



End-Stage Renal Disease  
Network of New England

# 2021 Annual Report



## **Maine State House, Augusta, ME**

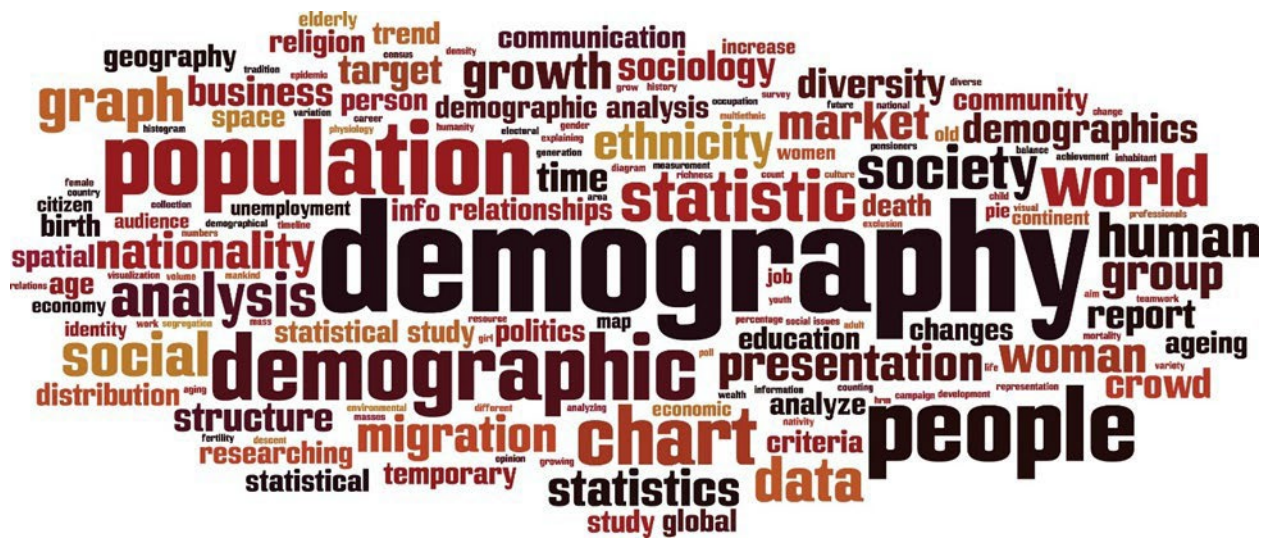
This report will cover quality improvement efforts led by the ESRD Network from January 1, 2021 – May 31, 2021 and the Base Year of Task Order Number 75FCMC21F0001, June 1, 2021 – April 30, 2022

July 2022 - Revised February 2025  
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## ESRD DEMOGRAPHIC DATA

IPRO ESRD Network of New England (Network 1) 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 1 service area, IPRO manages the ESRD Network of New York (Network 2), 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 residing in the four Network service areas detailed above.

Network 1 serves ESRD patients, dialysis providers, and transplant centers in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The role of Network 1 is to improve the quality of care and quality of life for people who require dialysis and/or kidney transplantation. The Network aligns its mission and activities with the U.S. Department of Health and Human Services' (HHS) National Quality Strategy (NQS), the Centers for Medicare & Medicaid Services (CMS) goals addressed in the CMS Quality Strategy, and the CMS 16 Strategic Initiatives designed to result in improvements in the care of individuals with ESRD. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

New England's 15.1 million residents are distributed over approximately 72,000 square miles. Its six states differ widely in terms of geography, population density, and socio-economic factors, all of which influence the availability of services, treatment choices, and quality of care for ESRD patients. For example, Maine is the largest New England state but has very few facilities (20, located primarily along the coast) providing service to a population that is spread out across the state. This presents a challenge for ESRD patients who may have to travel long distances to reach the nearest dialysis facility.

Of the total population of New England in 2021, 77.43% resided in the three southernmost states (Connecticut, Massachusetts, and Rhode Island), which also have the greatest number of individuals needing dialysis, and the greatest number of treatment centers. The remaining 22.57% resided in the three northernmost states (Maine, New Hampshire, and Vermont), which have the fewest dialysis facilities.

According to the U.S. Census Bureau estimates for 2021, New England's population was 84% white, 5.77% African American (a 2.2% decrease from 2020), 3.68% Asian (a 1.5% decrease from 2020), 0.6% American Indian and Alaska Native, and 2.33% Other race. The Hispanic or Latino population represented 8.9% of the population. With the exception of African American (13.4%) and white (76.3%) ESRD prevalent patients in 2021, data reported for the remaining U.S. Census Bureau population categories closely aligned with the race and ethnicity of ESRD patients in the New England states.

The ESRD population in the Network's service area was the smallest in the country as of December 31, 2021, according to ESRD National Coordinating Center (NCC) end-of-year data. As of December 2021, 14,786 prevalent dialysis patients were reported as receiving dialysis treatment from facilities in the Network service area. There were 3,864 incident patients in 2021, a 2.2% increase from the 3,781 patients that started treatment in 2020.

These patients were served by 203 Medicare-certified dialysis facilities, which included four Veterans Affairs (VA) hospitals and 15 transplant centers. In 2021, 144 dialysis facilities in the Network's service area (70%) provided evening services. Access to care after normal business hours can greatly improve quality of life for ESRD patients who are able to work full-time while receiving treatment.

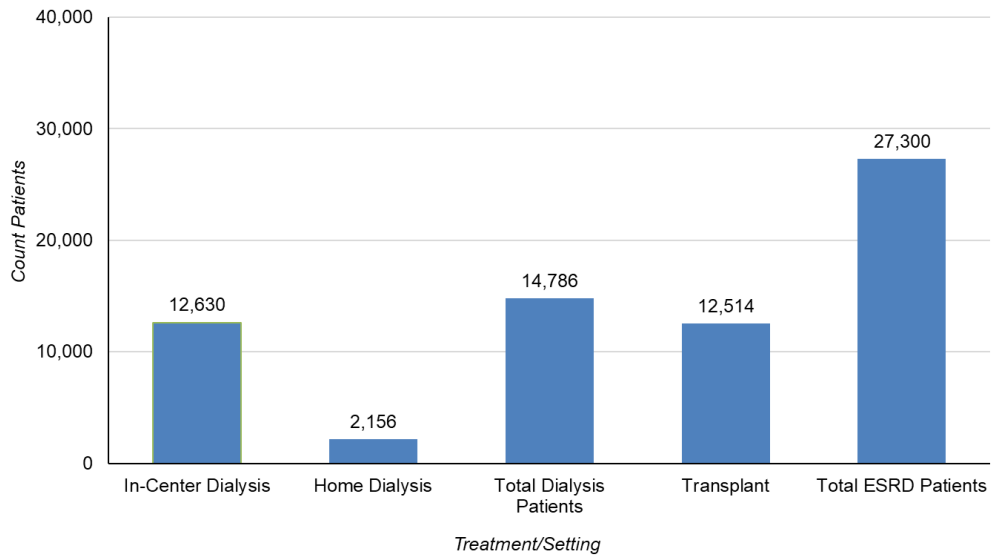
Patient Facility Representatives (PFRs), nominated by facility staff to engage with their peers, provided feedback about quality improvement activities and helped develop the Network's educational materials. Nominated PFRs participated in Network's calls and events as well as national calls. The PFR Alliance group met virtually on a monthly basis. During these meetings the Network provided an overview of the status of projects as well as monthly assignments.

The Network 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.

In 2021, the Network worked in collaboration with its Network Council, Medical Review Board, Patient Advisory Committee, Grievance Committee, and Network activity-specific committees to develop quality improvement projects aligned with the CMS-identified goals for the ESRD Network program. The Network worked closely with ESRD patients, patients' family members and care partners, nephrologists, dialysis facilities and other healthcare organizations, ESRD advocacy organizations, and other ESRD stakeholders to improve the care for ESRD patients throughout New England.

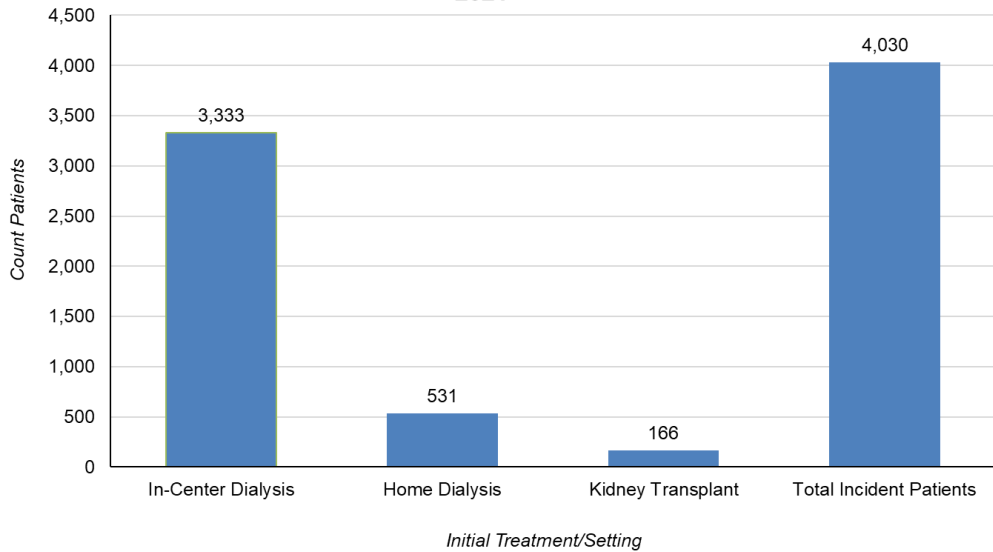
The Network deployed interventions that targeted patients, dialysis and transplant providers, and other stakeholders. These interventions, which focused on engaging patients, reducing disparities, and improving quality of care for ESRD patients are detailed in this report.

**Network 1: Count of Prevalent ESRD Patients by Treatment/Setting 2021**



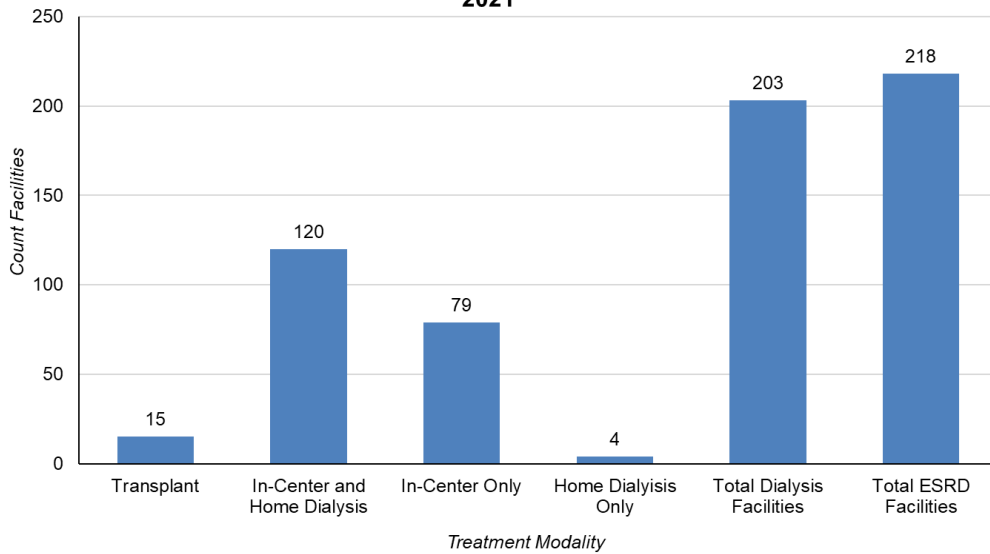
Total Dialysis Patients = In-Center Dialysis + Home Dialysis  
 Total ESRD Patients = Transplant + Total Dialysis  
 SNF dialysis patients are not shown due to small numbers.  
 Source of data: EQRS May 2022

**Network 1: Count of Incident ESRD Patients by Initial Treatment/Setting 2021**



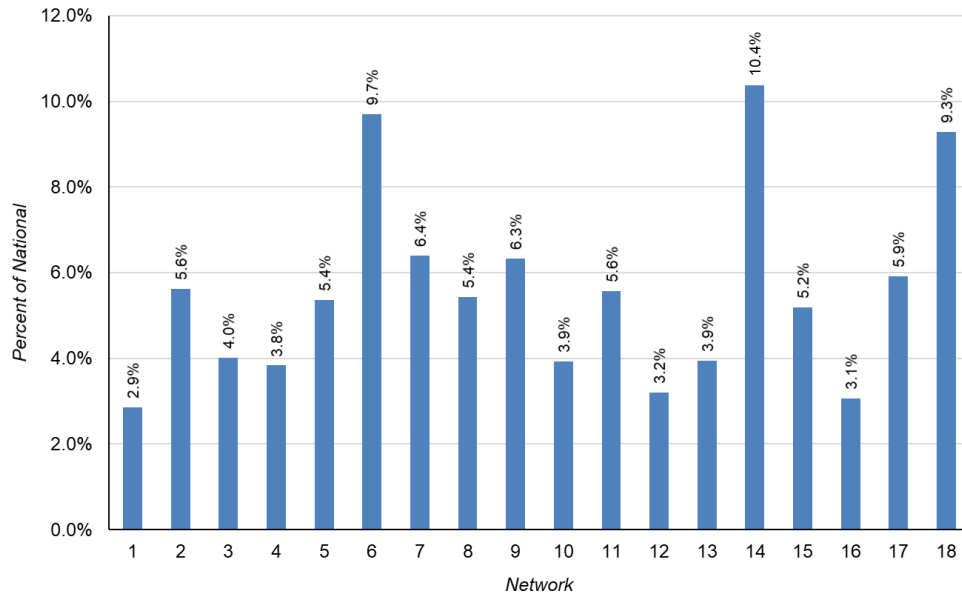
Total Incident Patients = In-Center + Home + Kidney Transplant  
 Source of data: EQRS May 2022

**Network 1: Count of Medicare-Certified Facilities by Treatment/Setting 2021**



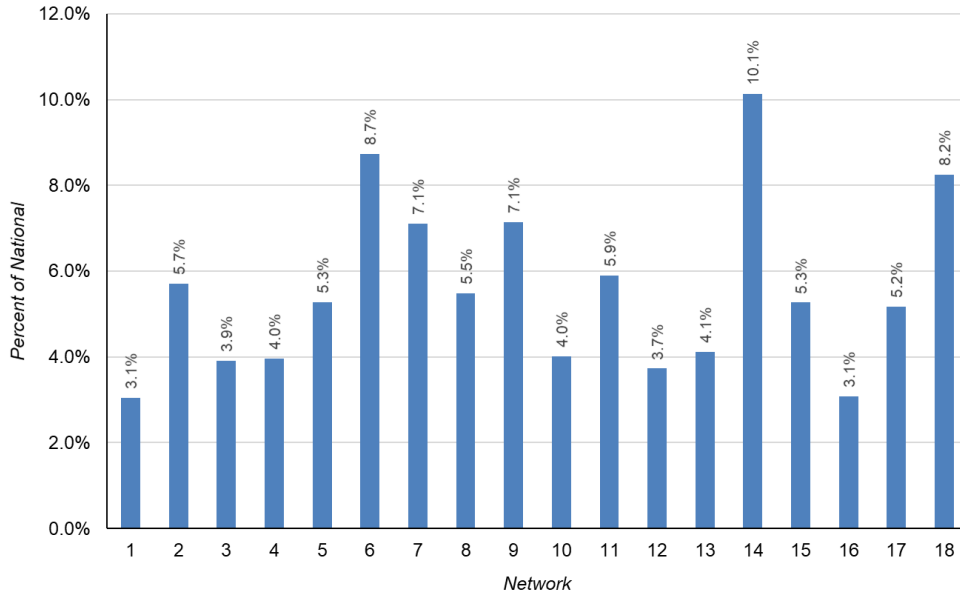
Total Dialysis Facilities = In-Center and Home Dialysis + Home Dialysis Only + In-Center Only  
 Total ESRD Facilities = Transplant + Total Dialysis Facilities  
 Source of data: EQRS May 2022

**Percent of National Prevalent Dialysis Patients by ESRD Network 2021**



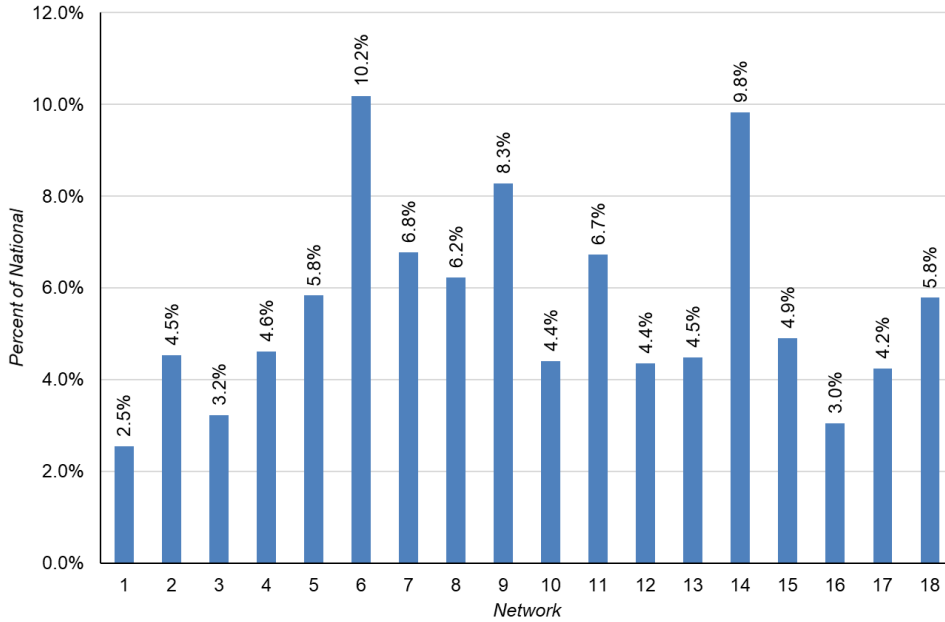
National total dialysis patients: 516,929  
 Source of data: EQRS May 2022

**Percent of National Incident Dialysis Patients by ESRD Network 2021**



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

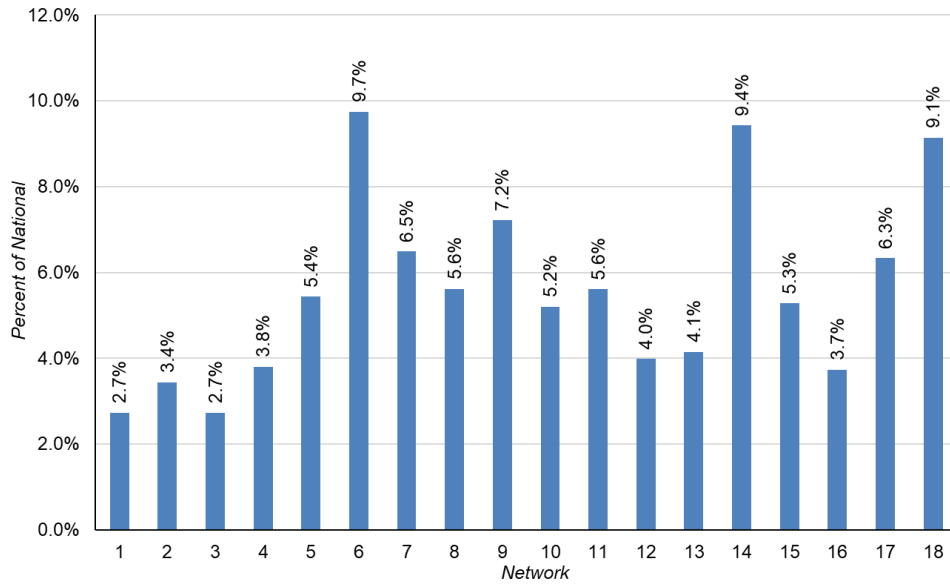
**Percent of Medicare-Certified Dialysis Facilities by ESRD Network 2021**



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

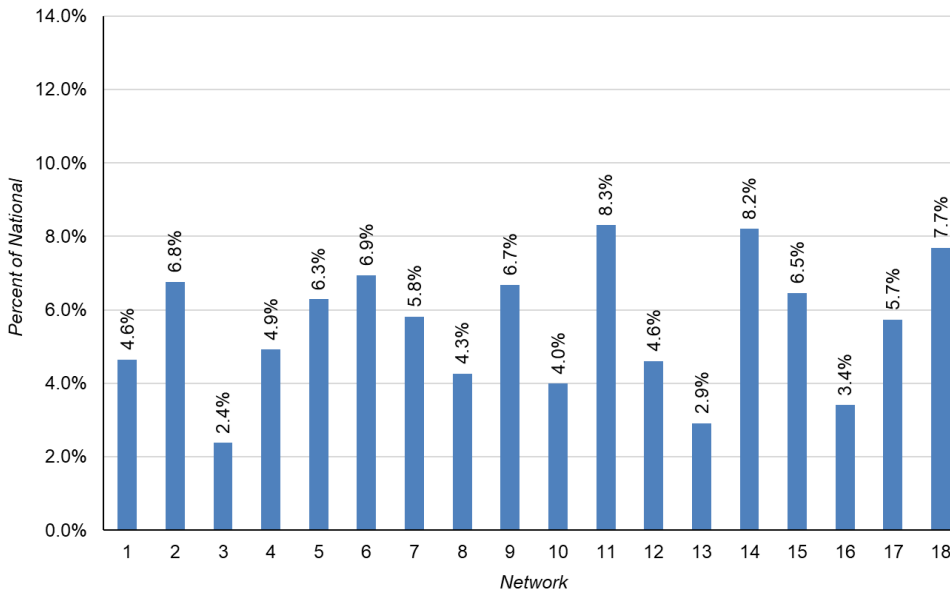


**Percent of National Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network 2021**



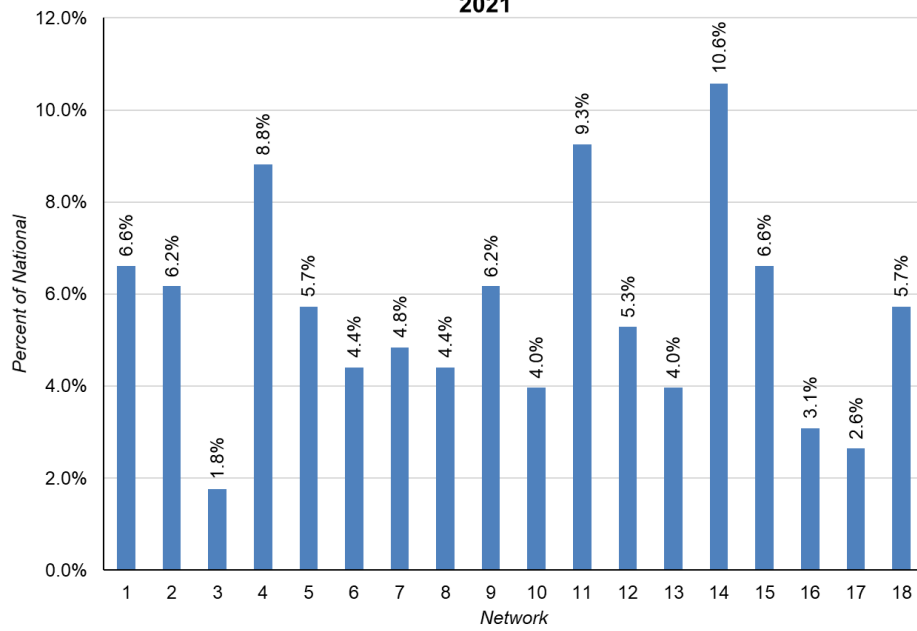
National total home hemodialysis and peritoneal dialysis patients: 79,071  
 Source of data: EQRS May 2022

**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

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## **ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA**

The Network responds to grievances filed by or on behalf of ESRD patients in Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island and Vermont, with a goal to address and mitigate concerns.

### **Grievances**

During the reporting period, the Network received seven clinical QoC cases, and 21 general grievance cases with areas of concern as follows: four cases related to physical environment, 10 staff related cases, two treatment related/quality of care cases, and five related to other personal conflicts. The Network also reviewed a total of 22 immediate advocacy cases. A breakout by area of concern follows: five cases related to physical environment, seven cases were staff related, eight cases were related to treatment/quality of care, and two cases involved other personal conflicts. Network interventions implemented to address these issues included providing staff with in-service training to improve the communication with patients. The Network provided technical assistance to resolve 167 facility concern cases.

With fewer staff members available to work with patients, staff shortages within dialysis facilities seriously affected patient care. As a related issue, dialysis social workers covering multiple clinics were unable to devote full time to their assigned patients. To help address the potential issues caused by the above, the Network employed strength-based approaches, not only with patients, but also with staff. These approaches focused on reducing burnout and compassion-fatigue at the clinic level.

### **Access to Care and Involuntary Discharge (IVD) Cases**

In 2021, the Network received 128 cases involving access to care concerns. Five cases opened in 2020 were resolved in 2021. With each access to care case, the Network provided technical assistance (TA) to help facility staff effectively support and protect their patients' access to treatment. Four patients were discharged from their respective facilities during 2021. To strategize long-term solutions and action plans, as part of the TA provided by the Network PSD clinic staff members were encouraged to incorporate the identified areas of concern during the facility's monthly Quality Assurance Performance Improvement (QAPI) meetings.

The Network encouraged clinic staff to implement peer-to-peer support using the Network's Peer Mentoring Program for patients who experienced challenges. The Network continued promoting its Second Chance Program to clinics for patients with a history of behavioral and non-adherence issues, with a goal to reduce the number of patients using hospital emergency departments for life sustaining treatment.

The Network continued to provide educational resources to both patients and clinic staff on patients' rights and the CMS Conditions for Coverage. The Network encouraged clinic staff to incorporate patients into QAPI meetings and where possible implemented the Second Chance Program with the respective state agency and provided updates to CMS.

## Network Assistance and Quality Improvement

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

The Network worked toward accomplishing the following overarching goals during the 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.

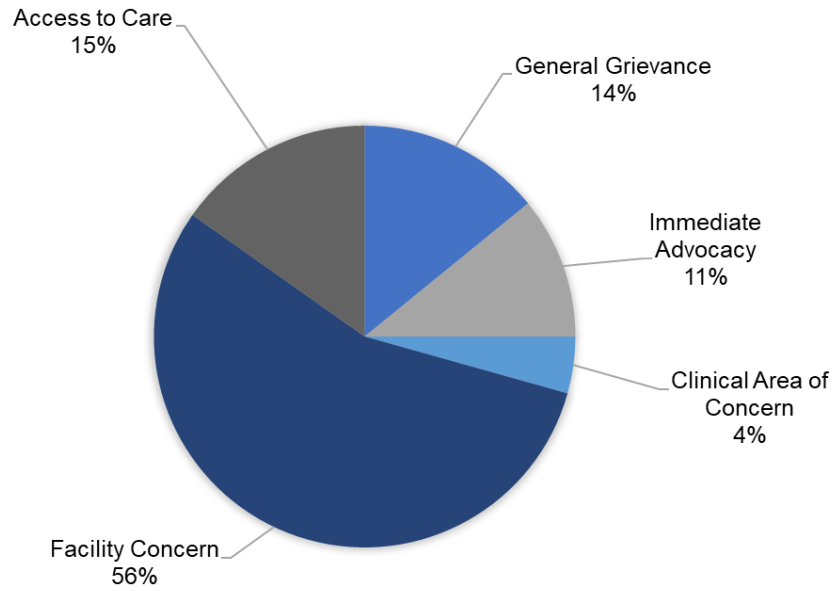
The Network continuously promoted an environment of advocacy for all ESRD patients and ESRD patients' caregivers. Through advocacy work, the Network provided educational training and resources on patient rights to all staff and patients. The Network also provided mediation to help de-escalate ongoing 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. While each intervention focused on a different topic, all Network-implemented interventions incorporated the basic elements of quality improvement:

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

The Network provided patients and facilities with the following resources:

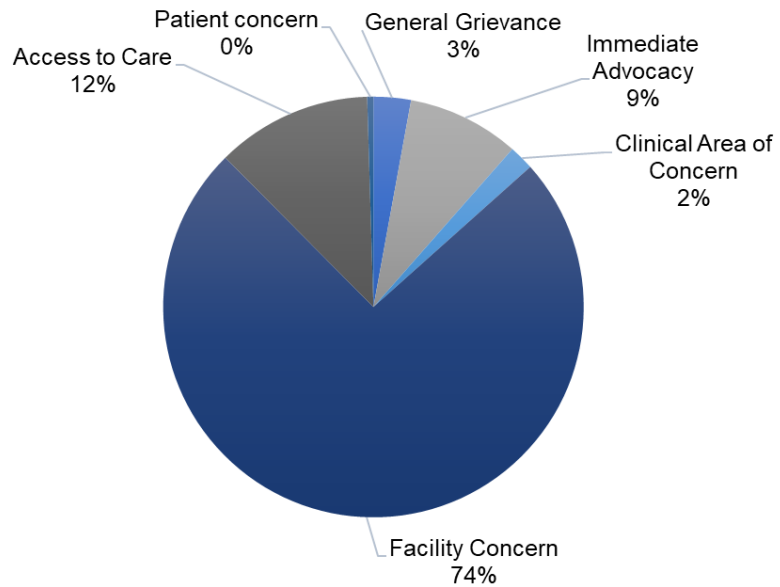
- The *Dialysis Patient Grievance Toolkit* created by the Forum of ESRD Networks' Kidney Patient Advisory Council (KPAC),
- Grievance preparation worksheets and a poster to create awareness of the educational resources available to dialysis patients,
- A poster and flyers (*What the Network Staff Can and Cannot Do*) that outline for patients clearly defined parameters of the support that the Network is able to provide,
- Crisis Prevention Institute (CPI's) *Top 10 De-Escalation Tips* resource.

**Network 1: Percent of Jan-May 2021 Grievances and Non-Grievances by Case Type**



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

**Network 1: 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 June -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.

During the June 2020 – May 2021 timeframe, the Network was tasked with continuing to provide educational materials to patients and dialysis facility staff during this time to maintain communications and relationships throughout the pandemic with a goal to retain patients on the transplant waiting list.

### Project Overview

Transplant centers in the Network service area was heavily impacted by the pandemic. Many furloughed their non-clinical employees and focused solely on deceased donor transplants, to the exclusion of processing new referrals or conducting patient evaluations for waitlisting. In addition, the routine procedures that are necessary to evaluate a patient for the waitlist were, in many instances, not available to be scheduled, since most of these were considered elective and not supported by hospitals during the pandemic. The Network's primary focus during the peak of the public health emergency in 2021 was to ensure that patients already waitlisted were able to maintain their active status and that existing transplant patients had access to necessary medications, as well as enhanced safety protocols due to their immunocompromised status.

### Interventions

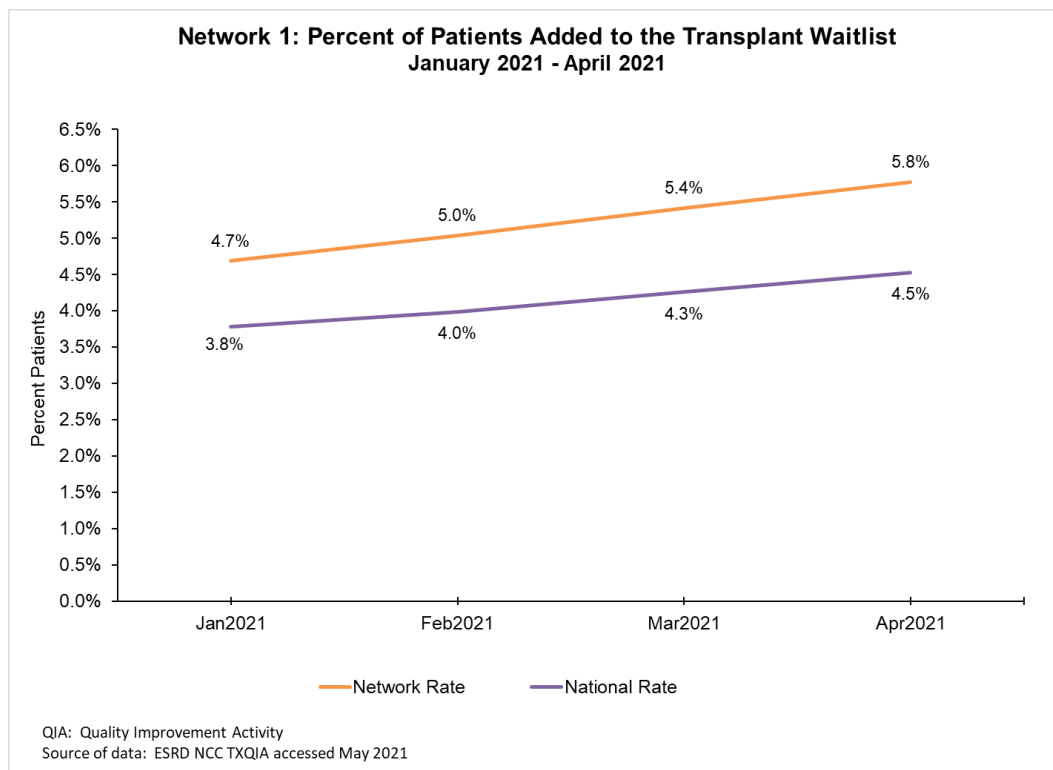
The Network provided individual technical assistance to overcome issues with courier and lab availability to process the required annual blood samples for waitlisted patients. To assist transplant patients the Network intervened to ensure ongoing access to necessary post-transplant medications in the face of pandemic shortages. The Network provided these patients with information on alternate pharmacy options and generic versus brand name product choices via mailings and the *Provider Insider* and *Patient Speaks* publications. Network staff also focused on developing educational materials 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. Best practices such as the use of telemedicine for office visits, limiting travel, and limiting social exposure were provided as educational topics for this at-risk group via webinars and mailings specific to the goals of this quality improvement activity (QIA).

### Barriers to achieving goals

Inconsistent communication with transplant recipients 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's challenges, such as 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

Working closely with transplant centers throughout this time period was essential in solving many of these challenges. The Network encouraged information sharing among the different transplant programs. When able, transplant centers posted patient information to their websites or in COVID-19 information releases. A best practice instituted at transplant centers was to maintain active check-in calls with their current waitlisted patients to provide updates and mitigate barriers.



## Transplant Waitlist & Transplanted Quality Improvement Activity June -April 2022

### Project Overview

Network 1 acts as a support and champion for patients regardless of age, sex, or ethnicity and focuses 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 by 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 NCC Transplant Learning & Action Network (LAN). The Network incorporated human centered design (HCD) practices in the development of patient-centered activities, the support of 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 746 patients being added to the transplant waitlist and 680 patients receiving transplants as of April 30, 2022, an increase of 42 patients compared to 2020 transplant 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 **IPRO Learn**, an electronic learning management platform build on open-source software.

Each month, via **IPRO 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 **IPRO 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 provided facilities and patients with a collection of tools and resources to support dialysis staff, led activities aimed at improving communication between 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 the Network implemented a discussion forum for facility staff. The forum provided a space in which facilities could share their barriers and best practices related to patients having access to transportation 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 their literacy levels are understood.

### **Barriers to achieving goals**

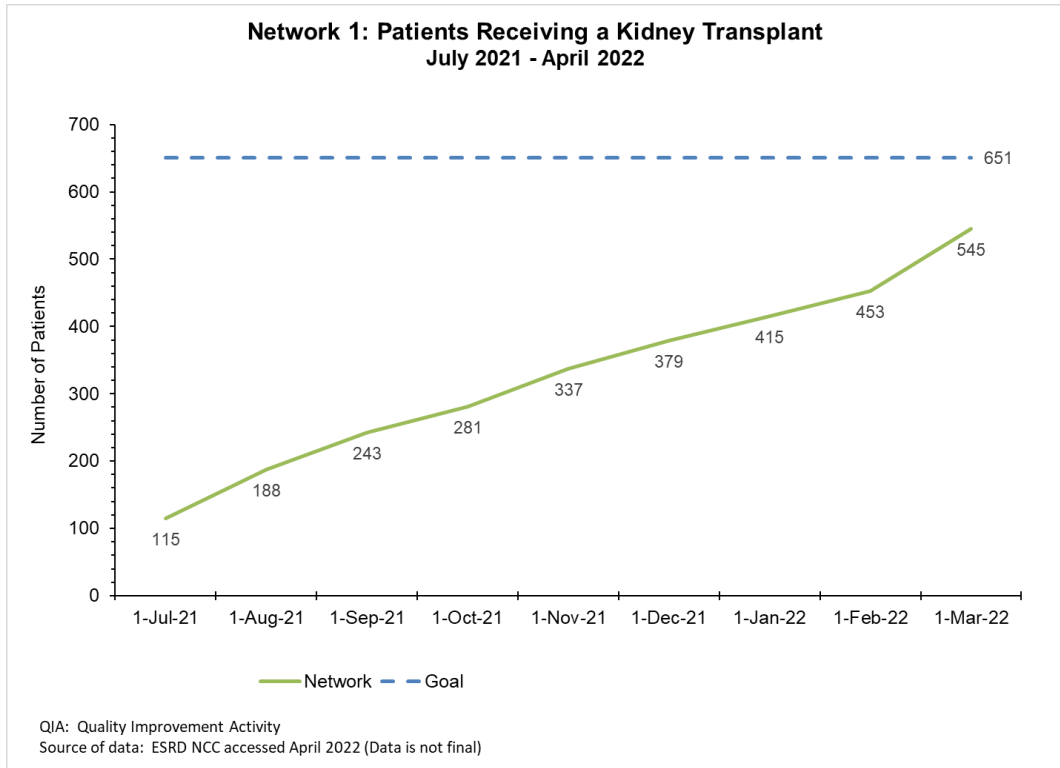
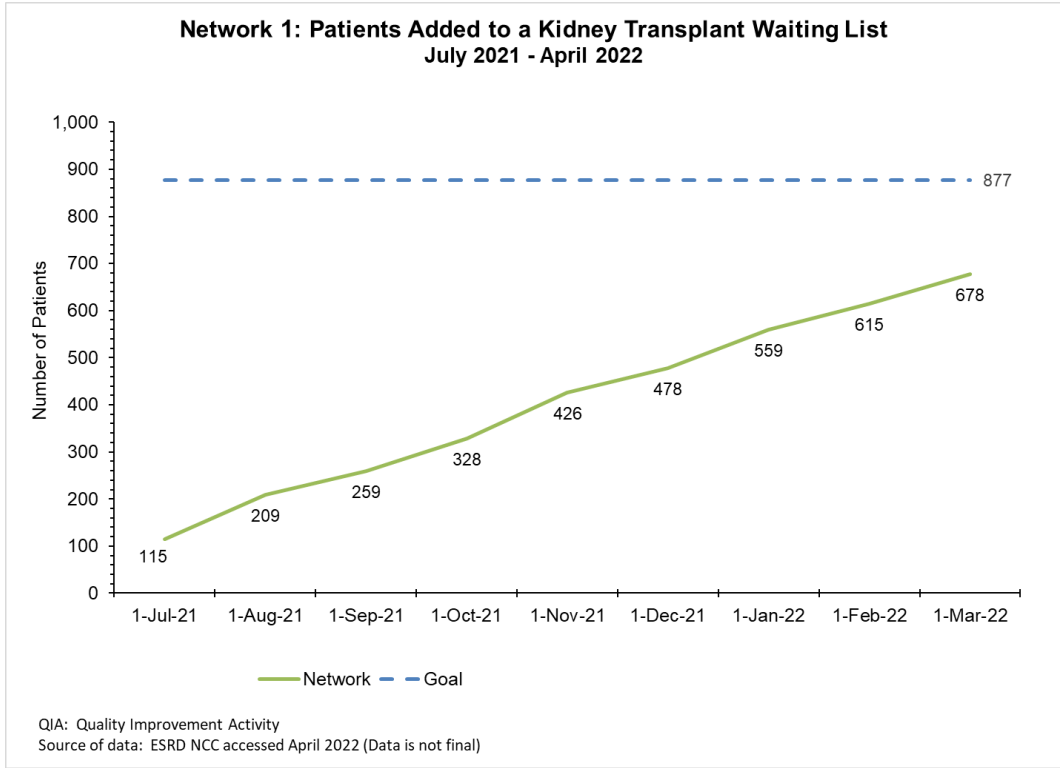
The pandemic resurgence and the resulting increase in staff turnover and shortages negatively affected Network strategies to increase rates of waitlisting and transplant. High rates of staff turnover resulted in facilities hiring individuals for senior staff positions who were: not familiar with the 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 obstacles faced in 2021, Network 1 added 746 patients to the transplant waitlist, and 680 patients in the Network's service area 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's service area via a live webinar, and they are featured on the **I PRO 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) as a

way to increase acceptance of organs that would otherwise be discarded, and providing tools to dialysis facilities and transplant centers to educate patients in making informed choices about their treatment options and encouraging streamlined referral processes.





## Home Therapy Quality Improvement Activity June–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. However, based on the 2020 baseline data, Network 1 transitioned 706 patients to a home therapy and 534 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

During the pandemic, the Network continued to focus on home modality education for dialysis professionals, patients, and caregivers. The Network launched a patient focused campaign, *Let's Start Healthy at Home*, which included a series of patient-facing educational materials geared to the patient's level of interest. One-page flyers were introduced as the first resource to provide basic information regarding alternative treatment modalities. If the patient required additional information, they were given pamphlets that presented in-depth information about each home option. To support staff in providing information about home treatment options, the Network produced instructional guides and webinars specifically for chairside staff to assist them in the most effective ways (including “ice breakers”) to start the discussion of home treatment options with patients.

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.

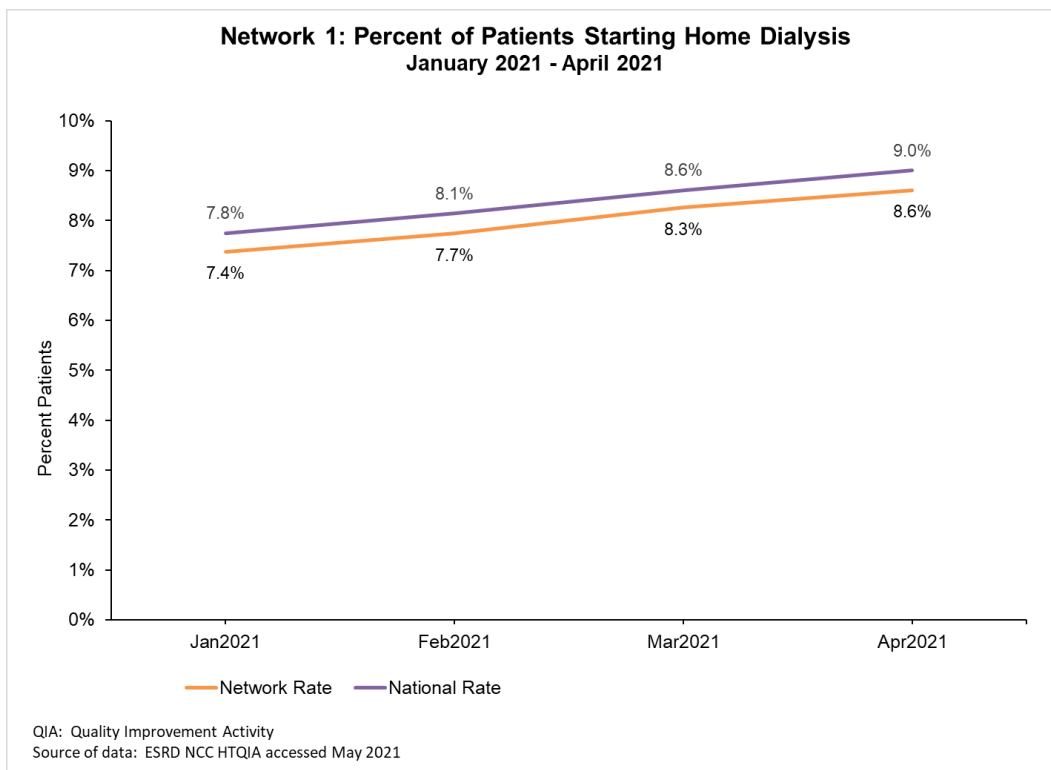
### Barriers to achieving goals

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.

### 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.



## Home Therapy Quality Improvement Activity June -April 2022

### Project Overview

With the new ESRD Statement of Work that began in June 2021, Network 1 renewed its focus on transitioning in-center patients to a home therapy and initiating treatments for incident patients on a home modality. The Network achieved the CMS goals of increasing the transition of patients to a home modality by 2% and increasing the percentage of incident patients starting a home modality by 10%.

### Interventions

The Network worked with dialysis facility staff to create a “pro home” culture within dialysis facilities. Training on home dialysis was provided to at all levels of facility staff. The Network also partnered with providers of chronic kidney disease (CKD) educational programs to introduce the home modality option to this population, and Network staff supported dialysis providers in linking patients and professionals to educational offerings made available through the **IPRO Learn** platform and Patient Advisory Committee Meetings.

The Network provided patients with information about the benefits of home therapy and shared facts to dispel myths and misinformation commonly associated with home modality options. The Network collected a variety of educational materials and tools to help providers assist patients in understanding the benefits of home dialysis. Each month Network staff members 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 verified best practices and resources shared received a >85% approval rating from dialysis facility staff, who indicated 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.

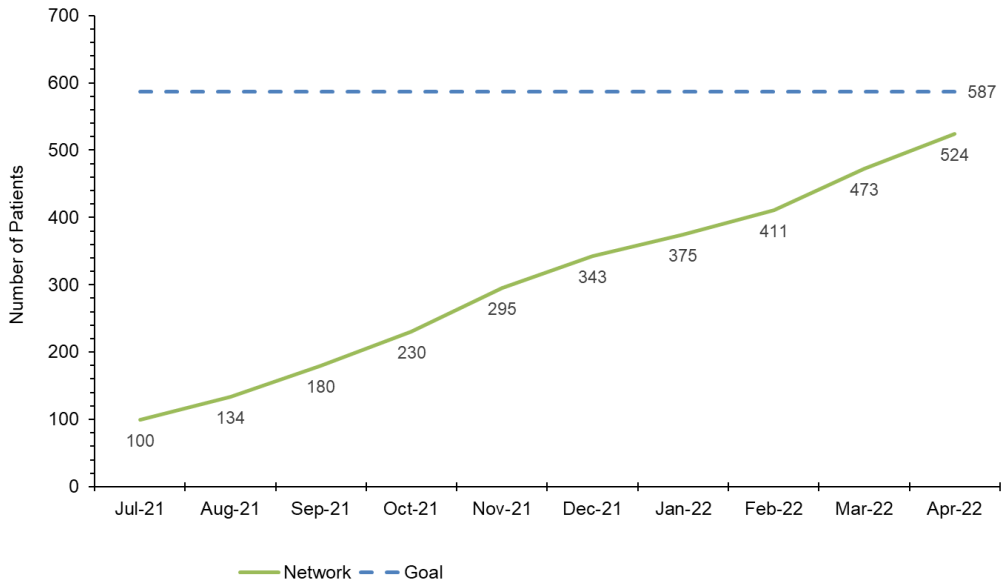
### Barriers to achieving goals

Even with home staff being temporarily moved to fill in gaps caused by the staffing shortage that impacted all healthcare providers in 2021, the dialysis facilities and providers in the community continued to support the importance of referral to home modalities and the availability of home program training to sustain home growth.

### Best practices spread to achieve goals

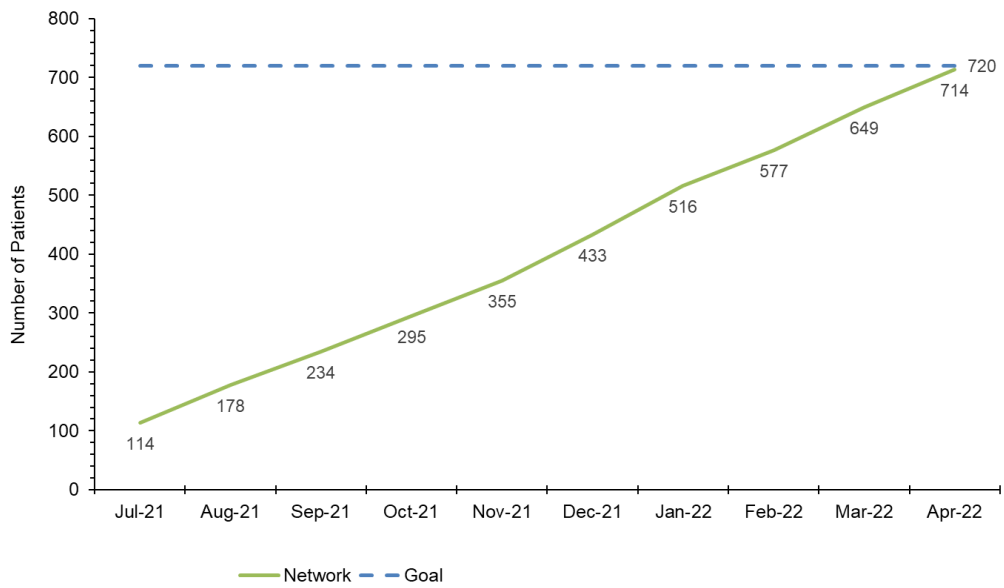
The concept of identifying “home champions” within the dialysis staff, nephrology groups, and patient population was a noted best practice in increasing the use of home therapies by patients in the Network’s service area. A best practice scenario started with a nephrology group that advocated for home therapy early and often with their CKD patients. That message was later supported by staff at a dialysis center that continued to educate and support referral to home treatment, and then engaged the help of patient advocates to relay their stories or otherwise address patient misgivings.

**Network 1: 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 1: 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 83%.

### 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.

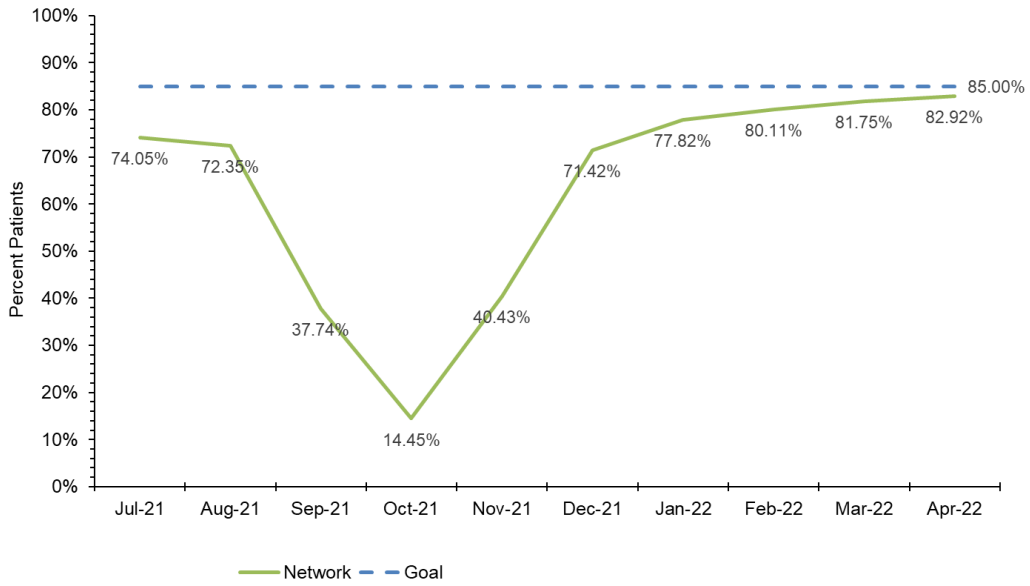
### Barriers to achieving goals

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 to receive 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 1: Percent of Patients Receiving an Influenza Vaccination July 2021 - April 2022



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



## COVID-19 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 those 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% rate of hospitalization and 20-30% chance 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 or not they have COVID-19. This creates a high-risk environment for dialysis patients and healthcare personnel and further 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 83% 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 0.05% 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 all states in Network 1 except for New Hampshire, had state mandates requiring 100% of employees to be vaccinated. As of the publication date of this Annual Report, all dialysis facilities and transplant centers are 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 required for dialysis and transplant facilities to maintain certification and licensure.

### Interventions

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

and Network staff provided a list of these patients to facilities to encourage individual coaching and education on the benefits of the COVID-19 vaccine. The Network incorporated technical solutions, such as **I<sup>PRO</sup> Learn**, **Caspio**, and **FreshDesk** to encourage bi-directional communication with facilities requiring assistance.

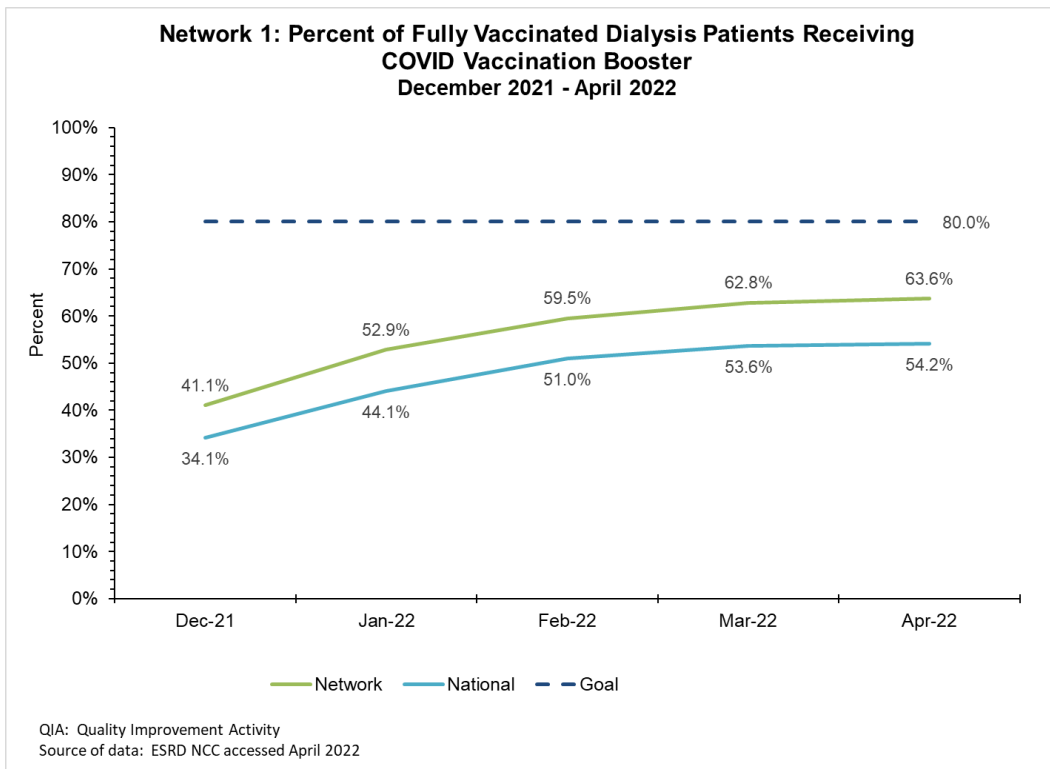
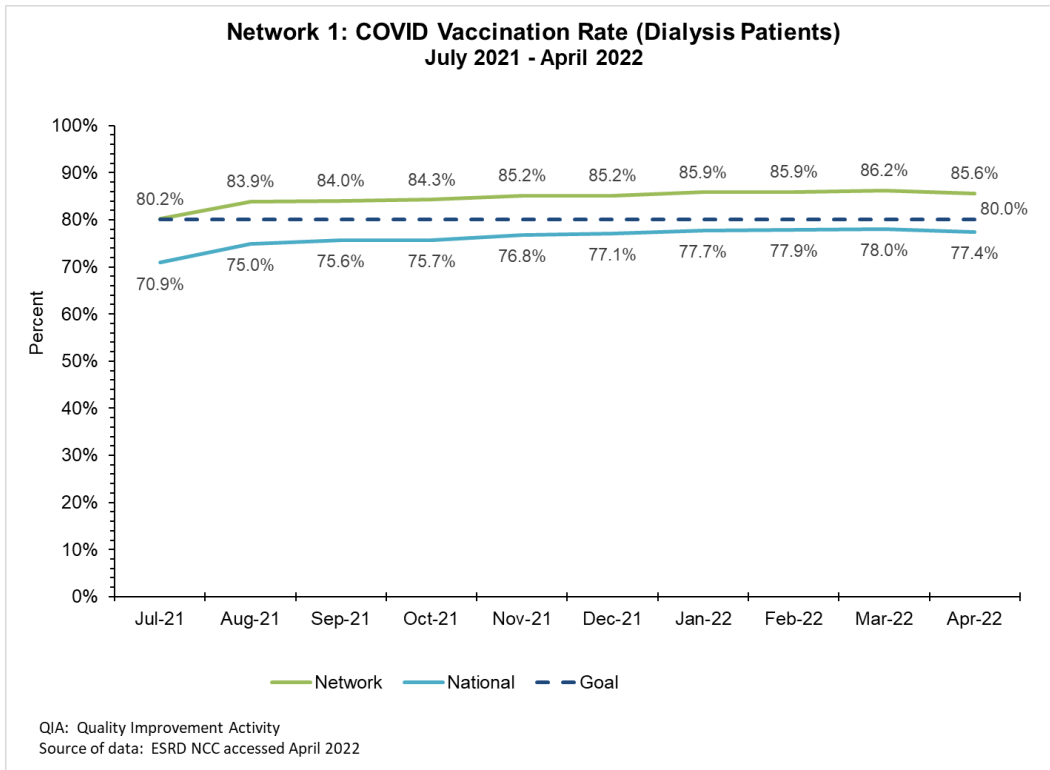
### **Barriers to achieving goals**

Due to staffing turnover and reassignments, the Network did not have accurate contacts for all facility personnel, which decreased successful communication with facilities. The Network offered facilities access to **Caspio**, a contact management system, to encourage facilities to update their contact information with the Network. Because not all facilities provided data on vaccination rates, the Network did not have accurate vaccination data. Facilities that did not have leadership to drive a pro-vaccine culture had suboptimal vaccination rates and did not pursue patients after a declination.

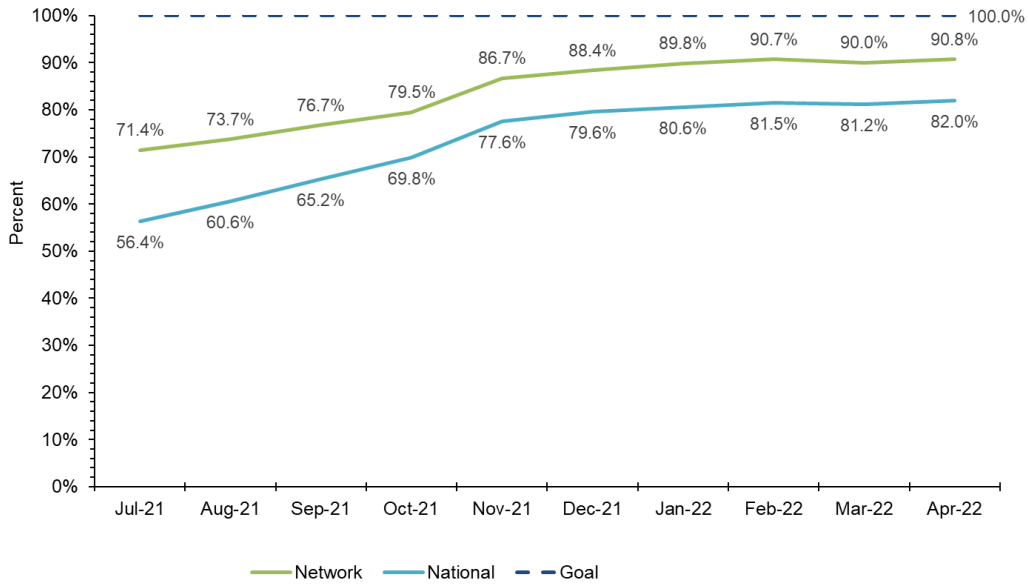
### **Best practices spread to achieve goals**

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

- It was important for senior staff at dialysis facilities to take 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” and identifying a PFR as a patient advocate also helped with increasing vaccination rates.
- 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.

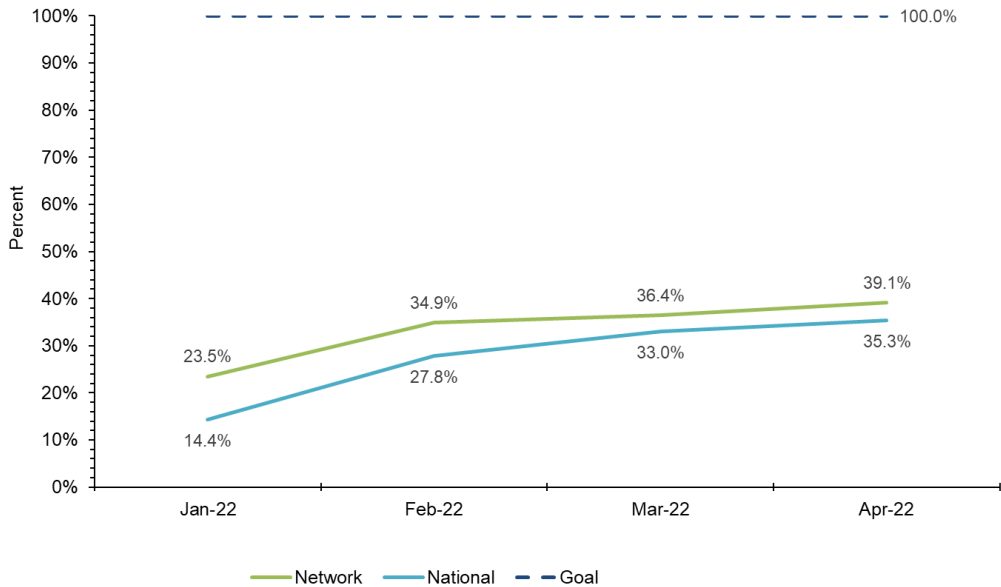


**Network 1: COVID Vaccination Rate (Dialysis Facility Staff)  
July 2021 - April 2022**



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

**Network 1: 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	73.04%	74.50%	72.34%
2728 Forms Within 45 days	78.63%	80.20%	77.91%
2746 Forms Within 14 days	64.96%	66.26%	61.29%

### 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. Facility staff were not always sure whether a patient would be admitted permanently or temporarily and were hesitant to admit them until 30 days had passed. Delays in admissions caused by the EQRS “Possible Duplicate” error was also identified as a barrier, as they required the Network to 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 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.

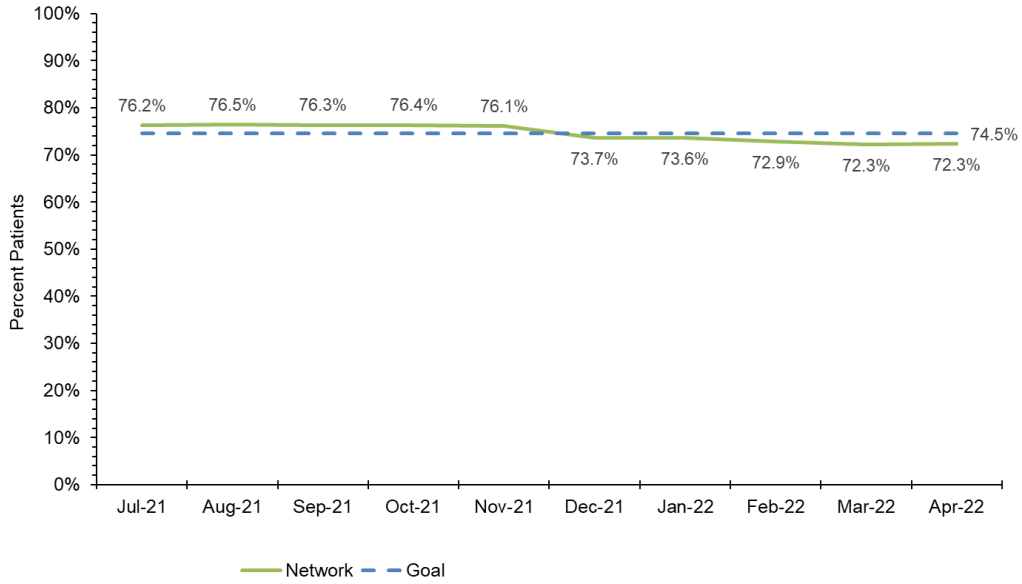
### **CMS Requirements & Training**

- 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**

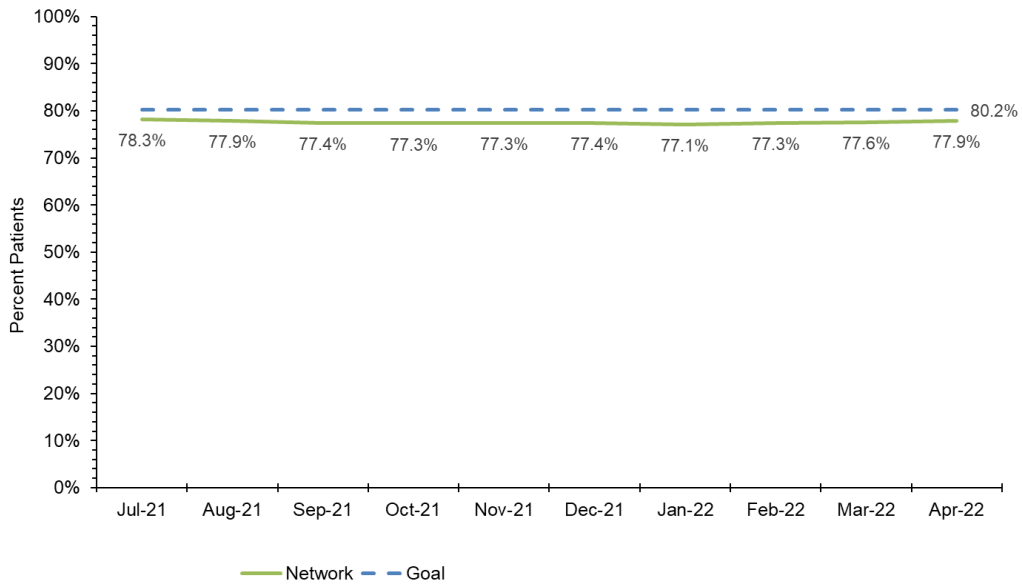
- At least two staff members per 50 patients should have access to EQRS.
- Reminders that only 2728 Form needs signature; 2746 Form does not need any signatures.
- Reviewing reports sent by the Network that show missing 2728 and 2746 Forms.
- Running the Patient Roster Report regularly to see which patients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

**Network 1: Admission Data Entered within 5 Days  
July 2021 - April 2022**



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

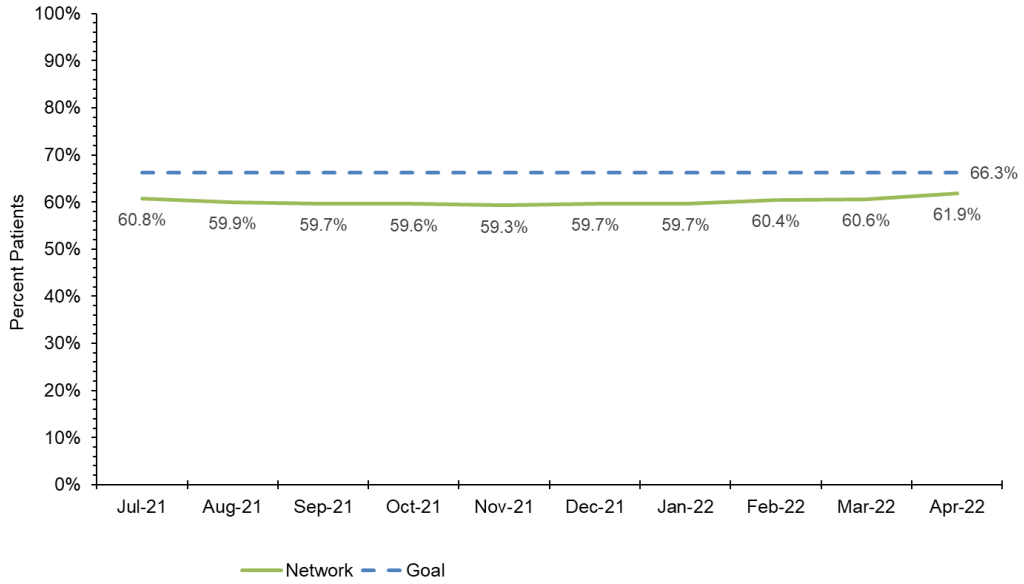
**Network 1: CMS-2728 Forms Submitted within 45 Days  
July 2021 - April 2022**



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



**Network 1: 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 was collected from Medicare Claims for the period of January-December 2020. The Network's work with facilities resulted in reduced hospitalizations from 3,070 at baseline (BL) to 2,538 over the eleven-month remeasurement period (June 2021- April 2022); reduced readmissions from 282 at BL to 208 instances at remeasurement; and reduced emergency room visits from 1,511 at BL to 1,309 instances at remeasurement, missing the 2% reduction for this measure by 0.0133%.

In addition, the Network worked to reduce hospitalizations with primary diagnoses related to COVID-19 by 25% from the baseline period of March- 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's approach to reduce COVID-related hospitalization was to promote vaccination among the immunocompromised ESRD community. The number of admissions at BL was 804. At time of remeasurement the Network reduced admissions to 627 and did not make the goal by 24 COVID-19 hospitalizations, achieving 23% reduction.

### **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 facilities’ 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 led to hospitalization in the Network service area’s population.

Interventions aimed at reducing of COVID-19 hospitalizations focused on increasing COVID-19 vaccination rates in our 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 FAQ document 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.

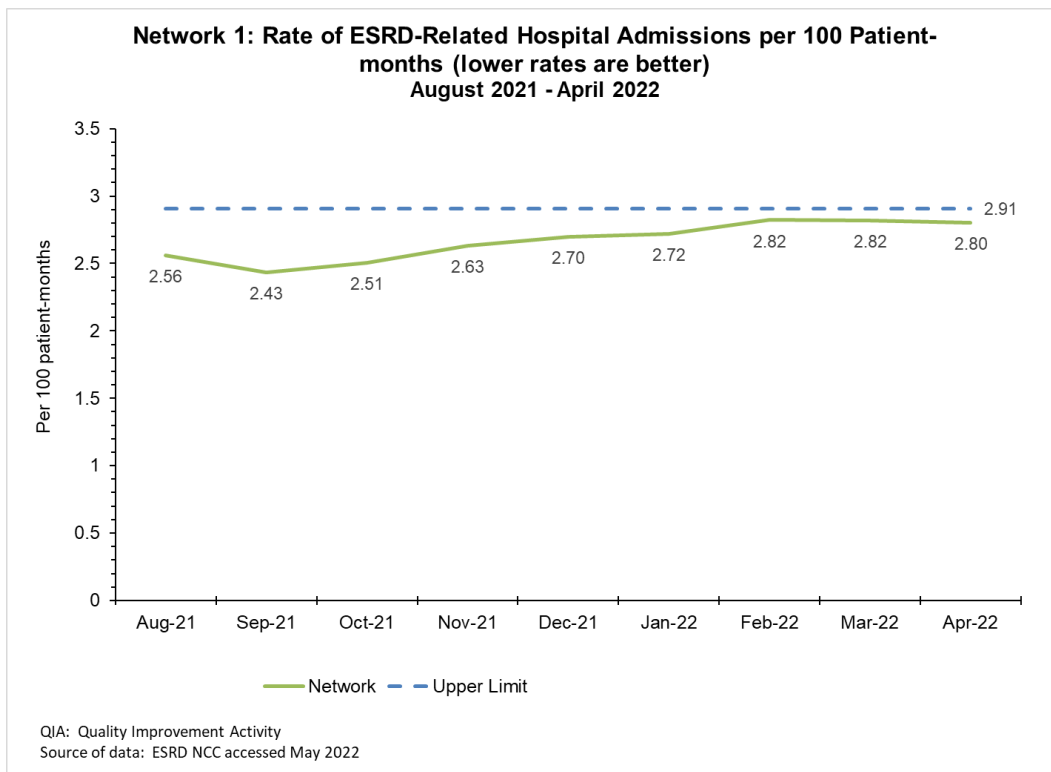
The Network identified rural facilities in Maine, New Hampshire and Vermont that had increased utilization of the emergency room for provision of non-acute care issues. Many hospitals in these rural states did not provide dialysis services, and overuse of these acute care hospitals delayed patients' 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.

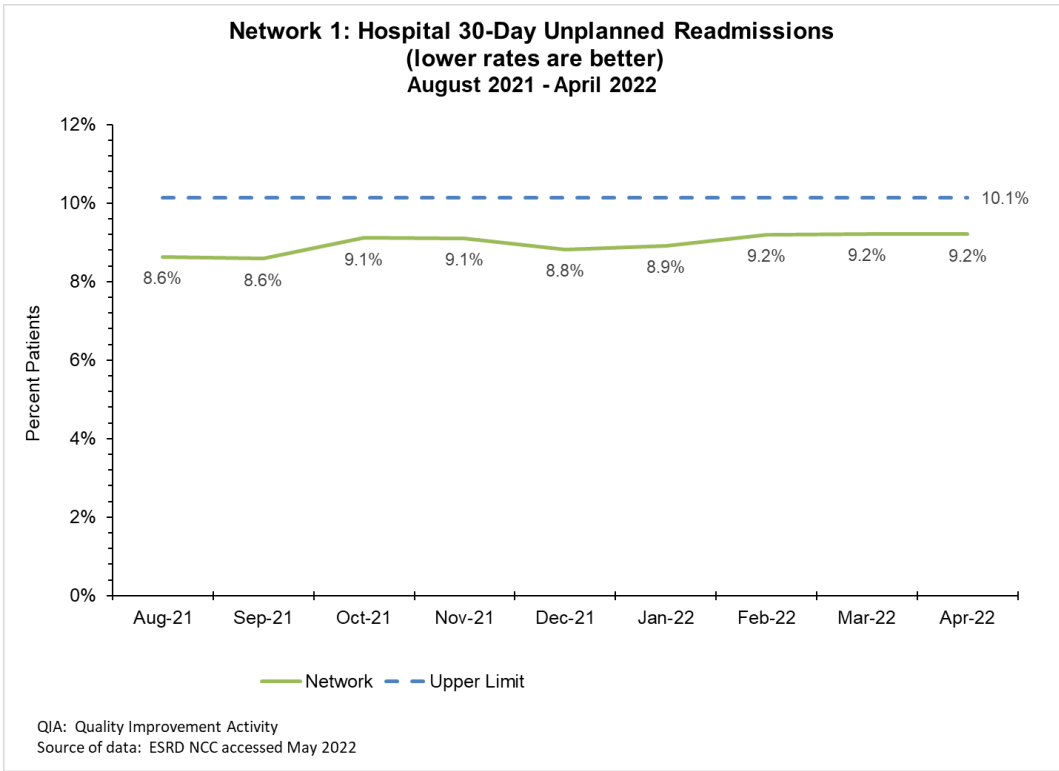
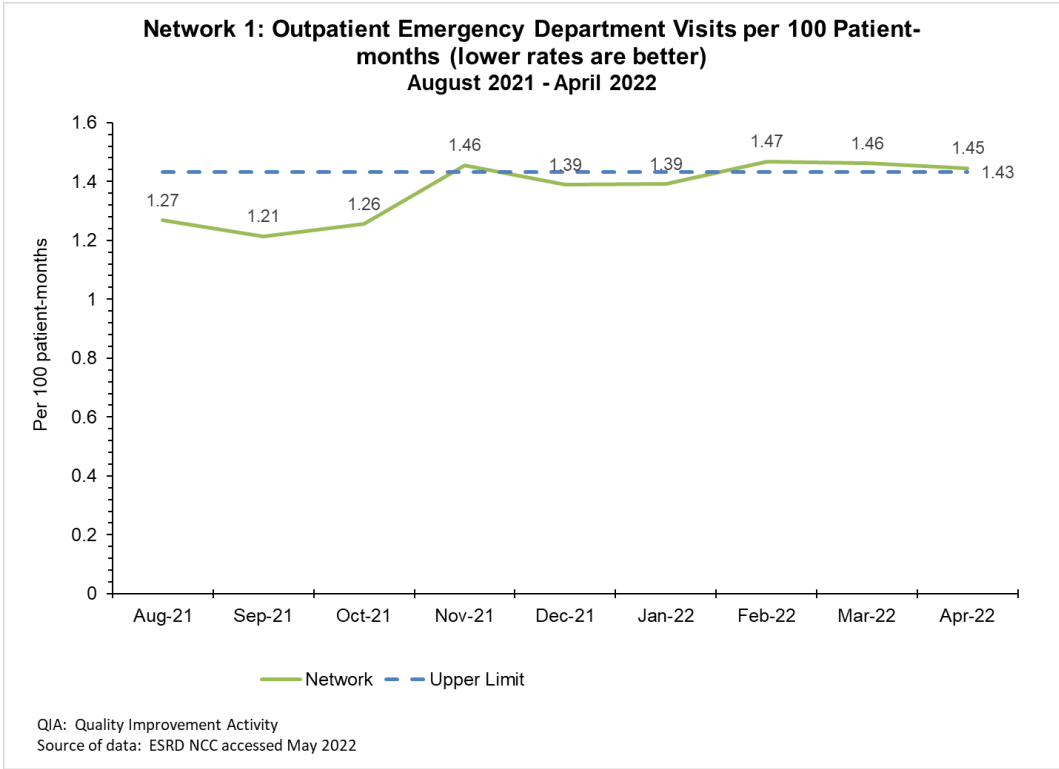
Barriers related to COVID-19 hospitalization reduction were found to be similar to those of COVID-19 vaccine uptake, which included patient hesitancy to vaccinate and multigenerational household and nursing home spread.

### Best practices spread to achieve goals

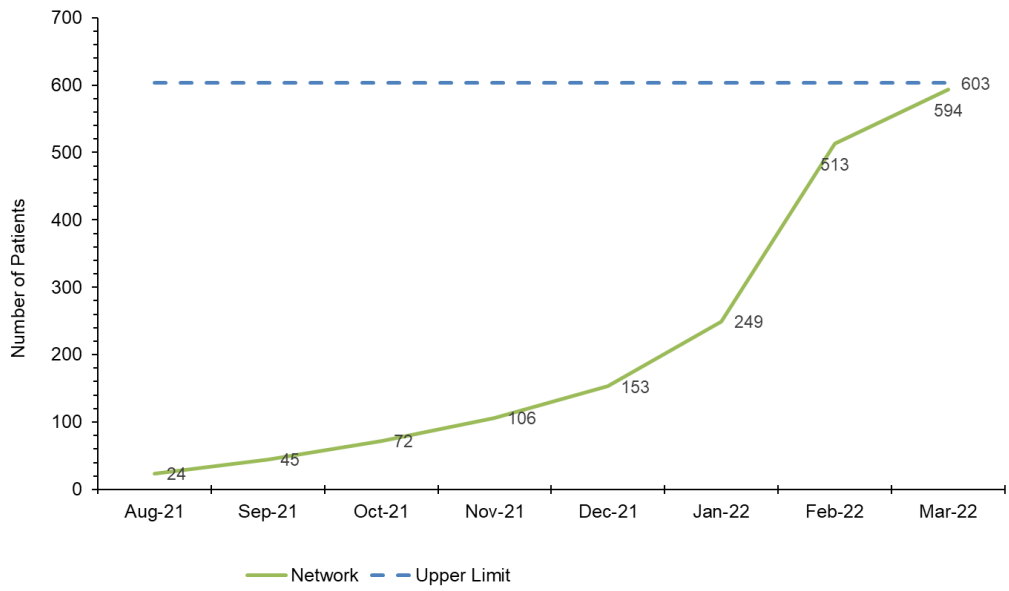
To make the transition process easier for patients the Network spread best practices learned from our facilities and the literature. Wallet Cards To Reduce Hospitalization were distributed to patients to improve communication between dialysis facilities and hospital staff. When carried by patients, these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

The Network learned best practices from facilities with low COVID-19 hospitalization rates and high patient 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





**Network 1: COVID-19 Hospitalizations (lower values are better)**  
August 2021 - April 2022



QIA: Quality Improvement Activity  
Source of data: ESRD NCC accessed April 2022 (Data is not final)

## 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 **I PRO 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*. Each month the Network promoted a resource that targeted a specific aspect of depression and a suggested method for integrating education into the facility culture and procedures.

## Nursing Home June-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. There were no patients in the Network that met the criteria of receiving home dialysis within a nursing home, therefore no data was obtained from baseline to the end of the base reporting period.

### Interventions

The Network collaborated with empowered patients/families, nephrologists, primary care providers, home dialysis providers and nursing home staff to design resources for dialysis staff treating nursing home patients. The Network developed an EQRS job aid that was released in **IPRO Learn** to collect data on facilities providing home dialysis in a nursing home.

### Barriers to achieving goals

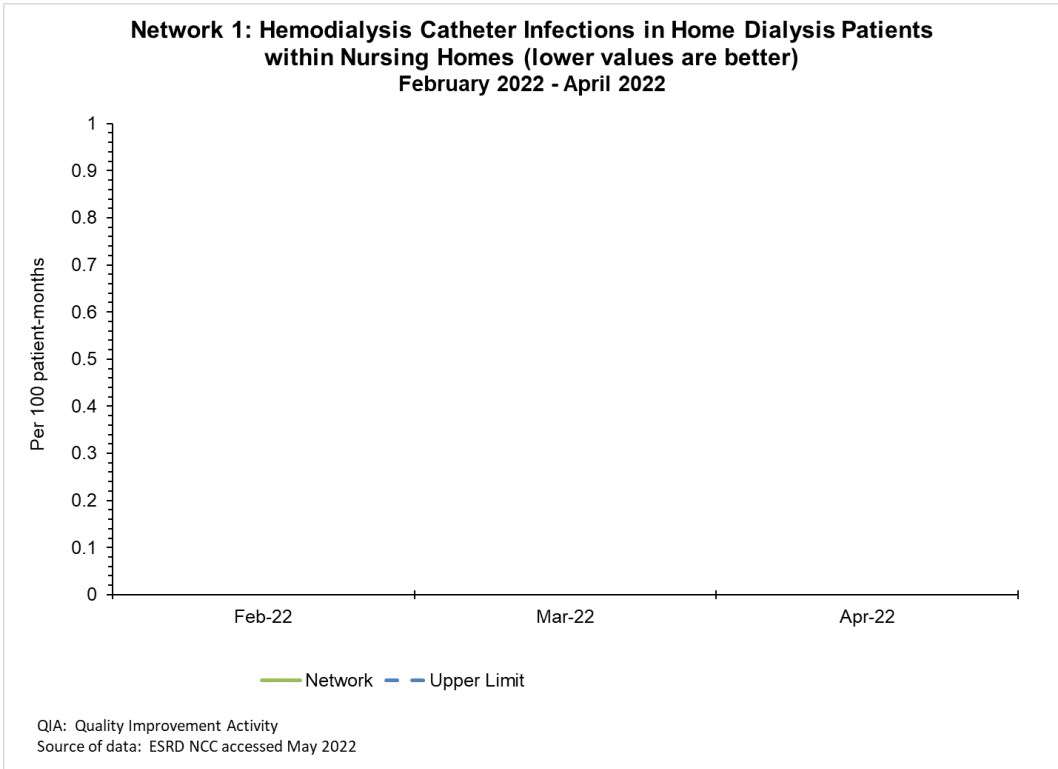
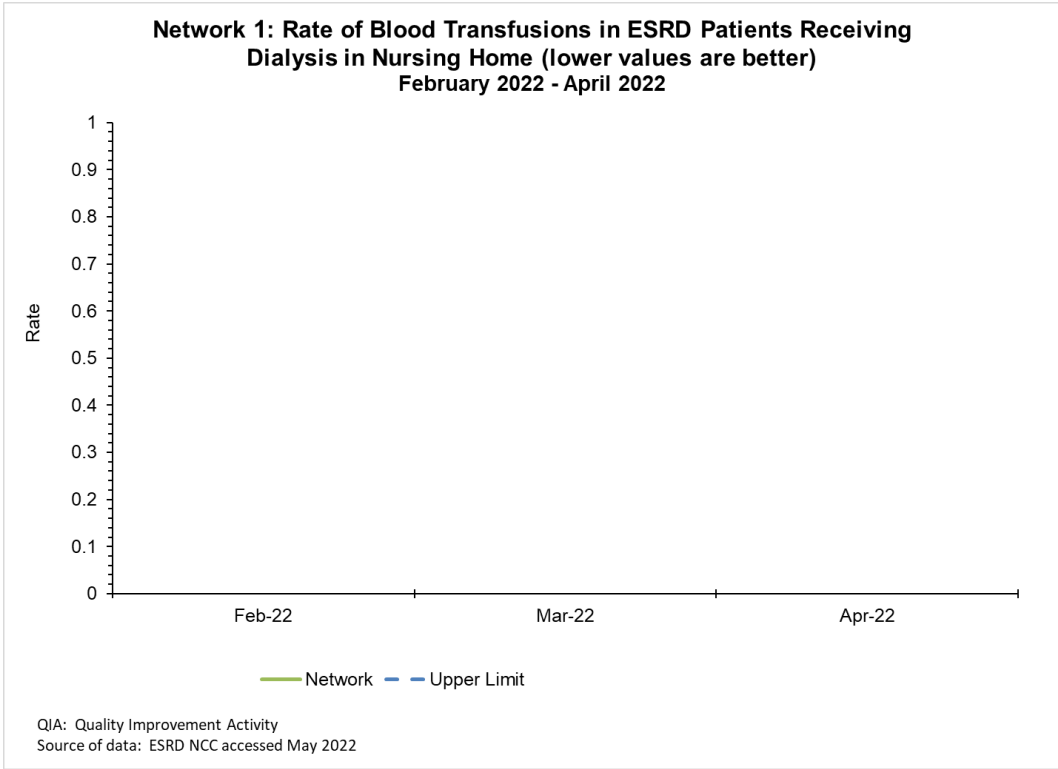
The primary barrier was a lack of data on home modalities patients treating in a nursing home, education was focused on increasing the general knowledge in the care of the frail elderly patient encountered in all dialysis settings.

### Best practices spread to achieve goals

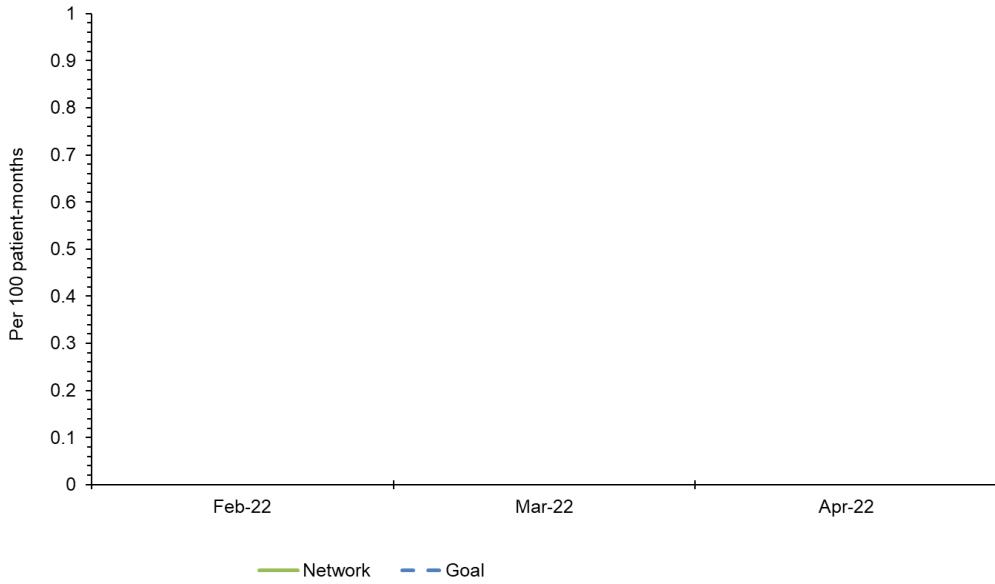
With support from the Network Advisory Committee, the Network developed and deploy through **IPRO Learn** various education materials, including tool kits, focused educational videos, “one pager’s,” continuing education offerings, and knowledge assessments.

The Network continued to include dialysis facilities in national (ESRD NCC) and Network-specific education and to promote the spread of home therapies in the nursing home setting. Based on the success in IPRO Network 2 service area (New York State), the nursing homes in the Network 1 service area participated in educational mentoring activities with nursing homes in the Network 2 service area to discuss how home therapies in long term care could be initiated and to brainstorm ways to “market” home therapies to this community. The Network continued to work with the IPRO QIN-QIO to monitor growth, changes in census and/or changes in service lines as part of identifying opportunities for more strategic involvement in this work.





**Network 1: 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, home-modalities patients using telemedicine for their healthcare provider visits. The goal was to increase the number of rural patients who used technology to gain access to their home modality providers by 2%. The Network surpassed this goal and led the nation in the number of telemedicine visits provided to the eligible patients. Baseline data indicated that 101 rural patients receiving a home modality used telehealth for a home dialysis visit; the Network's efforts resulted in 115 patients using telehealth for at least one provider visit during the remeasurement period.

### Interventions

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

The Network promoted the CMS-ESRD Provider Telehealth and Telemedicine toolkit to providers. A Network-developed webinar, "Telehealth is here to stay" provided the benefits of using telehealth and tips to obtain optimal health using technology, as well as checklists for how to have successful telehealth visits for both providers and patients. The Network provided education on telemedicine during Patient Facility Representative Alliance calls and produced a patient facing video presentation titled "Meet with Your Dialysis Team" to supplement the education.

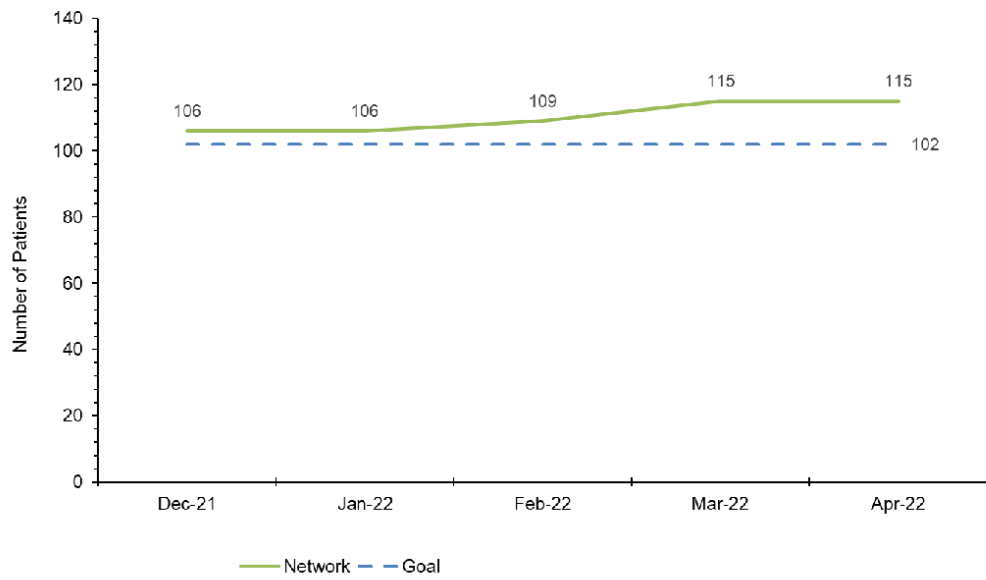
### Barriers to achieving goals

While the Network succeeded in accomplishing the goal for this quality improvement activity, facilities continued to report that physicians were reluctant to use telemedicine and preferred to have a conventional clinic day to see patients and meet with the interdisciplinary team. Many patients that dialyze at home preferred to come to the clinic for socialization and to meet with their peers on clinic days. Internet capability was also a barrier; rural communities often have limited access to broadband connection. Elderly patients with limited experience in technology who do not have family or friends to assist with telemedicine access were challenged as well.

### Best practices spread to achieve goals

The Network developed performance score cards that were sent monthly to the facilities that had eligible rural home patients that could benefit from a telehealth clinic visit. These were found to be valuable to the facilities in the Network's service area as many facilities had no way to distinguish between rural and urban patients.

**Network 1: 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 13 & 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

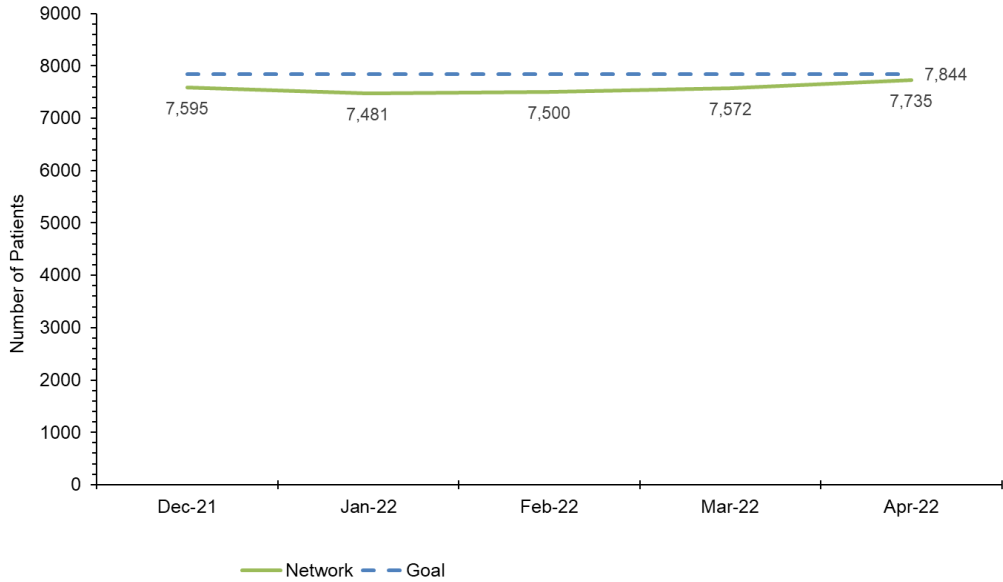
The inability to monitor and track the uptake of vaccines in the community was a large barrier. Changes in CDC guidelines for pneumococcal vaccine administration caused confusion for dialysis facility staff. Capturing vaccination information from alternate sites (hospitals and outpatient clinics and 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.

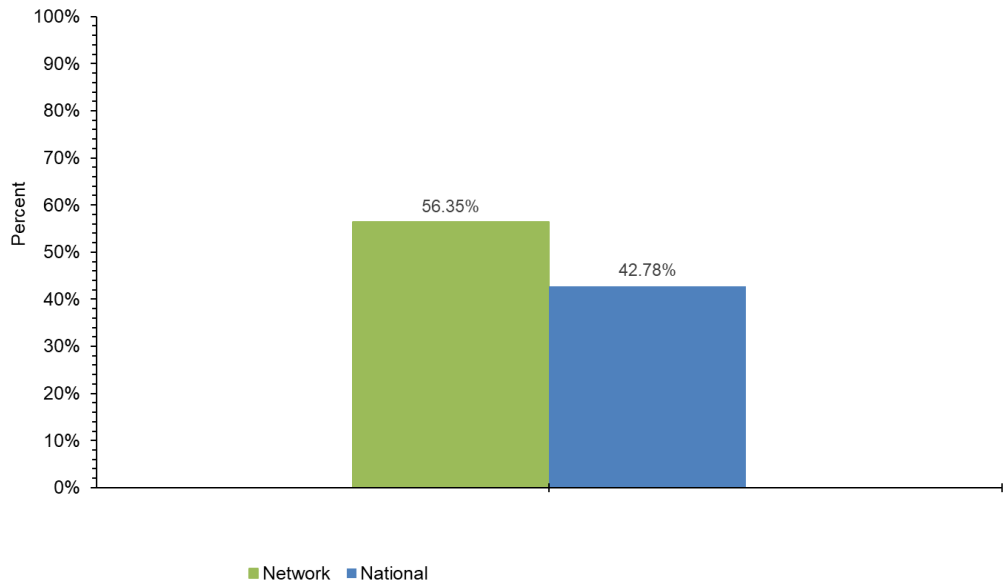
The Network launched a continuing education course in **IPRO Learn** for dialysis staff to earn a CE for learning about the benefits of vaccinations.

**Network 1: ESRD Patients Receiving Pneumococcal Conjugate Vaccination (PCV 13)  
December 2021 - April 2022**



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

**Network 1: Percent of Staff Receiving an Influenza Vaccination  
2021/2022**



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



# **ESRD NETWORK RECOMMENDATIONS**

## **Facilities that Consistently Failed to Cooperate with Network Goals**

The Network has garnered the support of facilities throughout its community to aid in the implementation of Network initiatives and to collaborate in meeting Network goals, even with modifications due to the pandemic. The Network did not identify any facilities in its service area that 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**

Based on data obtained in the contract base year, the Network would like to recommend the following services/facilities:

1. 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.
2. Enhance surveillance of Nursing Home - Home Dialysis Providers through better CCN delineation to capture location of services and increased offering of this service line in the Network 1 service area.
3. 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.
4. 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 by coordinating activities with CMS, the Kidney Community Emergency Response (KCER) coalition, and the six New England state departments of public health.

The Network relied on collaborations with, and information sharing from the ESRD NCC, CDC, CMS, KCER, state health departments, 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 that were 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 its 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 its website. This banner continued to appear in all Network emails and communications through the reporting period. 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 department of public health (DPH), and Office of Emergency Management (OEM) to assess reductions in staff, availability of personal protective equipment (PPE), 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 worker/facility administrators, contacts at the states’ OEMs and other transportation companies, Network staff were 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 state health departments, offices of emergency management, and large dialysis organization emergency management teams to ensure safety and continuity of care for ESRD patients in New England.

### **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.