAREDNESS INTERVENTION

As part of its responsibility to respond to emergency events, the Network monitored the COVID-19 virus for potential impact, and strategized support needs for the ESRD community.

The Network relied on collaborations with, and information sharing from, the ESRD NCC, CDC, CMS, KCER, the New York State Department of Health, large dialysis organizations (LDOs), patient-advocacy groups, renal listservs, and other stakeholders, to stay abreast of changing guidance. The Network used a number of processes to communicate information and/or guidance to facilities and patients. These methods were based on strategies that had previously been found to be effective in that population based on the controls the Network had in place. Critical information (guidelines, waivers, tools, resources, requests to assess local/regional impact, and strategies to address barriers to access to care) were disseminated to dialysis facility staff and/or patients via electronic newsletters, email, fax, website postings, webinars, blogs, and social media. The Network continued to maintain COVID-19 designated pages for both patients and professionals on our website, where new resources are easily identified by “New!” to alert the ESRD community of timely content. The Network created a COVID-19 banner that directed facility providers, patients, and stakeholders to updates on our website. This banner continues to appear in all Network emails and communications. The Network implemented a number of controls to ensure timely receipt of information and guidance sent to dialysis facilities.

To ensure that our community had the tools, information and supplies needed to sustain operation during the pandemic, the Network logged and tracked all calls and communications from facilities, the New York State Department of Health (NYSDOH), and Office of Emergency Management (OEM) to assess reductions in staff, availability of personal protective equipment (PPE) and implementation of infection prevention measures, and to promote CDC guidance. The Network actively worked to prevent access to care issues related to lack of transportation secondary to COVID-19 and non-COVID-19 problems. By conducting environmental scans via focused communications with facility social workers/facility administrators, contacts at the state OEM and transportation companies, the Network was able to understand and appropriately address transportation concerns.

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION

For individuals who have been diagnosed with ESRD, missed dialysis treatments can have serious adverse health effects. This makes the ESRD patient population especially vulnerable during emergencies and disasters. The Network relies on longstanding partnerships with the New York State Department of Health and Office of Emergency Management, and large dialysis organization emergency management teams to ensure safety and continuity of care for ESRD patients in New York State.

Staffing Shortage

The Network assembled Advisory Committee (AC) members to guide our work within the service area and established community coalitions focused on each “Objective and Key Result (OKR)”. The Network heard directly from AC members about the healthcare staffing crisis that existed due to resignations and other staffing losses. As the Network reached out to perform technical assistance, the number one barrier encountered was a lack of the necessary personnel or qualified personnel to perform the quality improvement work. The Network worked to help facilities mitigate barriers by suggesting alternate means and methods to offer education and support for quality improvement activities, advocating for a team approach to help move the project forward, and involving engaged patients to assist the interdisciplinary team. The Network focused efforts on reaching out to all chairside staff members to be part of the solution by offering educational resources and interventions that all staff as well as patients could support. These efforts were beginning to gain traction until October - November 2021 when COVID case counts rose. The resurgence of the pandemic again required that the primary quality improvement effort be directed at disease transmission prevention and had a secondary effect of further reducing available staffing. The Network worked to maintain a balance of moving quality improvement efforts forward, where possible while providing technical assistance to support facilities with COVID outbreaks throughout this period. In this regard, Network efforts focused on highlighting education and outreach on the need for vaccinations and booster shots. Most facilities struggled with these issues into the new year. In February – March 2022, when cases started waning, the Network was again able to fully engage facilities in the new work. Many facilities are still running with open positions and the Network receives notice that some of the key positions are being filled and staff are being trained to fill the void in the community. As resources stabilize, the Network continued to strive to link new leads to the projects and maintain ongoing education and communication focused on reaching each OKR.

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.