**End-Stage Renal Disease
Network of New York**

IPRO

2023 Annual Report

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ESRD Demographic Data

IPRO End Stage Renal Disease (ESRD) Network of New York (Network 2) is one of four ESRD Networks managed by IPRO, a non-profit organization that works with government agencies, providers, and consumers to implement innovative programs that improve healthcare. In addition to serving as the ESRD contractor for the Network 2 service area, IPRO manages the ESRD Network of New England (Network 1), ESRD Network of the South Atlantic (Network 6), and ESRD Network of the Ohio River Valley (Network 9), collectively known as the IPRO ESRD Network Program. IPRO is fully committed to the goals and vision of the ESRD Network Program and supports the renal community in ensuring safe, effective, patient-centered care for the more than 201,572 ESRD patients in the four Network areas it manages.

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

Geography and Population Density
New York State is the fourth most populous state in the country, with 19.5 million residents in 2023 (a decrease of 100K residents from 2022). New York City (NYC) has the highest population density of any major city in the United States, with over 29,000 people per square mile in 2020. The 2023 population of the five boroughs of New York City (-- Bronx, New York (Manhattan), Richmond (Staten Island), Kings (Brooklyn), and Queens counties— was estimated to be 8.26M or 42.2% of the state's population, according to the U.S. Census Bureau. 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 downstate, transportation options are limited, and there are fewer treatment facilities. This means that ESRD patients in rural areas typically travel farther and longer to reach dialysis clinics, vascular surgeons, hospitals, and other healthcare providers and clinicians, but both rural and urban patients face challenging factors that may affect treatment options, patient experience, satisfaction with care, and quality of care.

Diverse Populations

New York's population is rich in ethnic, racial, religious/spiritual, cultural, and lifestyle diversity. According to U.S. Census Bureau estimates for 2023, New York City's population is 51.6% White (68.6% New York State, 75.5% U.S.), 27.6% Black or African American (17.7% State, 13.6% U.S.), 15.8% Asian (9.6% State, 6.3% U.S.), and 29% Hispanic or Latino (19.7% State, 19.1% U.S.).

End Stage Renal Disease (ESRD) in the Network Service Area

According to December 30, 2023, data from the ESRD National Coordinating Center (ESRD NCC), the ESRD community in the United States included 948,917 individuals with renal insufficiency: 513,225 prevalent dialysis patients, 128,814 incident dialysis patients, and 306,878 patients living with a transplant.

Considered a mid-sized Network's region in 2023, the ESRD patient population in the Network 2 service area included 49,049 individuals either on dialysis or receiving a kidney transplant. There were 27,743 prevalent dialysis patients (5.4% of the national number) and 7,038 incident dialysis patients (5.8% of the national number) reported receiving treatment from dialysis facilities in the Network's region. Of the individuals living with a kidney transplant nationally, there were 21,306 kidney transplants completed in the Network's service area (6.9% of the national number) since the start of the ESRD Network Program in 1988.

As of December 30, 2023, there were 430,261 individuals in the United States receiving in-center hemodialysis (ICHD) treatments. This included 25,190 ICHD patients (90.8% of the prevalent dialysis patients) in the Network's service area, which comprised 4.9% of the ESRD population nationally. Of the 82,964 individuals in the United States using a home dialysis modality, including continuous-cycling peritoneal dialysis (CCPD), continuous-ambulatory peritoneal dialysis (CAPD), or home hemodialysis (HHD), there were 2,553 home dialysis patients (9.2%) in the Network's service area. This represented 3.1% of the ESRD population nationally. During the performance period the rate of transplants in the Network's service area was 43.4% exceeding the national rate of 36.7%.

In 2023, there were 7,830 ESRD Medicare-certified dialysis facilities in the United States. The Network's region included 370 dialysis facilities (4.7% of the national number), six of which were in Veterans Affairs (VA) hospitals. There were 270 dialysis facilities (73.0%) that provided treatment after 5 pm; 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. Of the 229 transplant centers in the United States, 14 centers (6.1% of the national number) offered kidney transplants within the Network service area.

ESRD Community Engagement and Collaborations

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 calls. The PFR Alliance group is an organized group of dialysis and transplant patients,

family members, and care partners from facilities across the Network service area who volunteered their time to represent the Network in their facility and share their perspective and concerns regarding their kidney care. 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 specific facility 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 performance period, the Network worked in collaboration with its Network Council, Medical Review Board, PFR Alliance, and Advisory 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 York.

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

Network 2: Count of Prevalent ESRD Patients by Treatment/Setting
2023
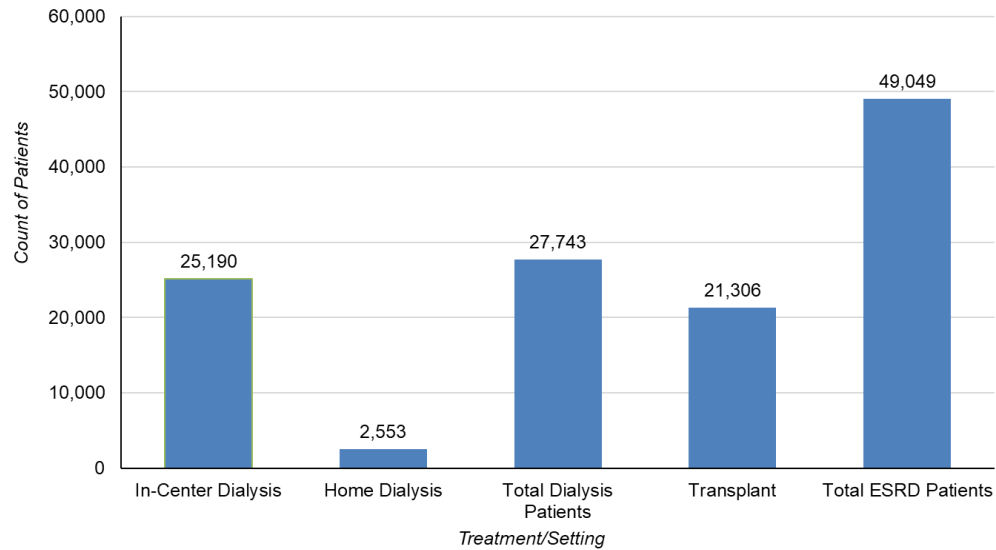
Total Dialysis Patients = In-Center Dialysis + Home Dialysis
Total ESRD Patients = Transplant + Total Dialysis
SNF dialysis patients are not shown due to small numbers
Source of data: EQRS May 2024

Network 2: Count of Incident ESRD Patients by
Initial Treatment/Setting
2023
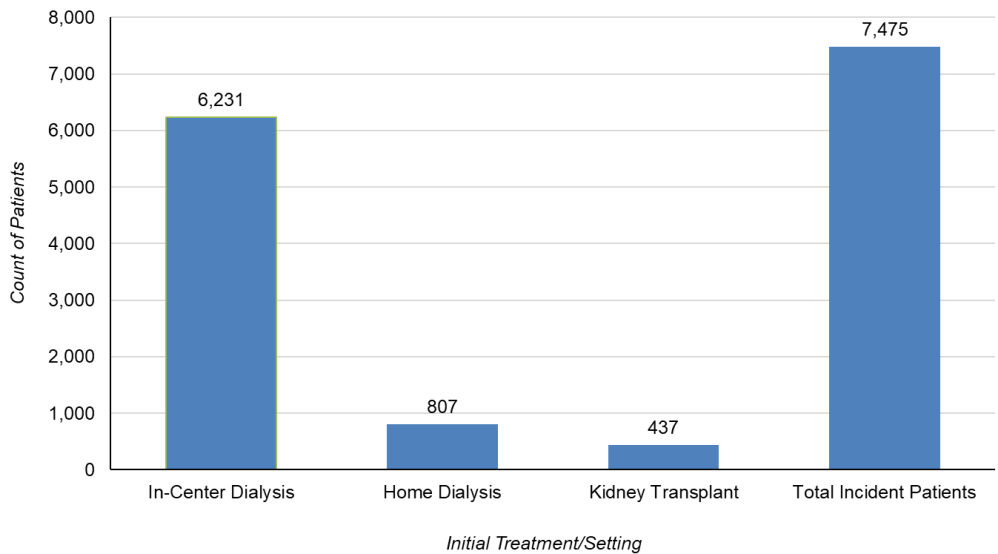
Total Incident Patients = In-Center + Home + Kidney Transplant
Source of data: EQRS May 2024

Network 2: Count of Medicare-Certified Facilities
by Treatment/Setting
2023
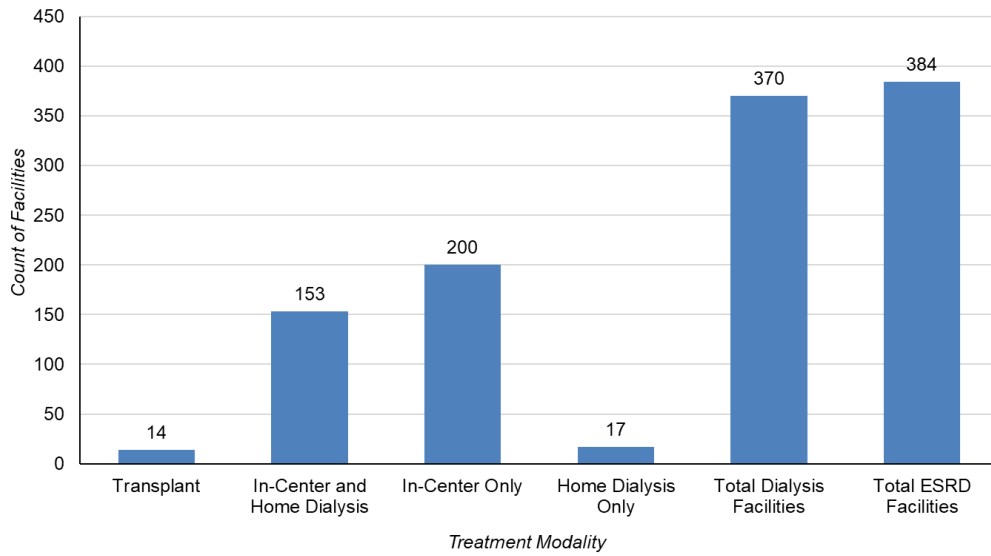
Total Dialysis Facilities = In-Center and Home Dialysis + Home Dialysis Only + In-Center Only
Total ESRD Facilities = Transplant + Total Dialysis Facilities
Source of data: EQRS May 2024

Percent of National Prevalent Dialysis Patients by ESRD Network
2023
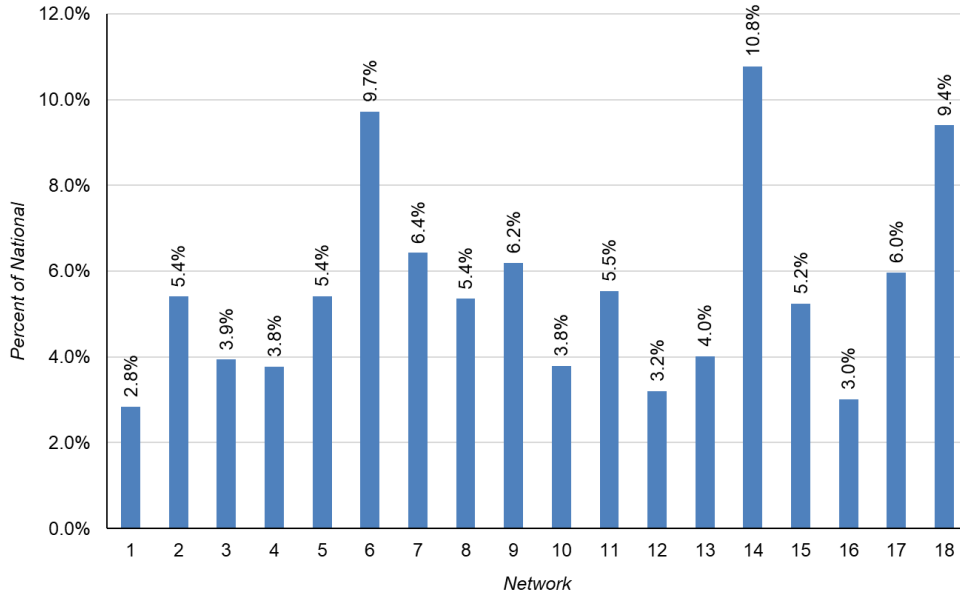
National total dialysis patients: 513,225
Source of data: EQRS May 2024

Percent of National Incident Dialysis Patients by ESRD Network
2023
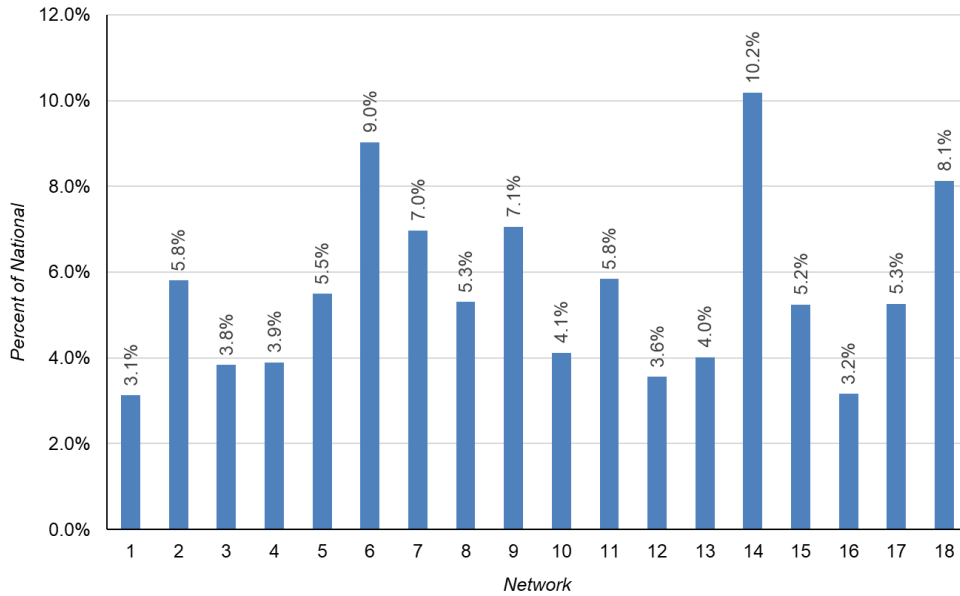
National total incident patients: 128,814
Source of data: EQRS May 2024

Percent of Medicare-Certified Dialysis Facilities by ESRD Network
2023
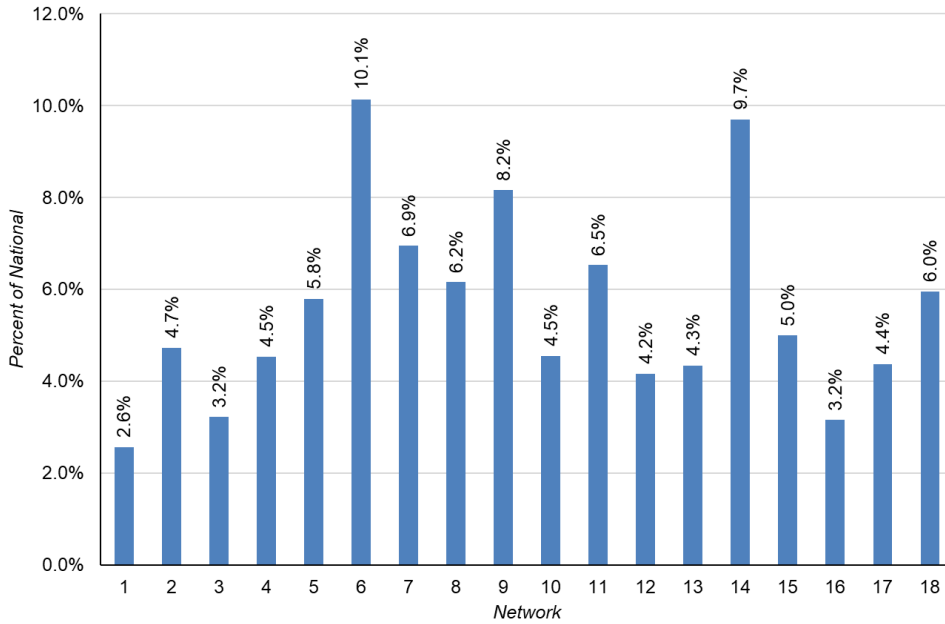
National total ESRD Medicare-certified dialysis facilities: 7,830
Source of data: EQRS May 2024

Percent of National Home Hemodialysis and Peritoneal Dialysis
Patients by ESRD Network
2023
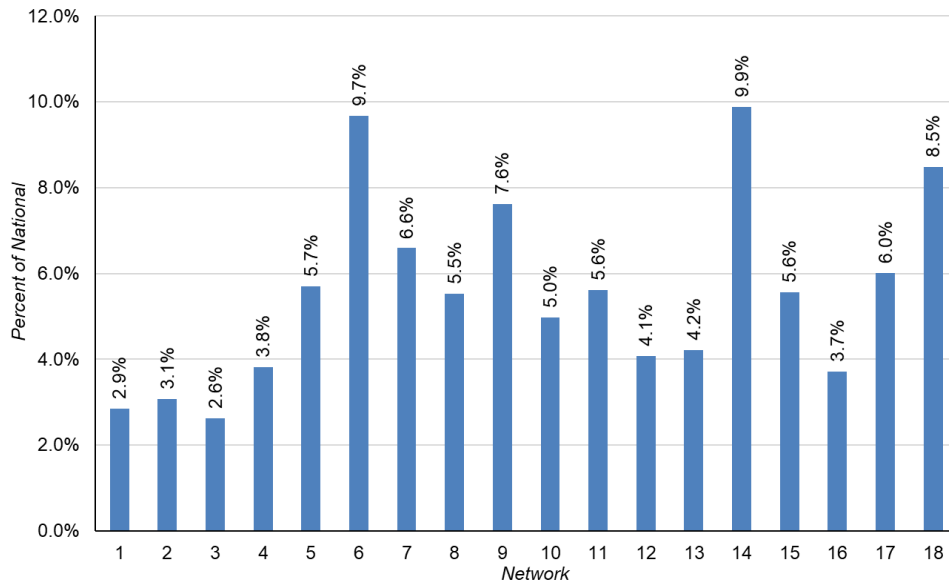
National total home hemodialysis and peritoneal dialysis patients: 82,964
Source of data: EQRS May 2024

Percent of National Transplant Patients by ESRD Network
2023
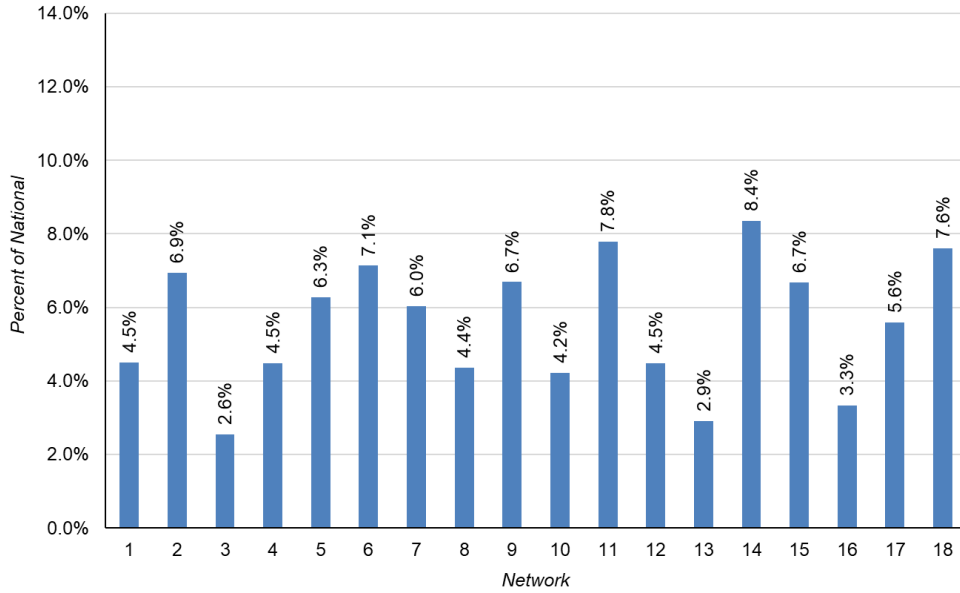
National total transplant patients: 306,878
Source of data: EQRS May 2024

Percent of Medicare-Certified Kidney Transplant Facilities by ESRD Network
2023
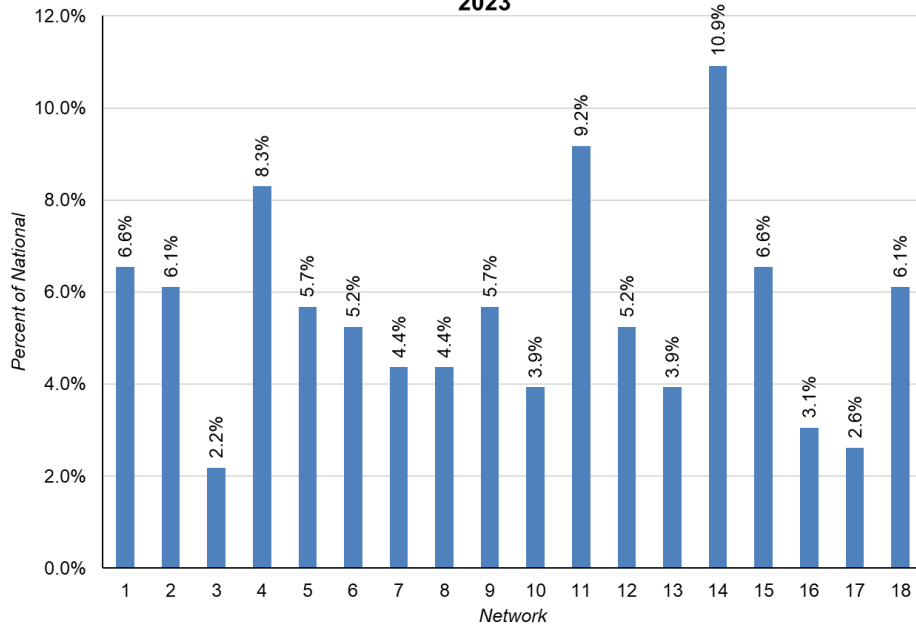
National total ESRD Medicare-certified kidney transplant facilities: 229
Source of data: EQRS May 2024

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Transplant Waitlist & Transplanted Quality Improvement Activity May 2023-April 2024

Project Overview

Kidney transplantation is the best treatment option for patients with end stage renal disease regardless of age, sex, and ethnicity. By 2025, it is the goal of the Health and Human Services' Advancing American Kidney Health (AAKH) initiative that 80% of new kidney failure patients are either receiving dialysis at home or working toward having a transplant. Network 2 has been committed to supporting this goal by meeting with empowered patients, nephrologists, primary care providers, transplant center staff, and dialysis providers to plan, develop, and implement quality improvement concepts and strategies to support transplant education and patient choice.

During the performance period, the Network worked to meet the goal of having 1,566 new patients in its service area added to United Network for Organ Sharing (UNOS), the national transplant waitlist, and 1,296 patients transplanted.

Interventions

Interventions deployed in the Network's region focused on building on the existing momentum to add patients to the waitlist and to encourage transplant. Interventions included the launch of *Kidney Transplant Compare,* a mobile application and website dedicated to helping patients navigate their transplant journey while also educating and assisting dialysis facilities in identifying and overcoming patients' barriers to transplantation via community coalitions; living donation education; and promoting the acceptance of high Kidney Donor Profile Index (KDPI) kidneys.

Kidney Transplant Compare

In 2018, the Network began work on the *Transplant Center Compare* project, which started as a set of documents highlighting transplant center patient selection criteria, support services, and data outcomes to encourage patients to make informed choices when selecting a transplant center. In 2023, the IPRO ESRD Network Program expanded and enhanced this project, making it a patient- and provider-facing mobile and desktop application: *Kidney Transplant Compare*. This comprehensive resource offers more than 130 key information points about each participating center. The information included in the resource is based on patients' responses when asked what they would have liked to know about transplant centers before starting their transplant journey. This application, launched in June 2023, allows the user to search, save, and compare more than 41 transplant centers across 13 states. In less than a year, *Kidney Transplant Compare* made a significant impact, with 10,000 desktop users and 500 mobile downloads to date. Furthermore, the application has garnered positive feedback from both patients and providers who attest to its effectiveness in boosting interest in transplant procedures, increasing the number of referrals submitted, promoting waitlisting at multiple transplant centers, and reducing the time spent referring patients to centers that may not fully

meet their unique needs.

Community Coalitions
During the performance period the Network chose 34 facilities to engage in a six-month quality improvement project as part of a community coalition. Participating facilities were asked to identify their most common barriers to waitlist and transplant, as expressed by patients. Network staff guided the facilities through a Plan-Do-Study-Act cycle that facilitated testing and evaluation strategies to mitigate patients' resistance to transplant as a treatment option and increase the number of patients who would consider transplant and then be waitlisted. Network staff engaged the facilities' patient advocates throughout the project. Facilities participating in the community coalition were provided with continuous feedback and resources while the Network gathered best practices to share with all facilities in the region.

Living Donation
As an additional strategy to overcome the region's transplant barriers, the Network implemented a plan to educate the dialysis provider community about the value of suggesting to their patients the option of living donation as a path to transplant and to provide resources and approaches that would assist patients in finding a donor.

This intervention began with data collection to better understand the prevalence of living donor education, if and how dialysis providers were discussing living donation with their patients, and what they were doing to help interested patients identify a living donor. The Network learned that 33% of the facilities in its service area "sometimes," "rarely," or "never" promoted the option of living donation at their facility.

To address that, the Network shared a resource with dialysis facility staff that emphasized the value of living donation and the importance of discussing this option with patients at the dialysis facility level. The Network also compiled and made available on *IPRO Learn* an updated list of approaches that patients have used to find a donor, such as utilizing community programs, printed materials, and social media platforms. Also included were seven unique patient campaign stories about finding a kidney donor. Seventy-one percent of the facilities in the Network's service area completed this activity and 97% stated they would adopt the intervention into their practice.

High KDPI Kidneys
The Network also encouraged and supported dialysis providers in suggesting that patients consider kidneys with a high Kidney Donor Profile Index (KDPI) or expanded donor criteria kidneys. Kidneys with a high KDPI score may not function as well as those with a lower KPI. *Better Than Dialysis Kidneys,* a resource made available by the ESRD NCC, was shared with dialysis facilities to provide staff with information and resources about KDPI and expanded donor criteria kidneys. This resource offered dialysis staff suggestions for ways to start a conversation about KDPI with patients who are considering transplant. Presented to facilities via *IPRO Learn*, this activity was completed by 69% of the facilities in the Network's service area. Of those facilities, 96% chose to adopt the intervention into their practice.

Outcomes

The Network's activities during the performance period contributed to an increase of 1,727 patients on the transplant waitlist (exceeding its goal of a 9% increase) and an increase of 1,666 patients transplanted (exceeding its goal of a 12% increase).

Barriers to Achieving Goals

The ESRD population in the Network's service area has had the second highest transplant rate of all ESRD Network service areas in the country. Despite this success, barriers to waitlist and transplant continued through the performance period, due to medical comorbidities, lack of patient interest, and the length and complexity of the process from referral to waitlisting.

Best Practices Spread to Achieve Goals

The Network focused on best practice sharing through the interventions implemented for the community coalitions and the *Kidney Transplant Compare*, *Living Donation, and Kidney Donor Profile Index* initiatives. The Network hosted calls that featured facilities sharing successes in their transplant processes, including how they were able to reduce inequities and increase awareness of and access to transplantation for all kidney patients. In addition, the Network highlighted the work of high performers in current and past community coalitions and shared how they (through data analysis and process changes) overcame common barriers and succeeded in increasing the number of patients considering transplant and/or registering on the waitlist.

Network 2: Patients Added to a Kidney Transplant Waiting List
May 2023 - April 2024

Number of Patients

Month	Value
May-23	158
Jun-23	291
Jul-23	447
Aug-23	557
Sep-23	689
Oct-23	859
Nov-23	999
Dec-23	1,148
Jan-24	1,275
Feb-24	1,407
Mar-24	1,563
Apr-24	1,727

Goal: 1,566

Network —— Goal – –

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024
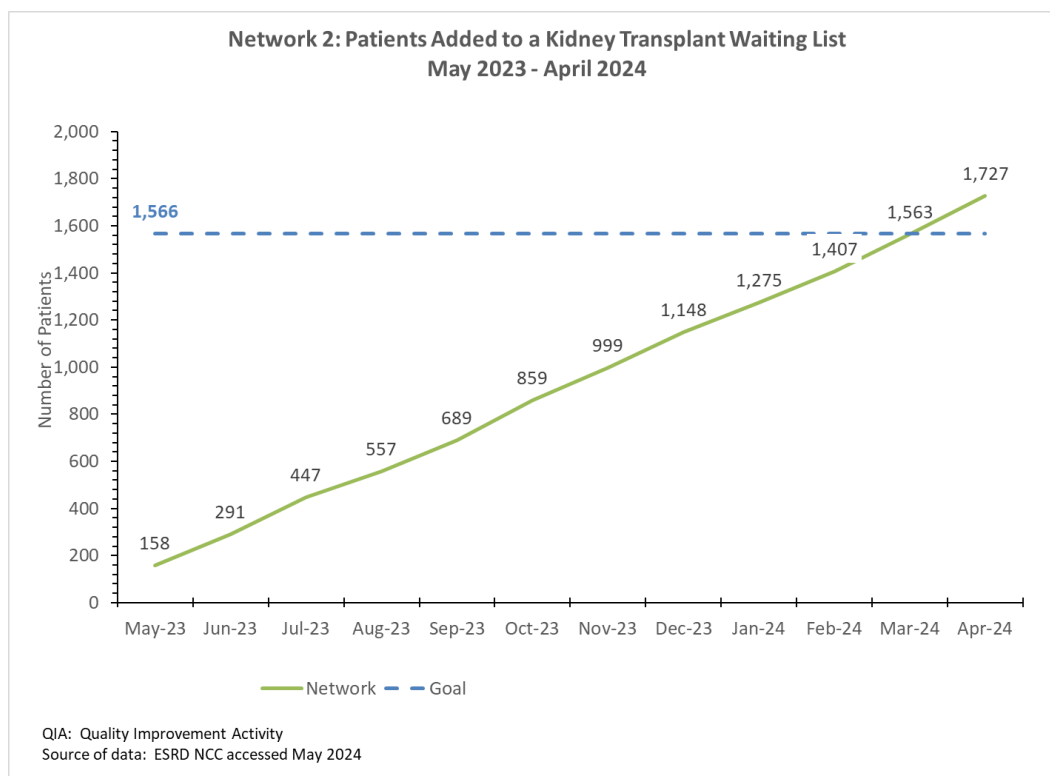
Network 2: Patients Receiving a Kidney Transplant
May 2023 - April 2024

Chart showing "Number of Patients" (y-axis, 0 to 1,800) over months May-23 to Apr-24 (x-axis).

Network line values:
- May-23: 110
- Jun-23: 250
- Jul-23: 413
- Aug-23: 554
- Sep-23: 677
- Oct-23: 822
- Nov-23: 991
- Dec-23: 1,124
- Jan-24: 1,250
- Feb-24: 1,369
- Mar-24: 1,498
- Apr-24: 1,666

Goal: 1,296

Legend: Network — Goal
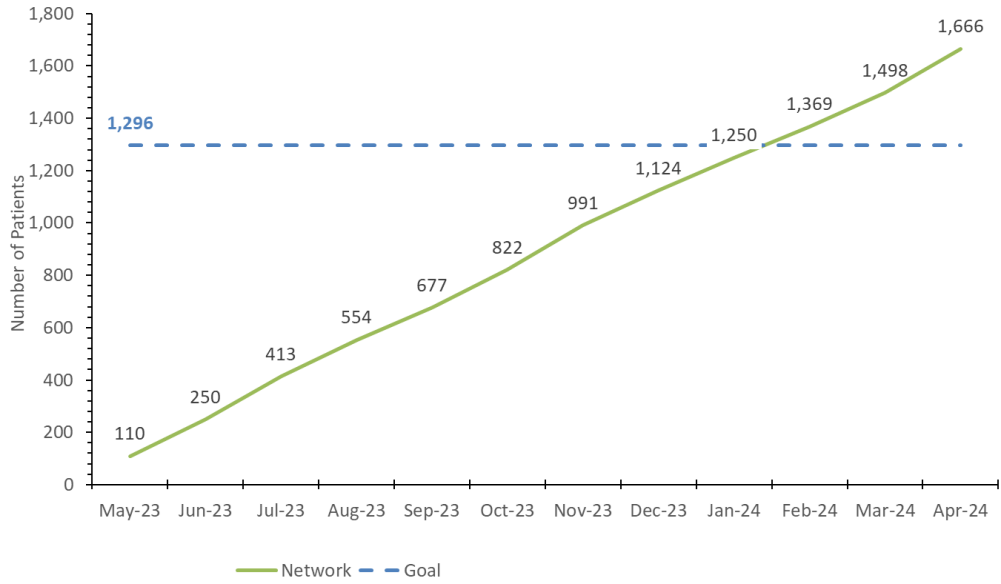
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Home Therapy Quality Improvement Activity May 2023-April 2024

Project Overview - Incident

There are many studies that document the effect of home dialysis on enhancing the quality of life for patients diagnosed with end stage renal disease (ESRD). Patients who choose a home modality gain an increased sense of independence, advanced knowledge of their disease, and a more flexible schedule that allows them to maintain their current lifestyle, including work and travel. Physical benefits of home dialysis include improved blood pressure control and improved fluid volume status leading to decreased hospitalizations as compared with patients who receive in-center treatment. When patients with chronic kidney disease (CKD) start directly on a home modality, it also helps preserve any remaining residual kidney function which is an added health benefit. Due to the numerous benefits of home dialysis for patients new to dialysis, the goal for this performance period was to increase the number of patients starting directly on a home modality by 30%.

Interventions

The Network assembled a Home Task Force comprising nephrologists, home program administrators, and a patient receiving dialysis treatments at home with a goal to identify and discuss barriers to patients starting directly on a home modality and to propose mitigation strategies. The major barriers discussed included lack of early CKD diagnosis, referral, education and treatment, and staffing shortages as well as underdeveloped home programs, low availability of programs that can be used to start a patient immediately on peritoneal dialysis, and housing/space constraints in the heavily urban area of Greater New York.

To mitigate the identified barriers, the Network worked directly with more than 34 facilities in a community coalition format on a plan-do-study-act (PDSA) process to improve their home growth both for patients new to dialysis and for those already undergoing in-center dialysis. In addition, the Network enrolled 13 facilities to work concurrently with the National Kidney Foundation's *Extension for Community Healthcare Outcomes (ECHO) Project*, to increase the comfort level and confidence of participating facilities' interprofessional teams in managing and growing a home dialysis program. Project ECHO is a mentoring program that brings together healthcare providers and subject matter experts in bi-weekly sessions to participate in case-based learning, using videoconference technology. Staff at participating facilities shared clinical challenges and benefited from the experience and feedback given by experts and peers. Curriculum topics included how to build a culture that promotes home dialysis, requirements of a home program infrastructure, patient decision support, and clinical and psychosocial issues related to home modalities. The 13 facilities that participated in Project ECHO achieved a 1.08% increase in incident patients starting on a home modality.

To help increase awareness of the importance of early CKD education, screening, and detection, the Network participated in the NKF New York Stakeholder Summits Working Groups *Ending Disparities in Chronic Kidney Disease (CKD).* Network staff participated in four work groups:

Clinical Considerations for CKD in Primary Care; Engaging Community and Community-Based Solutions; CKD in a Population Health Model Policy; and Payment and HEDIS Measurement.

Outcomes

The Network's activities during the performance period contributed to a total of 905 incident patients (11.94%) starting renal replacement therapy on a home modality, missing its goal of a 30% increase over the baseline year.

Barriers to Achieving Goals

The Network worked to identify barriers through discussions with the Home Task Force, NKF's Ending Disparities in CKD workgroups, and community coalitions. One of the most significant barriers identified was the lack of early education about dialysis treatment options for patients with CKD. The introduction of education on the disease would assist CKD patients in understanding how they might slow the progression of the disease and make educated decisions about a treatment option once they have to start dialysis.

For patients living in apartments in urban areas such as New York City, several additional barriers related to social determinants of health were identified, including the high percentage of patients living in multigenerational housing. These patients often have limited space for treatment and storage of supplies needed for home modalities. Patients living in older apartment buildings without elevators often face additional barriers including outdated electrical systems and cumbersome trash disposal.

Best Practices Spread to Achieve Goals

The Network found that having a CKD educator work with patients to increase awareness of the benefits of home dialysis is a best practice. The Network shared best practices and resources on how to build a CKD education program. One resource that was shared was the American Kidney Foundation course, *Kidney Health Coach*, which offered continuing education credits to all participants and helped participants develop a CKD education program. Additional resources and tools were also shared with CKD educators via *IPRO Learn*, the Network's online education platform, and via the Network's bimonthly CKD newsletter.

The Network organized and invited its CKD educators and home facilities to a Best Practice sharing call which featured a facility sharing how they became a top performing home program by using a unique group training model, innovative staffing, and a relationship-based care model.

Project Overview - Transition

The choice of a home modality (peritoneal dialysis or home hemodialysis) enhances quality of life, reduces healthcare costs, and provides flexibility for patients' treatments. During the performance period the Network worked to increase education and awareness about these treatment options and provide the resources needed to help patients determine the appropriate dialysis modality to fit their lifestyle.

The Network's goal for this performance period was to increase the number of patients transitioning to a home therapy to 12% above the baseline measurement (April 30 - 2020 - May 1, 2021).

Interventions

There are a large number of independent dialysis facilities within the Network's service area (44% of all facilities are independently owned), and a resulting set of barriers to transitions to home dialysis. The Network chose to focus its efforts on a program of one-on-one technical assistance starting in November 2023 to provide facilities with the resources they needed to open and/or grow their home programs.

After conducting one-on-one technical assistance and based on an understanding that vendor education could help facilities educate their staff and patients about home dialysis without putting additional stress on already understaffed facilities, the Network determined which of the facilities held contracts with an education vendor.

The Network also enrolled 13 facilities (mid-level performers) to work in concurrence with the National Kidney Foundation's ECHO Project, with a goal to increase the comfort level and confidence of participating facilities' interprofessional teams in managing and growing a home dialysis program. Staff at participating facilities shared clinical challenges and benefited from the experience and feedback given by experts and peers. Curriculum topics included how to build a culture of promoting home dialysis, requirements of a home program infrastructure, patient decision support, and clinical and psychosocial issues related to home modalities. The 13 facilities that participated in the ECHO project had a baseline (May 1 - 2022 - November 30 - 2022) rate of patients transitioning to home dialysis of 2.5 and at the conclusion of the ECHO project (June 1 - 2023 - December 30- 2023) the rate was 3.75.

The Network also worked with its Task Force, a group of nephrologists, nurses, patients, and Network staff, who collaborated to identify barriers to transitioning to home therapy and mitigation strategies to address those barriers. This group was instrumental in shaping the information that was disseminated to facilities and patients across the Network service area.

Outcomes

In the Network service area, 1,092 patients who had been receiving in-center dialysis transitioned to home therapy during the performance period. While the Network's efforts resulted in a steady increase in patients transitioning to a home modality throughout the performance period, the Network did not meet its goal to attain an increase over the baseline period of 12% of patients transitioning to home treatment.
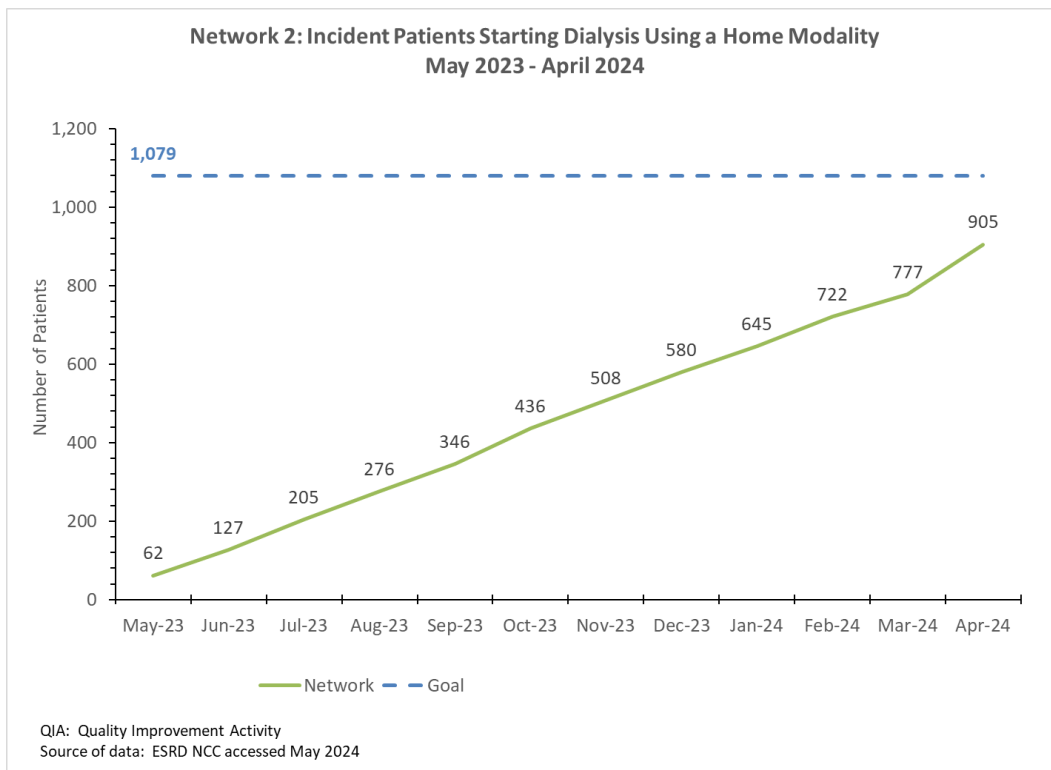
Barriers to Achieving Goals

Many barriers related to structural issues are inherent in starting and growing home programs. Nearly 44% of the dialysis facilities in New York State are independently owned and have difficulty absorbing the costs of training staff in preparation of opening a home program and supporting training needs and growth since they do not have back-up home program nurse

support systems. Many facilities in the Network service area treat patients whose English proficiency is limited, and independent facilities are less likely to have access to home educational materials in languages other than English. This often contributes to inequities for patients with limited English language skills who might consider transitioning to a home therapy.

The Network service area includes large urban centers which face unique barriers related to social determinants of health. Small housing units in urban areas make it difficult for patients to perform home modalities due to lack of space. Many apartment buildings in urban areas lack the proper electrical and storage requirements needed for equipment and supplies; and in some apartment buildings trash disposal can become an issue. The volume of supplies needed for home dialysis results in an increase in trash. Multigenerational families residing in apartment buildings also present a barrier due to already limited space in small urban apartments.

Best Practices Spread to Achieve Goals

Community coalitions functioned as bodies of stakeholders within the Network service area, dedicated to identifying barriers related to patients transitioning to a home therapy. Coalition members conducted root cause analyses to identify areas for improvement, committed to work as a group to achieve quantitative aims, and implemented specific actions to address the identified root cause. Network staff routinely invited members of community coalitions to attend the ESRD NCC-hosted Learning and Action Network and Expert Team calls.

Network 2: Incident Patients Starting Dialysis Using a Home Modality
May 2023 - April 2024

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Prevalent Patients Moving to a Home Modality
May 2023 - April 2024
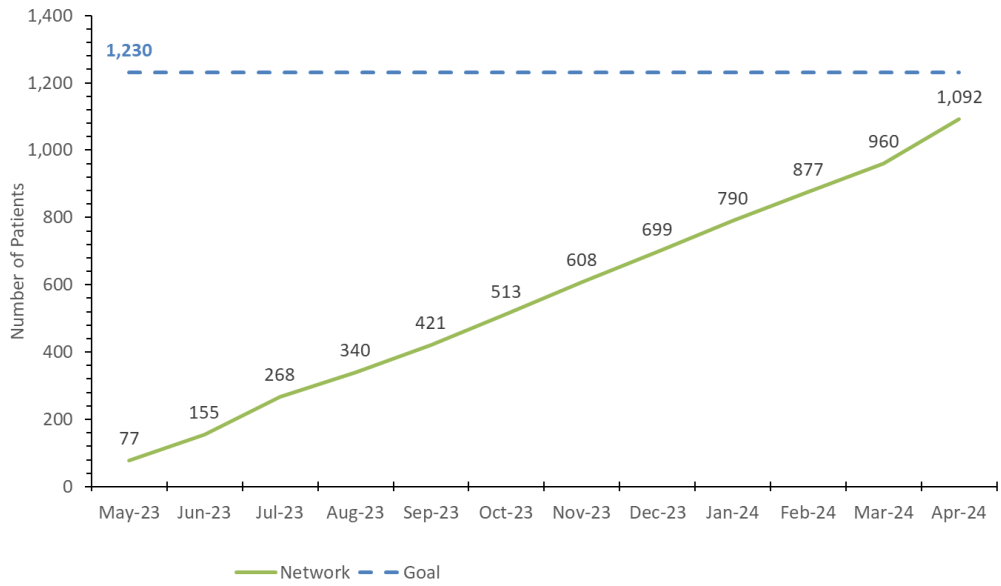
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Influenza Vaccinations (Patient and Staff) May 2023-April 2024

Project Overview

Patients with ESRD are immunocompromised and often receive their healthcare in conjugate care settings which makes them more likely to contract respiratory infections. This puts the ESRD patient at greater risk for contracting influenza, which can lead to hospitalization and death.

While "vaccination rates in the general population have been associated with improved outcomes, end-stage renal disease (ESRD) patients have received little attention in determining the potential benefits.[1]" In this environment it was the Network's role to educate ESRD facilities on the importance of increasing vaccine administration and provide technical assistance on capturing vaccination data within the community to meet the CMS goal of a 90% influenza vaccination rate for both patients and healthcare workers (HCW). All individuals were deemed eligible for the vaccine unless they had an exemption due to allergies or a religious belief.

To monitor influenza vaccination administration, facilities were responsible for reporting influenza vaccine rates using their electronic medical records (EMR) and ensuring that the data reports were transmitted to the National End Stage Renal Disease Quality Reporting System (EQRS) for patients and the National Healthcare Safety Network (NHSN) for staff.

Interventions

To change the narrative on vaccinations, the Network launched a *Healthy Living* campaign as a new approach to encourage patients to take an active role in their healthcare. Through this initiative, the Network focused on the need for preventative healthcare measures, including vaccination, as a vital component of maintaining the health of a person living with ESRD.

To educate the community on all the priorities of healthy living, the Network introduced the *Healthy Living Bingo Game* as a fun interactive approach to raising awareness about ways to maintain a healthy lifestyle. The benefits of gamification of this initiative included overcoming health literacy issues and providing an interactive way to address all areas of healthy living including weight management, nutrition, Patient Facility Representatives, as well as preventative measures like vaccinations. The game was created and promoted to be played both live and virtually, as well as with both in-center and home modalities. Of 356 facilities, 230 completed the intervention and 173 of those clinics noted they were scheduling a time to offer the game as a way to introduce the *Healthy Living* initiative. Feedback about the *Healthy Living Bingo Game* was highlighted by patients' excitement.

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[1] David T. Gilbertson, Mark Unruh, A. Marshall McBean, Annamaria T. Kausz, Jon J. Snyder, Allan J. Collins, Influenza vaccine delivery and effectiveness in end-stage renal disease, Kidney International, Volume 63, Issue 2,2003, Pages 738-743

Additional interventions implemented by the Network included efforts to improve processes related to the capture of data on influenza vaccinations given to patients and staff via a system of checks and balances. Facilities were encouraged to download internal data systems and cross-reference them to the national databases.

Those interventions focused on gathering and accurately entering data on current Influenza vaccination rates in each facility. The Network sent correspondence to help educate low performing facilities on methods to improve their vaccination rates and followed up with offers to provide one-on-one technical assistance to improve their data capture.

Outcomes

At the end of the performance period, 19,713 patients (72%) and 2,750 healthcare workers (32%) in the Network service area had received an influenza vaccine; a decrease of 2.73% over the prior year for patients and 17.18% for healthcare workers. Therefore, Network did not achieve the goal to have 90% of patients and healthcare workers vaccinated for influenza.

Barriers to Achieving Goals

Despite the proven efficacy of vaccinations, burden and burnout remained the primary barriers. A wide range of other reasons for denial had been identified in all communities; these included the frequency that vaccinations are required, vaccine side effects, misconceptions about the need to vaccinate, and lack of trust in the government/healthcare system. The Network worked with facilities to address another major barrier, the lack of good data capture on influenza vaccination. This occurred for many reasons, ranging from poor vaccination tracking mechanisms to computer issues in downloading data. The Network created focused strategies to deal with each data capture issue throughout the program year.

Best Practices Spread to Achieve Goals

One of the most important steps the Network took was to offer open discussions regarding best demonstrated practices in capturing vaccination data during Office Hours as well as the quarterly national calls. The use of open dialogue allowed low performing facilities to learn about implementing best demonstrated practices from high performing facilities. While generally not conducive to covering large amounts of content, the interactive approach effectively provided clear and understandable education using a comfortable format that encouraged people to ask questions as well as share ideas.

Network 2: Percent of Dialysis Patients Receiving an Influenza Vaccination
May 2023 - April 2024
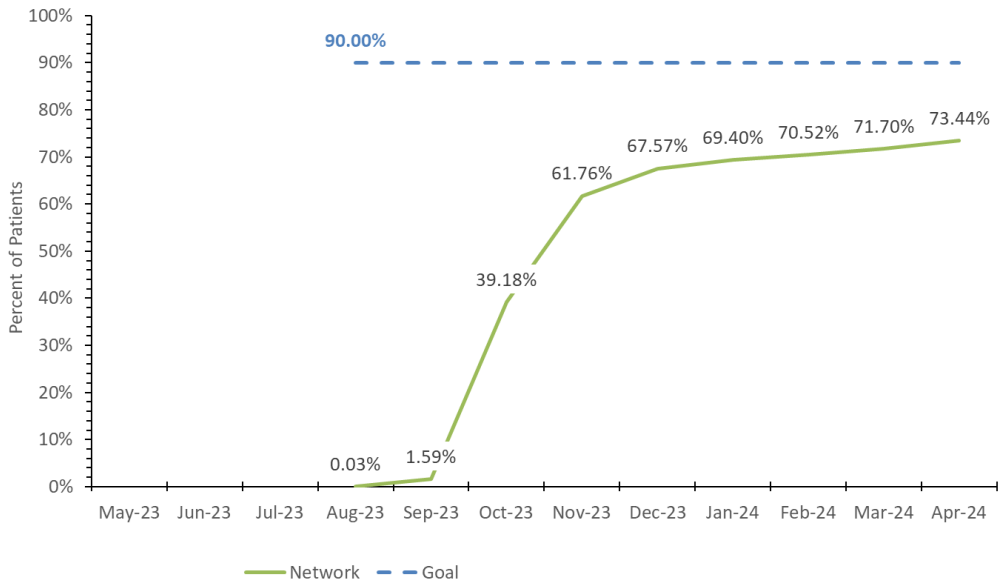
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Percent of Dialysis Facility Staff Receiving an Influenza Vaccination
May 2023 - April 2024
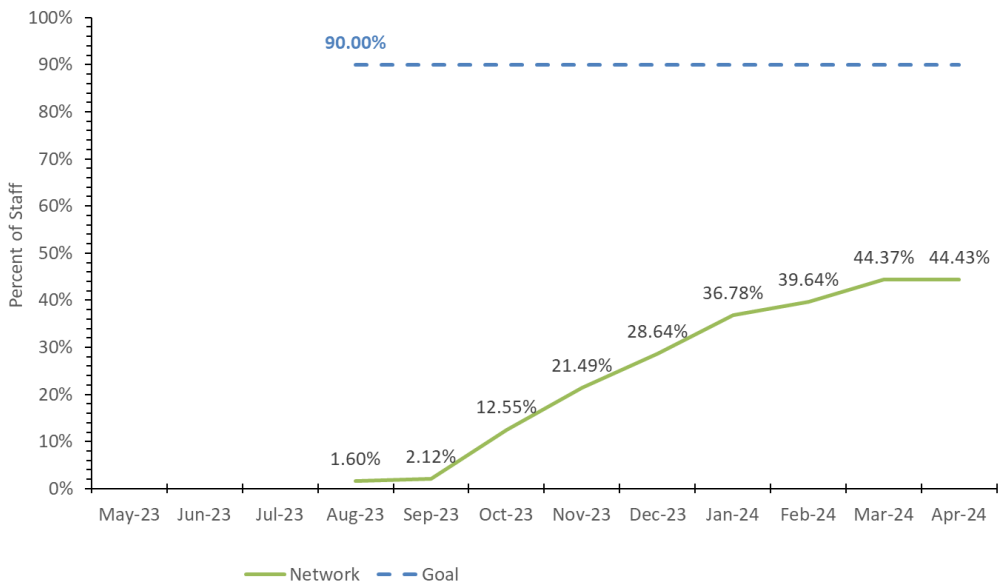
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

COVID-19 Vaccinations (Patients and Staff) May 2023-April 2024

Project Overview
There have been many improvements in the prevention and treatment of COVID-19 since the pandemic started in 2020; however, the best protection remains staying up to date with COVID-19 vaccinations. A majority of new COVID cases in the U.S. reported during the performance period were caused by a sub-variant of the COVID-19 Omicron variant, known as XBB. The current monovalent vaccines released in the fall of 2023 are effective against these COVID-19 virus strains. The elderly and immunocompromised individuals such as those with kidney disease are still at greater risk than others for infection, so immunization remains the best defense against serious illness and death for this population.

During the performance period, the Network worked to ensure that:
- A minimum of 80% of dialysis patients were fully vaccinated for COVID-19, including boosters, as determined by the Centers for Disease Control and Prevention (CDC) and/or CMS. The data source for this measure is the NHSN.
- A minimum of 95% of dialysis facility staff were fully vaccinated for COVID-19, including boosters, as determined by the CDC and/or CMS. The NHSN is the data source for this measure.

Interventions
The Network provided facilities with a Quick Reference Guide: *Reporting up to date COVID-19 vaccination status through the COVID-19 Vaccination Modules*. The guide was a tool to educate facilities on the definition of "up to date," in reference to vaccinations for both patients and staff. The resource was an algorithm that included examples of guidelines for when individuals would be due for a follow-up vaccine after they had received the initial dose, boosters, and updated bivalent vaccines. As a supplemental support, the Network also educated patients, their families, caregivers and stakeholders about the new resource released by the Biden Administration -- the *Bridge to Access Project* -- an online tool that provides information on local sites offering free COVID-19 vaccines. After sharing this resource, the Network contacted facilities in its service area to inquire if they were planning to offer the new COVID-19 vaccine.

Outcomes
The Network's efforts resulted in the following outcomes in the Network service area at the end of the performance period: The Network did not exceed or meet the goal of 80% for patients and 95% for healthcare workers. A total of 4,274 (6.78%) of patients and 334 (3.51%) facility staff members received the COVID-19 vaccination.

Barriers to Achieving Goals
The Network worked to address key barriers related to COVID-19 vaccination among both patients and staff. One significant challenge was the confusion many people had about the vaccines, stemming from factors such as burnout, fatigue, mistrust, and misunderstanding.

Following multiple rounds of vaccinations required during the pandemic, the sense of urgency and belief in an ongoing need for COVID-19 vaccination had diminished.

Many patients reported that they either believed they did not need the vaccine anymore or no longer perceived COVID as a serious health threat. Some individuals who had contracted COVID despite being vaccinated didn't believe in the vaccine's effectiveness. Additionally, there was confusion regarding what constitutes being up to date with the transition from the bivalent series to a single monovalent dose. These factors led to a general sense of confusion and disruptions in vaccine administration, particularly in the fall of 2023. In addition, the large percentage of dialysis facilities that did not offer the new monovalent vaccine on site added to a low reported rate of COVID-19 vaccination for both patients and staff.

Best Practices Spread to Achieve Goals

As a best practice, the Network engaged in personalized, one-on-one support sessions both onsite and virtually, during which it shared and facilitated the implementation of best-demonstrated practices with facilities across the Network's service area. During these sessions the Network highlighted successful strategies employed by facilities that had achieved high rates of COVID-19 vaccination. Through these interactions, facilities gained valuable insights into effective approaches for reaching vaccination goals.

The Network guided facilities regarding recent changes to the CMS Quality Incentive Program (QIP). Notably, facilities were informed about the inclusion of reporting on the vaccine status of healthcare workers (HCWs) as a performance measure linked to facility payments. This ensured that facilities were aware of the updated requirements and could take necessary actions to comply.

Additionally, clinics received tailored advice on patient education regarding the importance of staying up to date with vaccinations targeted for seasonal variants. By equipping clinics with the necessary knowledge and resources, the Network empowered them to effectively communicate to their patients the importance of vaccinations. This comprehensive approach aimed to enhance vaccination rates and promote better health outcomes within the community.

Network 2: Percent of Dialysis Patients That Are Up to Date with COVID-19 Vaccines
May 2023 - April 2024
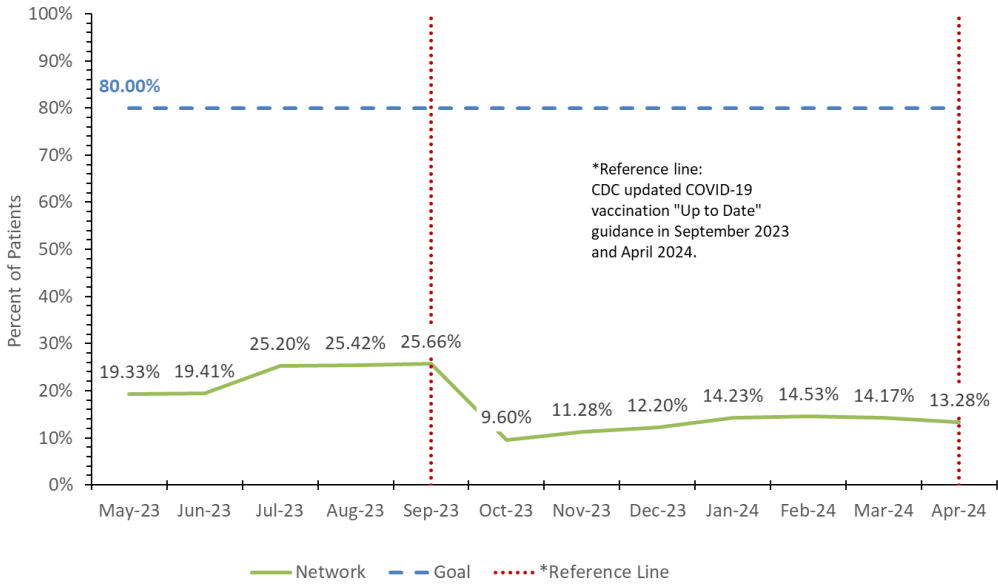
*Reference line: CDC updated COVID-19 vaccination "Up to Date" guidance in September 2023 and April 2024.

80.00%

19.33% 19.41% 25.20% 25.42% 25.66% 9.60% 11.28% 12.20% 14.23% 14.53% 14.17% 13.28%

Network — Goal .... *Reference Line

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Percent of Dialysis Facility Staff That Are Up to Date with COVID-19 Vaccines
May 2023 - April 2024

*Reference line: CDC updated COVID-19 vaccination "Up to Date" guidance in September 2023 and April 2024.

95.00%

16.77% 18.15% 25.79% 20.75% 20.79% 10.84% 7.48% 9.34% 10.83% 12.25% 11.58% 10.78%

Network — Goal .... *Reference Line
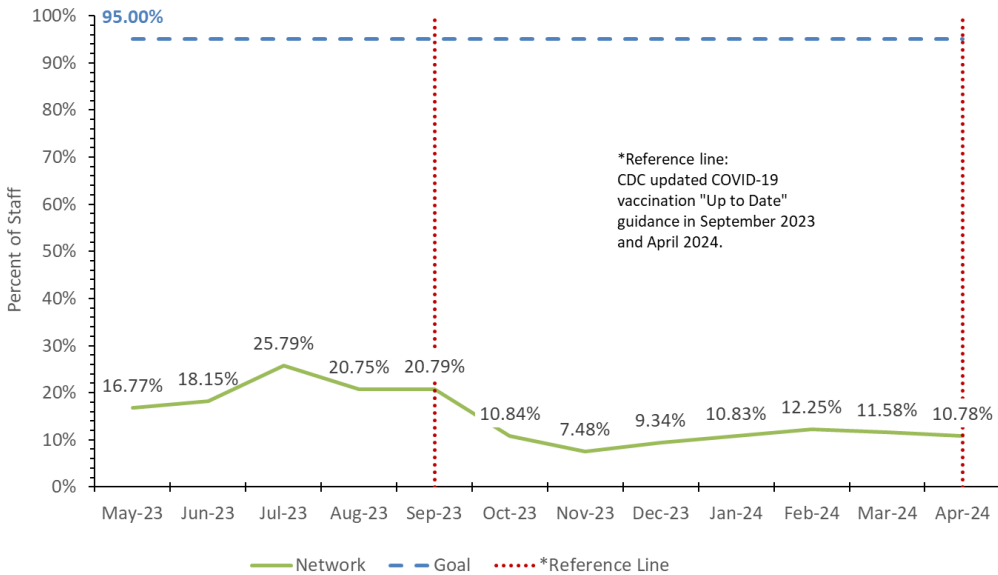
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Pneumococcal Vaccinations (PCV13 & PPSV23) May 2023-April 2024

Project Overview

Pneumococcal pneumonia is an infectious, potentially serious bacterial lung disease that is spread from person to person through coughing or close contact. It is defined as an infection of the upper respiratory tract that can inflame air sacs in one or both lungs. According to the Pharmacy Times, "pneumonia accounts for more than 50,000 annual deaths, 423,000 emergency department visits and $16.2 billion in healthcare costs." Common symptoms, such as high fever, coughing, and chills can vary for all age groups; however, those who suffer the most tend to have chronic health conditions. The most vulnerable patients are those with immunocompromised systems, which includes individuals with end stage renal disease (ESRD).

While the Network's focus during this performance period was to increase adult vaccination by 20% over the baseline period (May 2021 - April 2023), the ultimate Network goal was to develop quality improvement strategies to ensure that 90% of adult dialysis patients and 85% of dialysis patients over the age of 65 were protected with the pneumococcal vaccine.

Interventions

The Network implemented direct 1:1 coaching via virtual communication for facilities that were not meeting the new pneumococcal vaccine goals. These facilities were also provided the CDC's *Pneumococcal Vaccine Timing for Adults (*a guide to help clinicians select the correct vaccine at the time for their adult ESRD patients) and the *Pneumococcal Vaccination: Summary of Who and When to Vaccinate* (a resource that provides CDC guidance on vaccination options for adults who had previously received a pneumococcal conjugate vaccine).

To improve the effectiveness of the facility strategy, the Network sent out monthly performance reports to facilities within the Network Service Area. Each report documented the results of patients' pneumonia records and a listing of patients served by that facility who were due for vaccination. The Network determined if the facility had a better understanding of the vaccination pathways by requesting facilities to participate in an activity made available through *IPRO Learn.* Facilities were surveyed regarding whether the new CDC guidelines presented in "*Pneumococcal Vaccine Timing for Adults,"* were able to be understood. One hundred ninety-six facilities were engaged in the intervention. Eighty-eight percent of the facilities in the service area agreed to adopt the tool.

Outcomes

During the performance period, the Network's efforts resulted in a 10% increase over baseline in the number of adults receiving the adult pneumococcal vaccine. The remeasurement rate for adult dialysis patients receiving the adult pneumococcal vaccine was 12,421 patients vaccinated (45%).

Barriers to Achieving Goals

Barriers to achieving goals were primarily related to the lack of awareness about the CDC's requirements for being considered up to date on the pneumonia vaccine. Confusion was widespread, especially in light of the different vaccines that were available and time ranges for administration. Most providers were unaware of the newly recommended PCV20 vaccine, since it had recently been released to the community and was not in widespread use.

Best Practices Spread to Achieve Goals

Data quality in healthcare is crucial when dealing with patient medical records, especially regarding vaccination history. The accuracy and completeness of the medical data can directly impact the value of vaccination history. A best practice shared was the Network engaging audiences to participate in group meetings (e.g., Open Office Hours, ESRD NCC Best Practice and Learning and Action Network calls), to discuss the importance of data accuracy and the newly recommended PCV20. These meetings provided feedback on the benefits of reviewing reports for accuracy, cross referencing with internal electronic medical records (EMR) and updating the national database with "up to date" vaccines given to patients. In addition, high performing facilities were asked to spread best practices to low performing clinics within the Network service area.

Network 2: Percent of Dialysis Patients That Are Fully Vaccinated for Pneumococcal Pneumonia
May 2023 - April 2024

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024
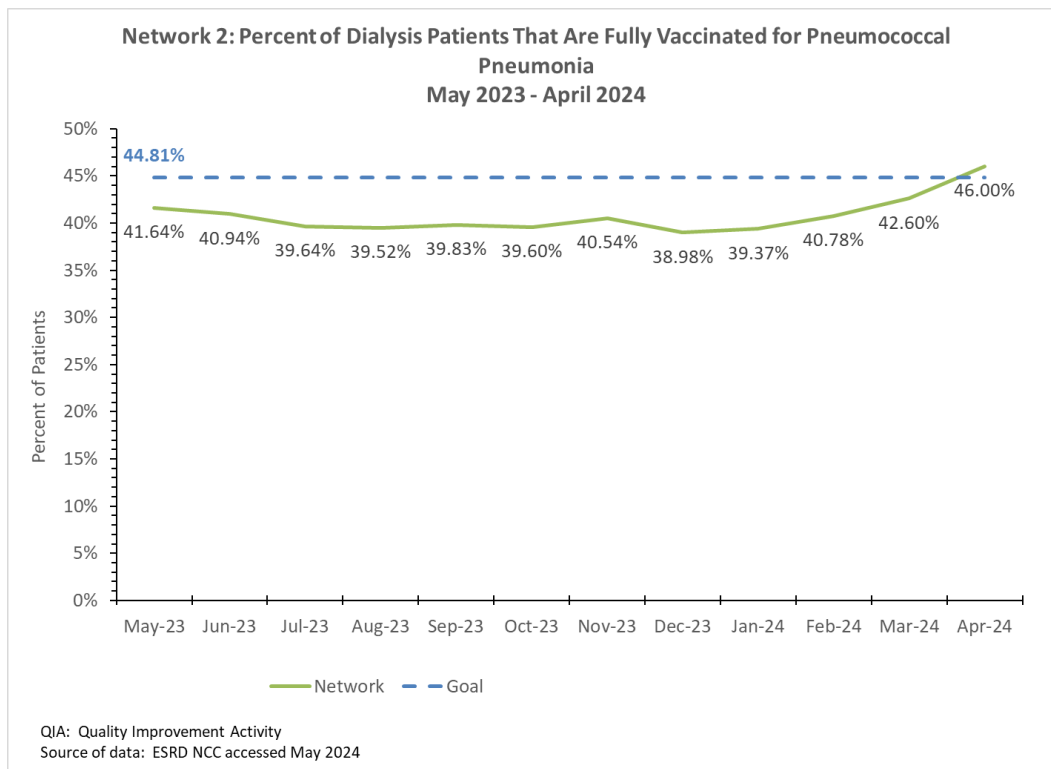
Data Quality (2728 Forms Over 1 Year, CMS Form 2728, CMS Form 2746) May 2023-April 2024

Project Overview

Network 2 worked with dialysis facilities in its service area to improve the timely submission of CMS Forms to them through the End Stage Renal Disease Quality Reporting System (EQRS). The Network's efforts focused on increasing the rate of timely submission for the following forms:

- The *Initial 2728 New ESRD/Medicare Application Forms - More Than One Year Past-Due* **submission.**
  The Network worked with facilities to increase the number of Initial 2728 Forms that were more than one year past their 45-day due date. The CMS goal was a 1% increase in the number of 2728 Forms submitted during the baseline period, or the prior performance period.

- The *Initial 2728 New ESRD/Medicare Application Form* **- due within 45 days of a 'New ESRD' admission**.
  The Network helped facilities increase the rate of timely submission of Initial 2728 Forms by 4% as compared to the baseline rate, which was recalculated using the prior performance period data. The rate was calculated to exclude 2728 Forms that were more than one year past due, using the number of 2728 Forms submitted on time divided by the number of total 2728 Forms submitted in the most recent 12-month period.

- The *2746 Patient Death Notification Form* **- due within 14 days of Date of Death.**
  The Network worked with facilities to increase the rate of timely submission of 2746 Forms by 9% as compared to the baseline rate, which was recalculated using the prior performance period's data. The rate was calculated using the number of 2764 Forms submitted on time divided by the number of total 2746 Forms submitted in the most recent 12-month period.

Interventions

Network 2 continually trained facility staff on ways to maintain accurate contact information to ensure that appropriate staff members received timely communications, including detailed instructions and announcements intended to help facilities meet CMS deadlines. Facilities in the Network service area received weekly EQRS Cleanup Reports itemizing forms due in EQRS, as well as reports of patients who required corrections in EQRS so that forms, such as 'First Admit Not New ESRD' were made available for completion and submission.

The Network sent each facility a monthly EQRS Form Compliance Report Card, which included the facility's' timely submission rates for each data quality measure during the performance period, as well as a list of EQRS Unique Patient Identifiers (UPIs) that were not submitted within the required time frame. The Network routinely instructed staff at facilities that were out of compliance to examine the possible causes that contributed to late submissions and to establish processes to ensure that the issues leading to the late submissions did not reoccur.

The Network prioritized efforts to assist facilities with submission of forms due within 10 days. Network staff called facility staff and sent additional reminders to be sure that facilities were assisted with any last-minute questions or issues that prevented the forms from being submitted earlier.

The Network also provided hands-on support to mitigate ongoing challenges for facilities that continued to miss deadlines for 2728 or 2746 Forms.

Outcomes

For 2728 Forms over One Year, the goal was to submit 106 Forms. Network facilities successfully submitted 172 2728 Forms that were over one year past due.

For the 2728 Forms due within 45 days, facilities successfully submitted 4,636 forms on time, for an 82.05% compliance rate.

For the 2746 Forms due within 14 days, facilities successfully submitted 3,301 forms on time, for a 66.38% compliance rate.

Barriers to Achieving Goals

Dialysis facilities experienced significant staff turnover, which caused gaps in staff knowledge and understanding about EQRS; and for those facilities in which contact information was not current, the Network's communications about EQRS failed to reach the right personnel.

Facilities also continued to express challenges related to obtaining nephrologist signatures on the 2728 Form, specifically if the forms needed to be sent via fax to the nephrologist's office outside of the dialysis facility, or if the nephrologist who diagnosed the patient as having ESRD visited the facility only once a month.

The Network helped the ESRD NCC identify a report discrepancy that, when fixed, triggered several hundred new 2728 Forms to appear in EQRS for facilities to complete. Though these forms were critical to patients receiving Medicare benefits and getting waitlisted for a transplant, most of them were already outside of the 45-day timeliness window, and any submission counted against the facility's 2728 Form compliance rate.

CMS made improvements in EQRS by populating the database with previously missing data from the Social Security Administration on patients' date of death. This triggered the creation of thousands of 2746 Forms that were not previously available in EQRS. Most of these forms were beyond their 14-day timeliness period, causing a decrease in the facility's 2746 compliance rate once submitted.

After a 2728 Form or 2746 Form was submitted, any modifications made to it changed the submission date and often caused the form to appear as 'late' even if it was originally submitted on time.

For 2728 Forms, patient demographic information (such as the correct spelling of the name or complete Social Security number) or diagnosis code were, at times, not available to the facility within the first 45 days after a new admission. These omissions were sometimes identified only after the Social Security Administration reviewed the forms.

When completing 2746 Forms, facilities often were not made aware of the patient's cause of death within the first 14 days, especially if the patient was hospitalized. In such cases, the facility often selected 'unknown' as the cause of death, and later requested that the cause of death be updated once that information became available.

Best Practices Spread to Achieve Goals

The Network continually worked to engage facility staff in EQRS compliance improvement activities that included training opportunities, one-on-one support appointments, and 'Live EQRS Help' webinars. Invitations to the 'Live EQRS Help' webinars were included in all weekly Cleanup Reports and monthly EQRS Report Cards. Notices about the webinars were also included in the *Announcements* section of *IPRO Learn*.

The Network used *IPRO Learn* to collect facility input on whether the Network-developed resources and instructions were clear and helpful, what best practices helped their facility stay timely with form submission, and what other types of support the Network should offer the facility at a critical time.

The Network collaborated with the data leadership teams of both large and small dialysis organizations by providing them with lists of facilities within their organization that consistently performed poorly or showed declining compliance, with a goal to facilitate corporate-level interventions to assist the struggling facilities.

Network 2: Number of Incomplete Initial CMS-2728 Forms that are Over One (1) Year Old that are Completed and Submitted
May 2023 - April 2024

Number of Forms (Y-axis: 0 to 200)

Month	Network
May-23	13
Jun-23	25
Jul-23	40
Aug-23	66
Sep-23	96
Oct-23	101
Nov-23	114
Dec-23	125
Jan-24	134
Feb-24	151
Mar-24	163
Apr-24	172

Goal: 106

Legend: Network — Goal

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Percent of Initial CMS-2728 Forms Submitted Within Forty-five (45) Days
May 2023 - April 2024

Percent of Forms (Y-axis: 0% to 100%)

Month	Network
May-23	82.59%
Jun-23	82.71%
Jul-23	82.86%
Aug-23	82.91%
Sep-23	82.59%
Oct-23	81.99%
Nov-23	81.36%
Dec-23	81.83%
Jan-24	80.68%
Feb-24	80.49%
Mar-24	81.17%
Apr-24	82.05%

Goal: 85.99%

Legend: Network — Goal

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Percent of CMS-2746 Forms Submitted Within Fourteen (14) Days of Death
May 2023 - April 2024

66.91%

Month	Percent
May-23	67.01%
Jun-23	66.72%
Jul-23	66.55%
Aug-23	66.36%
Sep-23	66.44%
Oct-23	66.08%
Nov-23	66.22%
Dec-23	66.40%
Jan-24	66.76%
Feb-24	66.19%
Mar-24	65.71%
Apr-24	66.38%

Network — — Goal
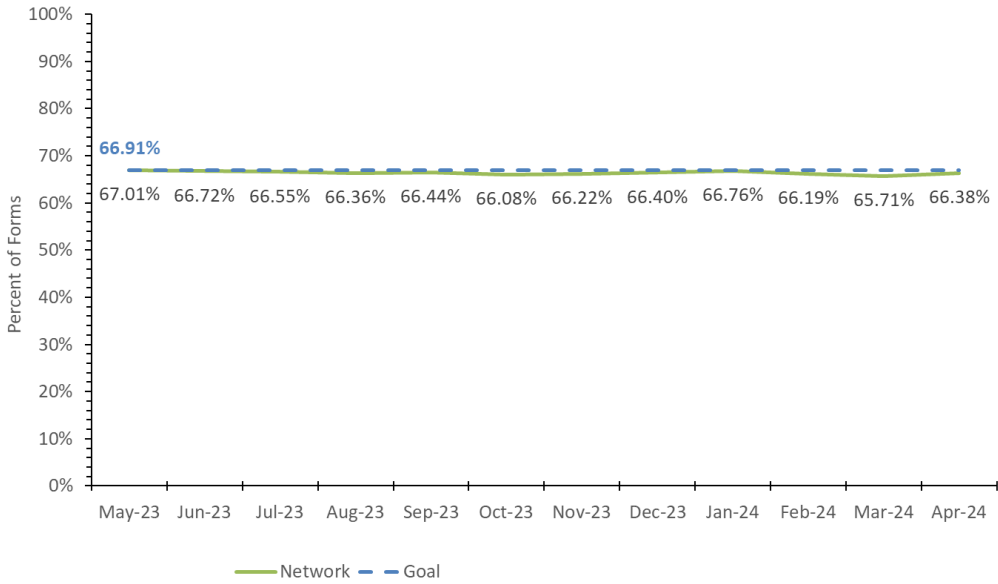
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Hospitalization (Inpatient Admissions, ED Visits, Readmissions) May 2023-April 2024

Project Overview

Individuals with ESRD are at a higher risk of requiring urgent medical attention, including hospital stays and emergency department (ED) visits, than are individuals with healthy kidneys. The need for acute care is elevated in dialysis patients due to conditions that led to kidney failure or changes in patients' physical state caused by kidney disease (e.g., diabetes, hypertension, cardiovascular disease, anemia, and blood chemistry imbalances). Dialysis patients are more susceptible to infections because of weakened immune systems.

People who frequently experience hospital stays and ED visits face higher risks of mortality and morbidity as compared to those who rarely seek acute care.[2] Considering these challenges, the Network worked to reduce, by 4%, hospitalizations, ED visits, and readmissions within 30 days related to specific CMS Primary Diagnosis Codes. The baseline for the measurement was Medicare Claims data for May 2022 to April 2023.

Interventions

The Network's approach to reducing hospitalizations involved implementing an *IPRO Learn* intervention centered around leveraging Z codes for social determinants of health (SDOH). This approach was selected after reviewing barriers that were reported during on-site technical assistance visits. Through these visits, it became apparent that issues preventing patients from adhering to their schedules and dietary regimens were often rooted in SDOH. Non-compliance emerged as a major contributor to ED visits, hospital admissions, and readmissions.

To address these challenges, the Network provided facilities with a resource on using Z codes and emphasized the benefits of their adoption. The resource aimed to equip healthcare providers with valuable tools for capturing information related to SDOH, lifestyle, and non-medical factors influencing patient well-being. Its overarching goal is to foster a more holistic and patient-centered approach to healthcare, recognizing the importance of addressing social determinants to achieve better health outcomes and reduce hospitalizations.

The training sessions were conducted through *IPRO Learn*, with 224 facilities completing the activity. Of those facilities that participated, 96% reported that the resource had improved their understanding of Z codes and how to utilize them effectively. The initiative underscored the significance of incorporating SDOH considerations into care plans and highlighted the value of addressing these factors when working to reduce hospitalizations.

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[2] Moe J, Kirkland S, Ospina MB, Campbell S, Long R, Davidson A, Duke P, Tamura T, Trahan L, Rowe BH. Mortality, admission rates and outpatient use among frequent users of emergency departments: a systematic review. Emerg Med J. 2016 Mar;33(3):230-6. doi: 10.1136/emermed-2014-204496. Epub 2015 May 7. PMID: 25953837.

Outcomes

The Network's activities during the performance period resulted in the facilities within its service area successfully achieving the emergency department visit reduction goal of 0.60% along with improvements in the inpatient hospitalization and readmission rates. The inpatient hospitalization rate was 2.12%, 0.22 from the goal; and the readmission rate was 10.8%, 2.26 from the goal. While the Network did not meet all the set goals, the results represent reductions in overall hospitalizations. Using the CDC's Center for Health Statistics calculated average inpatient hospital cost of $14,101 in 2019[3], Network activities in the region resulted in 125 fewer hospital stays than the 2023-2023 baseline rate, saving $1,762,625.

Barriers to Achieving Goals

One obstacle the Network encountered was the difficulty in tracking patient hospitalizations and ED visits due to the lack of identifiable admitting primary diagnoses in the current dataset. The dataset provided to the Network contained 25 lines of ICD-10 codes, none of which indicated the primary admitting diagnosis. CMS prioritizes certain diagnosis codes, and if any of these codes appeared within the 25 lines of ICD-10 codes in the dataset, the Network automatically attributed the hospitalization to this key result. The complexity of the issue increased when the Network struggled to identify the primary admitting diagnosis, making it challenging to pinpoint the causes of preventable admissions/readmissions and provide facilities with strategies to reduce these types of hospitalizations.

Best Practices Spread to Achieve Goals

The Network shared effective strategies implemented through community coalition partnerships and involving local facilities in addressing issues related to hospitalizations, readmissions, and ED visits. These groups collaboratively identified root causes for these incidents, committed to specific actions for improvement, and worked together for better outcomes. High-performing facilities were also encouraged to share detailed summaries of their RCA/PDSA cycles, focusing on reducing hospitalizations, readmissions, or ED visits. These shared insights assisted lower-performing facilities in creating action plans to reduce incidents.

Best practices identified through the Network's work with community coalitions were also shared broadly through Learning and Action Network calls as well best practice calls held for facilities in the Network's service area as well as discussions on *IPRO Learn*.

The Network also initiated "Meet the Challenge," a program to support best practice clinics by challenging facilities that had met their goals in reducing hospitalizations and ED visits to

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[3] Cost savings projected by using https://www.cdc.gov/nchs/hus/topics/hospitalization.htm average adjusted cost per inpatient stay.

achieve further improvement in their rate for the performance period. Those achieving this goal received a certificate acknowledging their efforts and their success.

Network 2: Rate of ESRD-Related Hospital Admissions per 100 Patient-months
(lower values are better)
May 2023 - April 2024

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Outpatient Emergency Department Visits per 100 Patient-months
(lower values are better)
May 2023 - April 2024

Per 100 Patient-months

Month	Network	Upper Limit
May-23	0.17	0.60
Jun-23	0.37	
Jul-23	0.51	
Aug-23	0.52	
Sep-23	0.50	
Oct-23	0.52	
Nov-23	0.54	
Dec-23	0.50	
Jan-24	0.56	
Feb-24	0.59	
Mar-24	0.56	
Apr-24	0.60	

Network —— Upper Limit – –

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Hospital 30-Day Unplanned Readmissions (lower values are better)
May 2023 - April 2024

Percent of Patients

Month	Network	Upper Limit
May-23	3.13%	8.51%
Jun-23	6.69%	
Jul-23	10.61%	
Aug-23	10.01%	
Sep-23	10.34%	
Oct-23	10.25%	
Nov-23	10.45%	
Dec-23	10.18%	
Jan-24	10.34%	
Feb-24	10.40%	
Mar-24	10.47%	
Apr-24	10.82%	

Network —— Upper Limit – –

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Nursing Home (Blood Transfusion, Catheter Infection, and Peritonitis) May 2023-April 2024

Project Overview

Throughout the performance period, the Network was committed to addressing the healthcare needs of ESRD patients receiving dialysis in the nursing home setting, with a strong focus on improving quality of care, overall well-being, and health outcomes.

These patients have higher rates of comorbidities and mortality compared to the broader ESRD population, as evidenced by data from the United States Renal Data System. The Network's overarching objective was to facilitate the provision of high-quality care through successful care coordination by identifying and mitigating risks and improving patient safety practices, with a specific goal to reduce hemodialysis catheter infections, peritonitis, and transfusions.

In collaboration with ESRD providers offering dialysis within nursing home settings, as well as nursing home facilities, patients, and other stakeholders, the Network worked to enhance patient safety, reduce harm, and improve care for ESRD patients residing in and receiving dialysis treatments in nursing homes. The Network's activities focused on achieving a 6% reduction in hemodialysis catheter infections, a 3% decrease in cases of peritonitis, and a 3% reduction in blood transfusion rates for nursing home facilities providing dialysis.

Interventions

The Network implemented monthly targeted interventions with dialysis providers that perform nursing home dialysis to address reported infections and transfusions. These interventions followed root cause analyses (RCA) to identify the underlying issues that led to each infection or transfusion. Based on RCA findings, the Network provided facilities with targeted resources and supported them in conducting PDSA cycles to assess the efficacy of the implemented interventions.

Additionally, the Network conducted monthly data clean-up processes with these facilities, focusing on incidents of infection, transfusions, and peritonitis. This process involved thoroughly examining all incidents in the dataset and cross-referencing them with documented records in the EQRS system. Many incidents were inaccurately identified, often due to missing information regarding nursing home admission dates. To address this, the Network assisted facilities in investigating admission dates and ensuring accurate data entry into the system. The Network engaged all 226 facilities in its service area in reviewing the ESRD NCC's *Nursing Home Change Packet*. The primary focus was on the driver labeled "Prevent and treat peritoneal and LTC infections and anemia." Facilities were encouraged to utilize the secondary driver by following procedures and implementing protocols. They were then asked to share specific change ideas from the change packet to implement as they pertained to infections and transfusions.

Outcomes

The Network's efforts during the performance period succeeded in eliminating peritonitis in the nursing home population, with a reduction from a rate of 3.03% at baseline to zero for the year and reducing the number of transfusions given from 76 in the prior year to 45 in the current performance period. However, the Network was unable to achieve the 3% transfusion rate reduction due to fewer patient months in the denominator of the rate equation this year. The Network 2 service area maintained a low level of infections throughout the year with only four infections occurring, but during the baseline year, only two infections occurred so the 6% rate reduction goal was not met.

Barriers to Achieving Goals

In addressing an ongoing challenge with data entry in EQRS, specifically regarding the completion of a non-mandatory field related to patients' admissions to nursing homes, the Network encountered difficulties in accurately identifying patients with infections or transfusions. This issue arose because facilities often did not enter the nursing home admission date, leading to patients being mistakenly categorized as nursing home patients when they were not at the time of the incident. As a result, patients were inaccurately classified as living in a nursing home at the time of transfusion or infection, which complicated the identification and management of these incidents.

These challenges were exacerbated by the volume and acuity of patients. Network staff conducted in-depth reviews of the data and provided customized assistance to facilities based on issues identified through the reviews. Any systemic issues identified were forwarded to the ESRD NCC for further review.
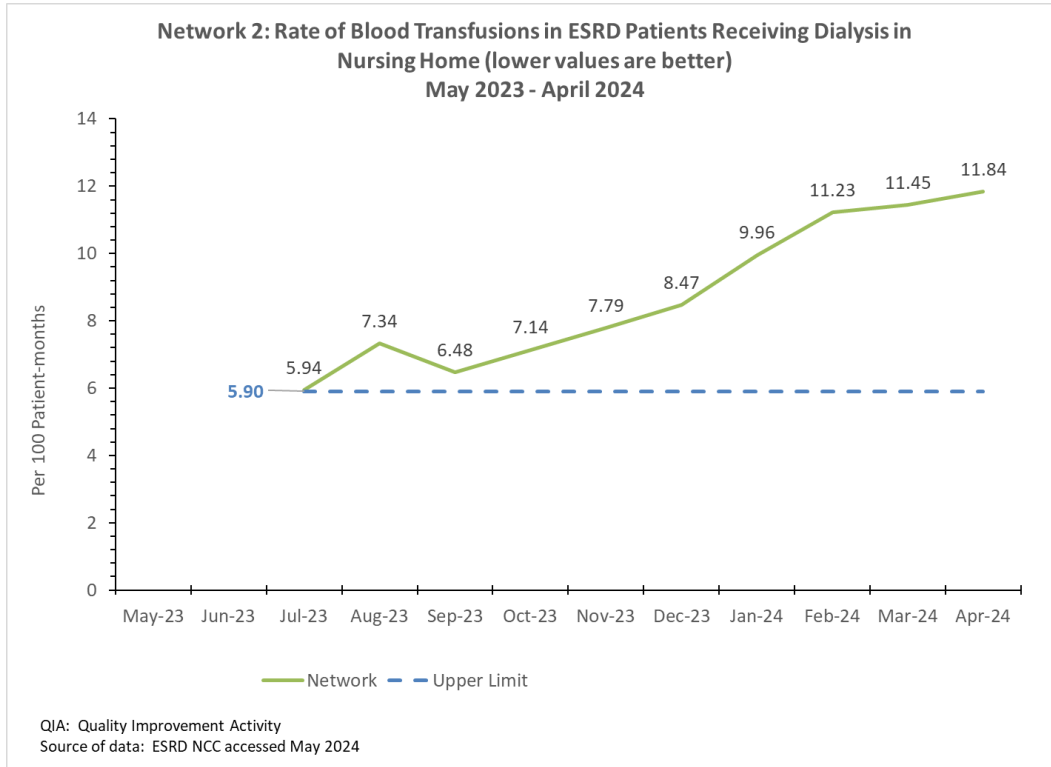
Best Practices Spread to Achieve Goals

During an ESRD NCC call, the Network showcased multiple best practices gathered from facilities throughout the year. These practices were consolidated into three main categories, each addressing a facet of patient safety and infection prevention for dialysis patients in nursing homes.
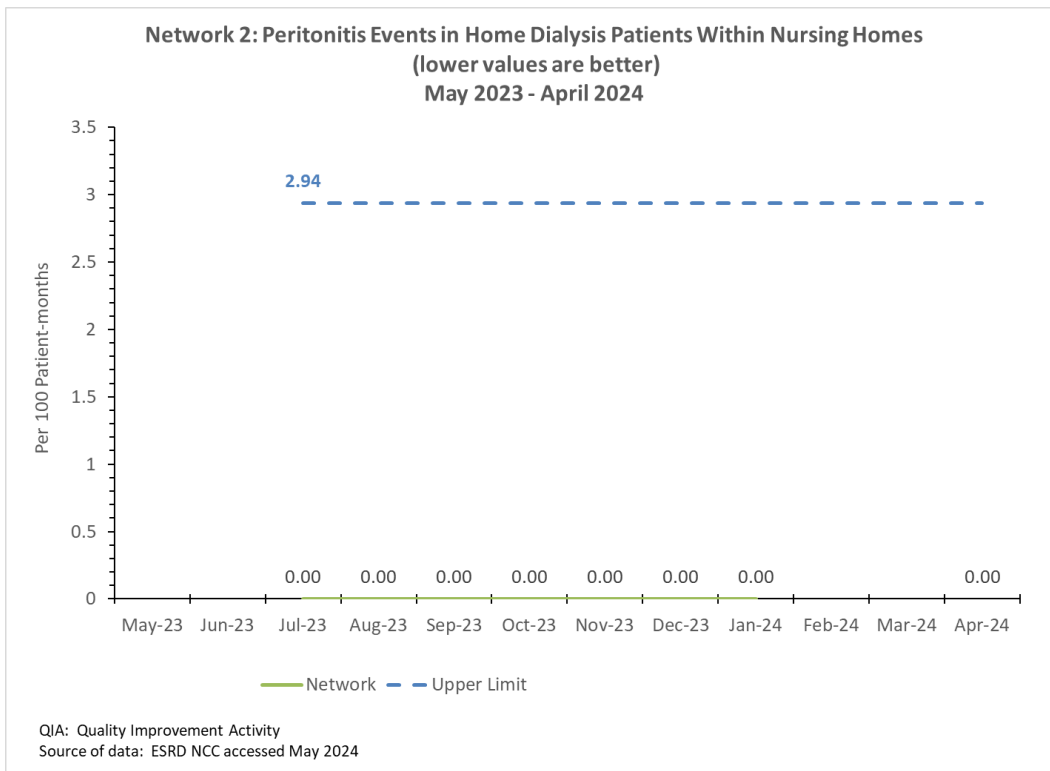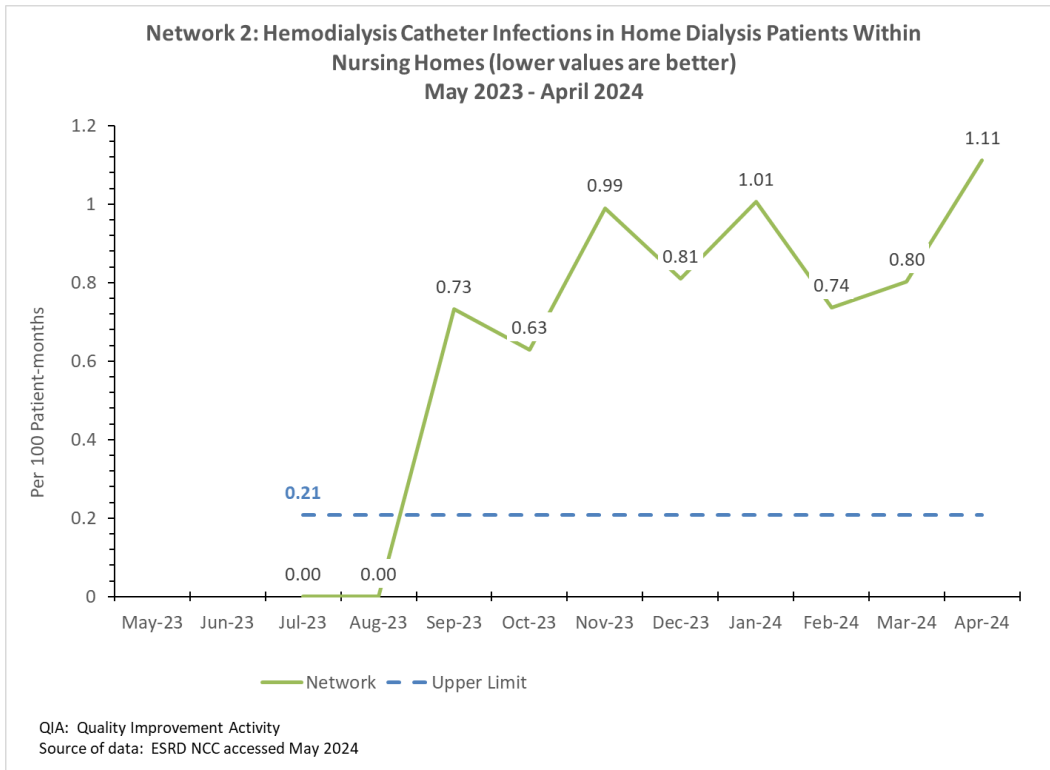
One best practice focused on effective documentation in EQRS through use of the IPRO Help Desk. Facilities reported that this support helped to ensure accurate patient records and reduce inaccuracies related to incidents of infections and transfusions. This practice was communicated to facilities via email and one-on-one discussions with staff and EQRS leads. The second highlighted best practice was a presentation focused on infection prevention strategies. Titled *Preventing Infections in Dialysis Patients in Nursing Homes: Implementing Effective Strategies for Enhanced Patient Safety*, this presentation emphasized the importance of strict infection control practices, staff education and training, and regular surveillance and monitoring to identify trends and potential outbreaks.

Lastly, the Network presented a series of best practices gathered during technical assistance sessions. These practices highlighted successful strategies, including adherence to infection

control practices, staff education and training, and regular surveillance and monitoring protocols.

Network 2: Rate of Blood Transfusions in ESRD Patients Receiving Dialysis in Nursing Home (lower values are better)
May 2023 - April 2024

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Hemodialysis Catheter Infections in Home Dialysis Patients Within Nursing Homes (lower values are better)
May 2023 - April 2024

Per 100 Patient-months

0.21 (Upper Limit)

0.00   0.00   0.73   0.63   0.99   0.81   1.01   0.74   0.80   1.11

May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24

—— Network   – – Upper Limit

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Network 2: Peritonitis Events in Home Dialysis Patients Within Nursing Homes (lower values are better)
May 2023 - April 2024

Per 100 Patient-months

2.94 (Upper Limit)

0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00

May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24

—— Network   – – Upper Limit

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Telemedicine May 2023-April 2024

Project Overview

Telemedicine has been found to be a useful tool to improve access to care for home dialysis patients who live in rural settings far from their care team. During the performance period, the Network focused on increasing the number of patients living in rural areas who participate in telemedicine visits by 3%. Based on zip codes, the Network identified facilities that had rural patients and then worked with this group of facilities as a community coalition to share information, interventions, and resources to improve use of telemedicine with their rural patients on home dialysis.

Interventions

Network staff conducted a survey to better understand how telemedicine was being used in dialysis facilities within its service area and identify interventions that would best address barriers. The survey questions focused on the type of telemedicine platform used by the facility, whether patients would need to download/install a platform on their personal devices to participate in a telemedicine event, and whether the physician team in the facility supported the use of telemedicine.

Of the 228 facilities that completed the intervention

- 25% stated that their platform does need to be downloaded.
- 46% stated that their patients are able to join from a link.
- 24% stated that their patients need to set up an account and password to join.
- 62% stated that the facility's physician team supports the use of telemedicine.

The Network hosted a Telemedicine Kickoff call to introduce the project to all facilities serving patients in rural zip codes, whether or not they currently treated patients on home dialysis. During the call Network staff reviewed the goals of telemedicine and explained why the facilities that were invited were included in the project. Network staff presented information to support the value of having patients who live in rural areas transition to home dialysis (if they weren't already using that modality) and use telemedicine to communicate with their care team. The Network reviewed local resources related to connectivity, laptops, smartphones, and devices as well as The EveryONE Project's *Neighborhood Navigator.*

Other interventions included distribution of monthly report cards providing each facility with its own performance on key metrics that included their goal and their progress in meeting the goal. The Network provided information to help facilities become aware of patients who hadn't yet had a telemedicine visit but might benefit from one.

Outcomes

Working with the identified facilities during the performance period, the Network goal was to facilitate 297 telemedicine visits. The efforts of the Network resulted in 279 telemedicine visits by patients in rural areas.
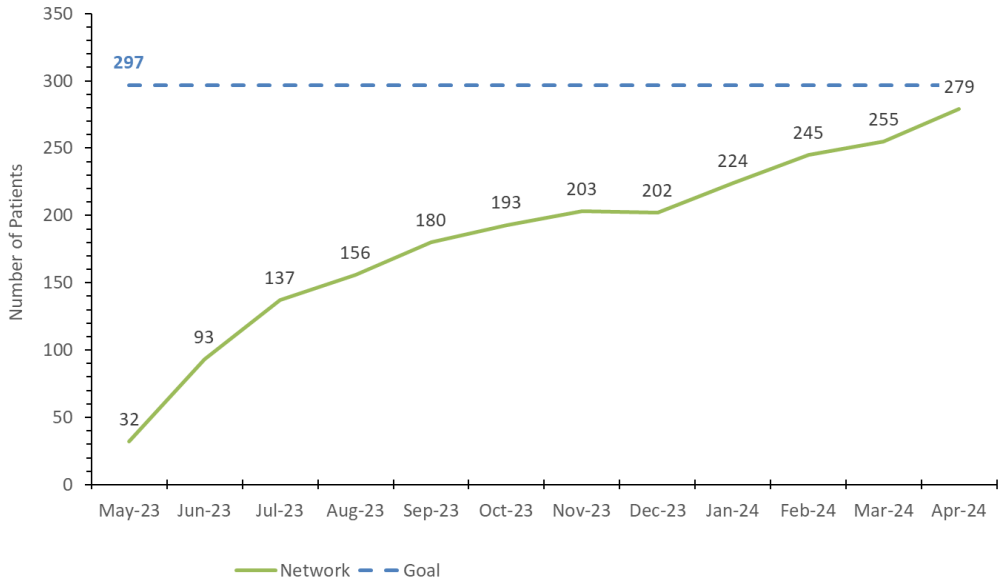
Barriers to Achieving Goals

Barriers identified in the Network service area included the inability to get the devices needed to carry out the telemedicine visits, including a smartphone or tablet. The Network focused on providing resources for internet assistance as well as assistance to ensure that devices being used were able to provide successful telemedicine visits for rural patients on home therapy. Some resources shared included Assurance Wireless (a telephone service subsidized by the federal Lifeline Assistance program) for assistance with smartphones and internet service; the Affordable Connectivity Program, which helped ensure that households were able to afford the broadband needed for activities such as telemedicine; and the Neighborhood Navigator website to assist in finding local resources.

Best Practices Spread to Achieve Goals

During the month of January 2024, the Network invited all facilities that were either in a rural zip code or had a patient that used a home modality and lived in a rural zip code to send the Network a telemedicine success story. These success stories were posted to the *IPRO Learn* platform through which education, resources and tools are shared with facilities. One facility stated that they had implemented telemedicine visits for patients who could not routinely make the long drive from their rural home to the facility, to avoid a lapse in their care. This facility structured their telemedicine visits so that a nurse first assessed the patient, after which the patient met with an interdisciplinary team. The Network routinely invited any facility that was struggling with telemedicine or that needed strategies to improve their use of telemedicine to visit the postings on the *IPRO Learn* platform.

Network 2: Number of Rural Patients Using Telemedicine to Access a Home Modality
May 2023 - April 2024

Number of Patients

Month	Network	Goal
May-23	32	297
Jun-23	93	
Jul-23	137	
Aug-23	156	
Sep-23	180	
Oct-23	193	
Nov-23	203	
Dec-23	202	
Jan-24	224	
Feb-24	245	
Mar-24	255	
Apr-24	279	

Network ― ― Goal

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

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Depression Treatment September 2023-April 2024

Project Overview

Patients diagnosed with ESRD are at increased risk for depression due to both the psychosocial and biological changes associated with the disease. Depression is not only a mental health issue but can also have a negative impact on patients' physical health. Depression in ESRD patients is known to lead to a diminished quality of life and may even lead to an increased risk of mortality. Due to the high incidence of depression in the ESRD population, the goal of this project was to increase patients' awareness of depression as a potential consequence of their chronic illness. At the beginning of the performance period the goal of this project was to ensure that facilities were screening at least 80% of patients for depression, with an additional goal of increasing by 10% the number of patients who screened positive and received treatment. During the performance period, CMS removed the depression treatment metric as a goal; however, it continued to be a top priority for the Network.

Interventions

The Network worked with both high- and low-performing facilities within its community coalitions to identify barriers facilities face when referring patients for depression treatment. The Network supported each facility in conducting a root cause analysis and implementing a PDSA cycle to identify and overcome patients' resistance to seeking treatment for depression.

The most common obstacles to patients seeking treatment were found to be stigma, shame, and lack of interest. To address these barriers, the Network used *IPRO Learn* to share the ESRD NCC *Depression Change Package*. This resource provided facilities with ideas for promoting a culture of caring and trust with patients, with the understanding that building a trusting environment for patients would allow them to feel more comfortable sharing their concerns with healthcare staff.

The Network developed a new patient resource, *Working Through Feelings of Loss and Sadness,* to help patients understand the emotions and reactions common to many individuals who receive a diagnosis of a chronic condition such as ESRD. The resource also highlights the importance of seeking treatment, should patients be identifying with any of the feelings discussed. Of those facilities that participated in the *IPRO Learn* intervention, 97% reported that they would adapt/adopt this resource for their practice.

Outcomes

The depression treatment rate metric was removed by CMS from Network goals this year; however, the Network continued to monitor facilities for their depression screening and treatment rates. Overall, the facilities within the Network's service area screened 98.28% of their patients and had a depression treatment rate of 16.52%.

Barriers to Achieving Goals

Through individual facility technical assistance and work within community coalitions, the Network identified that the top barriers to screening for depression were patients' stigma/shame, lack of patient interest, and appointment fatigue.

Additional barriers included the inability to track patients who participated in peer support, peer mentorship, pastoral care, and mental health treatment centers that do not bill through CMS.

Best Practices Spread to Achieve Goals

A high performing facility within the Network's service area presented on an ESRD NCC Learning and Action Call, during which they discussed how they worked as a team to identify and encourage patients to seek treatment for depression by creating a culture of caring. This facility also shared how their peer mentors helped to increase morale within the facility through conversations with patients about their emotions when they start and as they continue dialysis.

The Network also shared the newly developed resource, *Working Through Feelings of Loss and Sadness*, on an ESRD NCC Depression Community of Practice call as a tool to help fight the stigma surrounding mental health treatment by normalizing feelings that patients may experience when faced with kidney disease. The resource reviews how patients may experience the five stages of grief when diagnosed with kidney disease and explains the benefits of receiving treatment to help them deal with their feelings.

The Network also started a post on its *IPRO Learn* Behavioral Health Forum titled *Share your success stories*. Facilities posted success stories about their efforts to motivate and assist patients in seeking treatment for depression. This allowed facilities to both share best practices with and learn best practices from other facilities. A total of 66 facilities from the Network service area participated by sharing their successes on this forum.

Network 2: Percent of Patients, Within the Subset of Patients Identified as Having Depression, Who Have Received Treatment by a Mental Health Professional May 2023 - April 2024
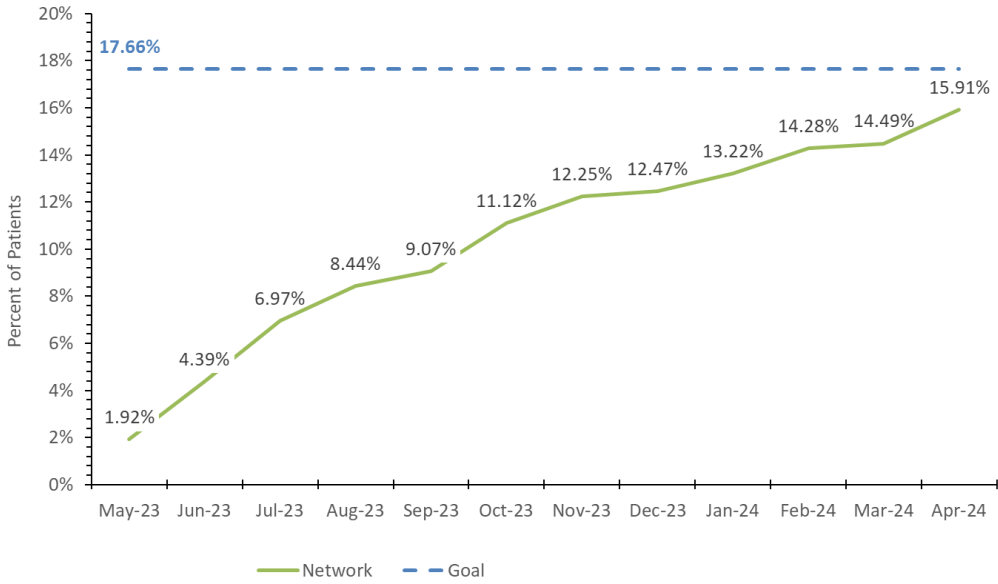
QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2024

Patient and Family Engagement May 2023-April 2024

Project Overview

Working with facilities to establish a culture in which the perspectives and values of patients and family members are included in the planning, delivery and evaluation of the patient's care has been an ongoing focus of the Network's work. During the performance period the Network has worked to incorporate the patient's voice at the facility level through inclusion in quality improvement activities, involvement in their own plan of care, and peer mentorship.

The Network focused on achieving four goals throughout this performance period:
1. Increase the number of facilities in which the patient's voice is incorporated into facility Quality Assurance and Performance Improvement (QAPI) meetings by 30%;
2. Increase the number of facilities that assist patients in developing a life plan by 30%;
3. Increase the number of facilities that successfully develop and support a patient-patient support program by 15%;
4. Maintain a patient attendance rate of at least 60% for the National Patient and Family Engagement (N-PFE) Learning and Action Network (LAN).

Interventions

The Patient Facility Representative Alliance

The Patient Facility Representative (PFR) Alliance is an organized group of dialysis and transplant patients, family members, and care partners from facilities across the Network service area who volunteers their time to represent the Network in their dialysis or transplant facility and share their perspective and concerns regarding their kidney care. Throughout the performance period, Alliance members had the opportunity to review and provide input on the quality improvement work conducted by the Network on monthly PFR Alliance Calls. PFR Alliance members also contributed their perspectives in the creation of resources and patient education materials that were being developed. PFR Alliance members were crucial in providing the patient connection between the Network and dialysis beneficiaries by sharing resources and learned material with patient peers within their facilities and communicating areas of improvement to their dialysis facility staff.

Release of Education and Interventions via *IPRO Learn*

Using the Network's online education platform, *IPRO Learn*, facilities were provided with strategies and information related to life planning using the ESRD NCC *Professional Module: Helping Patients Stay on Track with Their Life Plans*. The tool was completed by staff at 237 dialysis facilities (67%) and was reported to be adopted into facility operations by 93% of them. Feedback about this resource included comments suggesting that the tool would be helpful in giving staff different ways to approach conversations with patients and could be used to build rapport between staff and patients, particularly in situations involving elderly patients who might not be interested or patients who are apprehensive about discussing life goals. The Network used this feedback to encourage patients to continue to focus on life planning.

Inclusion of Patient and Family Engagement in Community Coalition Project Cycles

Patient and family engagement (PFE) principles were incorporated into community coalition quality improvement processes. Within community coalitions, the Network led facility staff members through a quality improvement process, or a PDSA cycle. Throughout this cycle, the Network guided facility staff in changes that should be implemented monthly at the facility level and at the patient level to generate the most successful quality improvement outcomes. The patient level activities included a focus on learning and executing life planning to support positive change as well as inclusion of the patient into QAPI.

Strengthening the Peer Mentor Community

With a strong history of building and sustaining a successful peer mentorship program, the Network continued to recruit and train interested patients in the principals and skills required to be a peer mentor. Interested patients were recruited from the PFR Alliance roster and via facility staff nominations, as well as through outreach strategies deployed at the conclusion of the community coalitions' project cycles. Once recruited, patients participated in training that occurred once a month in a virtual format.

Supporting Participation in N-PFE LAN Activities

In support of the ESRD NCC, the Network recruited six patients to participate in the National Patient Family Engagement (N-PFE) LAN activities and monitored participation by:

- Providing reminders to members in advance of meetings using Text-Em-All, a mass messaging platform that delivers personalized text messages and direct phone calls to large groups to promote attendance and active participation;
- Offering patients technical assistance to help in completing the required pre-work surveys;
- Recruiting new patients for inclusion in the group in the event an existing patient no longer wanted to continue their involvement.

Outcomes

The Network's activities during the performance period contributed to

- An additional 124 facilities in the Network service area integrating the patient perspective in QAPI; a rate of 34.73%.
- 179 new facilities beginning to assist patients in developing a life plan: a rate of 50.14%.
- An additional 163 facilities developing and supporting a patient-to-patient support program; a rate of 45.66%.
- Maintaining an 84% patient attendance rate for N-PFE LAN activities throughout the year.

Through collaborative efforts with the PFR Alliance, dialysis facility community coalition work, and on-site technical assistance, the IPRO ESRD Network New York was also able to expand the PFR Alliance to 141 new ESRD patients and care partners.

Barriers to Achieving Goals

Despite the success in meeting the goals during this performance period, barriers still existed related to the willingness of facilities to incorporate patients into QAPI. Facilities noted HIPAA

concerns as the primary cause of this lack of engagement. Other reported barriers to inclusion in QAPI included a lack of patient interest in participation or, for some facilities, not having a suitable patient candidate to involve in the process.

Effectively reaching all PFR patients was an area of concern. To support effective communication with patients, the Network adopted a variety of platforms including social media (Facebook and Instagram), broadcast texting (Text-Em-All), emails, virtual PFR Alliance meetings, and direct phone calls. In addition, Network staff met regularly with the PFR Alliance members to discuss barriers related to patient care and issues they may be facing in their facilities; and to gain their insight and perspective on quality improvement educational resources and interventions in development. Maintaining ongoing communications in ways that addressed and met the communication needs of the PFRs helped to overcome previously existing communication gaps between the Network and PFR Alliance members.

Best Practices Spread to Achieve Goals

The Network hosted calls during which best practices identified by high performing facilities that had sound patient engagement strategies were shared with other facilities in the Network's service area. Resources that outlined best practices in patient inclusion in QAPI and life planning were shared continually with the provider and patient communities, and live peer mentoring training sessions were conducted regularly to support, strengthen, and expand the peer mentorship program across the Network's service area.

Health Equity May 2023-April 2024

Project Overview

The Network worked to address health inequities to ensure that every ESRD patient within its service area has the opportunity to attain his or her full health potential and that no one is disadvantaged from achieving their potential because of social position or other socially determined circumstances. The Network strove to drive improvements in patient care by identifying health disparities and implementing strategies to improve health equity. Disproportionate poor health outcomes were identified through data gathered from the ESRD NCC and data analysis conducted by the Network. This analysis determined the direction of the Network's health equity work by identifying facilities that performed poorly in specific program objectives and key results areas.

Interventions

Addressing disparities associated with the lack of access to quality food was a focus in the Network's health equity work. Facilities located in neighborhoods with high area deprivation index (ADI) scores and priority zip codes, as identified by CMS, were targeted by the Network based on the association of "food deserts" and high ADI areas[4]. A "food desert" or a "food swamp" is defined as an area in which the population has multiple barriers preventing access to healthy food. The Network conducted an environmental scan to better understand factors used by each facility to screen patients for existing social determinants of health (SDOH), including food insecurity. While most facilities were already screening for SDOH barriers, the Network assisted staff in streamlining the screening process by providing CMS SDOH screening expectations for future ESRD Quality Incentive Program (QIP) measures.

The Network also disseminated resources for facility staff and patients that could be distributed once food insecurity was identified. Resources included a toolkit to guide dialysis facility staff in implementing an onsite food drive and educational resources for patients, such as renal-friendly shopping lists to help patients independently follow a renal diet. In addition, the Network encouraged staff to offer renal friendly foods at their facilities, provided tips to build partnerships with local food banks and pantries, and disseminated resources to guide patients in healthy eating.

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[4] Agarwal, S., Fertig, A. R., Trofholz, A. C., Tate, A. D., Robinson, J., & Berge, J. M. (2022). Exploring the associations between neighbourhood food environment, household food insecurity and child weight-related outcomes in socio-economically and racially/ethnically diverse families. Public health nutrition, 25(12), 1–10. Advance online publication. https://doi.org/10.1017/S1368980022002130

Jin, H., & Lu, Y. (2021). Evaluating Consumer Nutrition Environment in Food Deserts and Food Swamps. International journal of environmental research and public health, 18(5), 2675. https://doi.org/10.3390/ijerph18052675

On-site technical assistance was implemented to identify health disparities in facilities in the Network's service area. During one on-site visit, a health equity issue was identified at a facility that accepted referrals from a Native American Reservation. The health equity issue was related to a lack of knowledge by dialysis facility staff of the cultural traditions of the patients from the reservation. Network staff met with both the dialysis facility staff and staff at the Native American Reservation Health Center to gain a complete understanding of the issues. The information that resulted from these meetings was that some cultural traditions and beliefs that are commonly held by the Native American population negatively influenced their health practices and outcomes, and many of the dialysis staff members were unaware of the cultural influences affecting their patients.

To further address the issue, the Network conducted several one-on-one meetings with staff members at both the Native American Reservation Health Center and the dialysis facilities that served this population in an effort to find ways to improve care coordination across care settings. These meetings provided facility staff with clarification of the identified problem and an improved understanding of the health education programs that were being provided to chronic kidney disease patients at the health center. In turn, the meetings provided staff at the health center with an understanding about the process of transitioning to dialysis. The Network identified contacts at both the dialysis facilities and the health center and followed up with all parties to ensure ongoing active communication.

The Network's efforts to increase each organization's understanding of the other's procedures improved care coordination for future admissions of patients from the reservation to the incenter dialysis facility.

Culturally and Linguistically Appropriate Services (CLAS)
May 2023-April 2024

Project Overview

The Network designed and executed an approach to support the education and implementation of CLAS standards for staff at small, medium, and independent dialysis facilities. The Network also supported the ESRD NCC with the development of a CLAS implementation plan for large dialysis organizations (LDOs).

Interventions

In order to advance health equity and improve the quality of care provided to all patients, the Network encouraged dialysis facilities to adopt CLAS standards. An assessment of facility staff members' understanding of National CLAS standards was distributed to all facilities to gather data on facility staff members' baseline knowledge. Analysis of this baseline CLAS assessment showed that LDOs had a better understanding of CLAS standards but were unfamiliar with the acronym CLAS. Many of the LDOs referred to activities included in implementing CLAS standards using other terms, such as Diversity, Equity, and Inclusion or Cultural Competency Training. Data analysis of the assessments of small, medium, and independent dialysis facilities presented various areas for improvement in their understanding of CLAS standards and ways that CLAS could be integrated into their organizations' current policies and procedures.

Network 2 is unique in that 45% of the facilities in its service area are classified as small, medium, or independent dialysis facilities. To assist this large group of facilities, the Network developed monthly training modules that were distributed via *IPRO Learn*. Each training module focused on a CLAS theme and the corresponding standards, which was followed by assessments to gauge the facility staff members' understanding about each CLAS training module. Results of the assessments were used to evaluate improvements from baseline in staff members' knowledge of CLAS, the progress of CLAS implementation, and to identify areas needing improvement. One-on-one technical assistance was provided to facilities when lack of understanding of CLAS standards or incorrect implementation of standards was identified, or if additional support was requested.

The Network worked with facilities to identify barriers to specific CLAS standards and introduced resources and strategies to overcome these issues where indicated. To conclude the training, the facilities were given a CLAS Implementation Checklist and a post CLAS assessment to identify areas of improvement and to track improvement in the staff members' understanding of CLAS as compared to the baseline assessment. The CLAS Implementation Checklist was also used to help facilities identify how well the organization had integrated CLAS standards into their own policies and procedures and how to set actionable goals to meet the guidelines of CLAS. Facilities indicated their intention to use the CLAS Implementation Checklist to guide staff in taking the necessary steps to improve health equity at an organizational level.

Onsite Technical Assistance May 2023-April 2024

Project Overview

During this performance period, the Network conducted on-site visits to dialysis facilities that operated in zip codes that were deemed areas of social deprivation. The geographical locations were identified using CMS designated Priority Zip Codes. Network staff visited the selected dialysis centers and met with patients, the interdisciplinary team (IDT), medical directors, and regional management in a collaborative effort to review and discuss quality processes and health equity concerns. Technical assistance (TA) from an onsite manager was provided to offer insight, education, and resources which would help facilities formulate mitigation strategies for identifiable barriers that could hinder optimal outcomes for their patients.

The goal for the Network was to visit a total of 90 sites. With 45% of the facilities in the region being owned either by a small dialysis organization or independently, there were only 45 clinics noted in the priority zip code list provided to the Network. To reach the goal of 90 site visits, 45 supplemental facilities from the encompassing neighborhoods of each priority zip code were added, based on their quality improvement performance metrics and ownership entity.

Interventions

Interventions for site visits included but were not limited to a pre-visit review of the clinic's outcomes in all key result goals, personnel list, hours of operation, and *IPRO Learn* Compliance Completion Rates. Based on the findings, a plan for interventions was made along with printed resources tailored to the clinic and its perceived barriers.

Interventions also included a survey and discussions that allowed staff to share concerns, ideas, and barriers while devising a PDSA process to lead to improvement in noted areas. The Network offered resources, education, and support from in-person TA and plans for follow up.

The onsite manager also met with patient representatives to gauge engagement. Facilities were provided with education, resources, and ongoing support to help build patient and family engagement as needed.

Examples of commonly reviewed and discussed resources are:
- *Kidney Transplant Compare*, an easy to use, downloadable mobile application that allows patients to obtain basic information about kidney transplant as well as search, save, and compare transplant centers.
- *What Type of Care Do I Need*, a printed resource that shows patients a list of common medical conditions and what type of medical provider they should seek, be it emergency room, urgent care or a visit to their primary care physician.
- The EveryONE Project's *Neighborhood Navigator,* a tool that allows clinics to find SDOH resources in their neighborhood by entering their zip code.

Outcomes

The Network successfully completed 90 onsite visits. Clinic follow-up indicated that the goal set for patients attending quality meetings (33%) was met and surpassed with an improvement of 34.73%, 22 clinics registered a Patient Facility Representative (PFR), 31% had improved transitions to home, 26% had an increase in transplant rates and 26% had increased the number of patients waitlisted for transplant.

Barriers to Achieving Goals

Geography, issues related to SDOH, patient medication compliance, transportation, and facility staffing played a significant role in preventing clinics from achieving their goals this program year. Urban and rural clinics shared the SDOH and adherence barriers. Geography, staffing, and transportation affected the rural clinics more than their urban counterparts.

Best Practices Spread to Achieve Goal

Onsite TA gave clinic staff the opportunity to connect one-on-one with the Network to mitigate barriers that affected access to care for their patients by sharing best practices, resources, education, and experienced-based improvement strategies. Ideas on how to identify a PFR and capture the patient's voice in quality meetings were discussed. Staff were encouraged to engage the Network in supporting their assigned quality-based activities, patient education, forums, and to provide resources from the quality improvement toolkits. They were also encouraged to take advantage of the free continuing education courses offered by the Network. Follow-up within a three-month period gave the Network the opportunity to monitor changes in the clinics' outcomes, track their progress in a PDSA activity, and check in on patient related metrics. The follow-up also enabled the Network to foster a mutually beneficial relationship with clinics, aiming for long-term sustainability.

ESRD Network Grievance and Access to Care Data

During the performance period, the Network responded 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 received and responded to a total of 609 cases, including 19 (3.10%) clinical quality of care (QoC) cases, 25 (4.10%) general grievance cases, and 22 (3.60%) immediate advocacy cases. The Network's clinical staff reviewed and assessed QoC cases to resolve the issues raised by the grievant, while also providing support, educational resources, and guidance to the facility staff. QoC cases primarily pertained to access site issues, treatment, fluid removal, supplies/equipment, and staff/patient ratio. General grievance and immediate advocacy cases most often dealt with communication, professionalism, staff/patient ratio, staff relations, and physical environment. For the 389 (63.90%) facility concern cases that were received, the Network offered technical assistance to the facilities dealing with disruptive patient behavior, non-adherence, mental health challenges, cognitive concerns, staff shortage issues, and more.

The Network implemented interventions to support facility staff in resolving grievances. These interventions included recommendations for facilities to conduct staff in-service training on effective communication, empathy, professionalism, de-escalation techniques, and the advantages of employing a strengths-based approach with patients. To help support interventions, the Network provided facilities with resources via email which included links to the Network's recorded webinars, including *Communication Starts with You*, *Mental Health Challenges*, *Decreasing Dialysis Patient-Provider Conflict (DPC) Manual*, *DPC Addendum*, and a resource from the Crisis Prevention Institute, *Top 10 De-Escalation Tips*.

The Network also actively participated in meetings with patients, families, and facility teams involved with a grievance to address areas of concern and develop strategies to resolve the reported grievance. Via *IPRO Learn*, facility staff participated in educational modules related to DPC, mental health, and patient non-adherence. In November 2023, 60% of facilities completed an *IPRO Learn* activity on DPC. In January 2024, 69% of facilities completed the *IPRO Learn* activity on mental health. In March 2024, 72% of the facilities completed an *IPRO Learn* activity on patient non-adherence. The Network successfully resolved all cases within the mandated time frames; immediate advocacy cases were resolved within 10 calendar days, and general grievances and QoC cases were resolved within 60 calendar days.

In those dialysis facilities experiencing staff shortages, patient care was significantly impacted. Dialysis social workers covering multiple clinics struggled to dedicate ample time to their assigned patients. To mitigate potential issues stemming from these challenges, the Network adopted strengths-based approaches, not only for patients but also for staff. This approach aimed to alleviate burnout and compassion fatigue at the clinic level by providing education on stress and conflict management. The Network released a pre-recorded webinar via YouTube on

the topic of mental health challenges, which received 188 views. The webinar acknowledged the challenges dialysis staff may be facing while caring for dialysis patients with mental health issues and provided strategies for remaining mentally healthy.

Access to Care and Involuntary Discharge (IVD) Cases

The Network received 102 (16.70%) access to care cases. Of those, 33 (32.25%) cases involved patients who were "at risk," 51 (50%) cases involved "failure to place," and 18 (17.65%) resulted in an involuntary discharge. 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.

To foster long-term solutions and support implementation of action plans, the Network recommended that facility staff members incorporate patients into QAPI meetings to ensure that the patients' perspectives were considered in the clinic's quality improvement initiatives. The Network also encouraged clinics to implement peer-to-peer support through its *Peer Mentoring Program* for patients encountering challenges.

The Network continued to promote its *Second Chance Program* to clinics, targeting patients with a history of involuntary discharges, behavioral issues, and/or non-adherence; and aiming to diminish reliance on hospital emergency departments for essential treatments. Under this program, dialysis units were granted a 30-day, 60-day, or 90-day trial period contract, with the goal to accept patients for treatments permanently.

The Network continued to provide educational resources to both patients and clinic staff on patients' rights. Resources included a patient-facing flyer, *Can You Ever Be Discharged From your dialysis clinic?* and resources for facility staff on *CMS Conditions for Coverage* and *the Second Chance Program*. The Network continued to reinforce the value of clinic staff incorporating patients into QAPI meetings.

Network Assistance and Quality Improvement

The Network advocated for patients, promoting the rights of patients to participate in their healthcare and emphasized the importance of patients voicing their perspective about services provided by the facility. The Network also mediated cases involving patients' concerns with the facility and implemented quality improvement activities that included interventions designed to provide facility staff with guidance on communication techniques that would better support their patients' care. The Network worked toward accomplishing the following overarching goals during the performance period:

- Resolve all grievances within required time frames: 10 calendar days for Immediate Advocacy and 60 calendar days for General Grievance and Clinical Quality of Care.
- Increase patients' awareness of the Network and the educational resources available by sharing information during the monthly Patient Facility Representative (PFR) Alliance meetings and the Network's Facebook page.
- Provide patients with educational resources with each acknowledgement letter and grievance summary letter.

- Increase use of *IPRO Learn* modules. The Network used *IPRO Learn* to deliver its toolkits: *Decreasing Dialysis Patient-Provider Conflict (DPC)*, *Mental Health*, and *Patient Non-Adherence*. In November 2023, 60% of facilities completed the DPC *IPRO Learn* activity. In January 2024, 69% of facilities completed the *IPRO Learn* activity on mental health. In March 2024, 72% of the facilities completed the patient-non-adherence *IPRO Learn* activity.
- Support dialysis facility staff who have limited time, skills and training in conflict resolution, with an ultimate goal to enhance staff members' ability to manage and deal with patients who have mental, emotional and/or psychosocial issues.
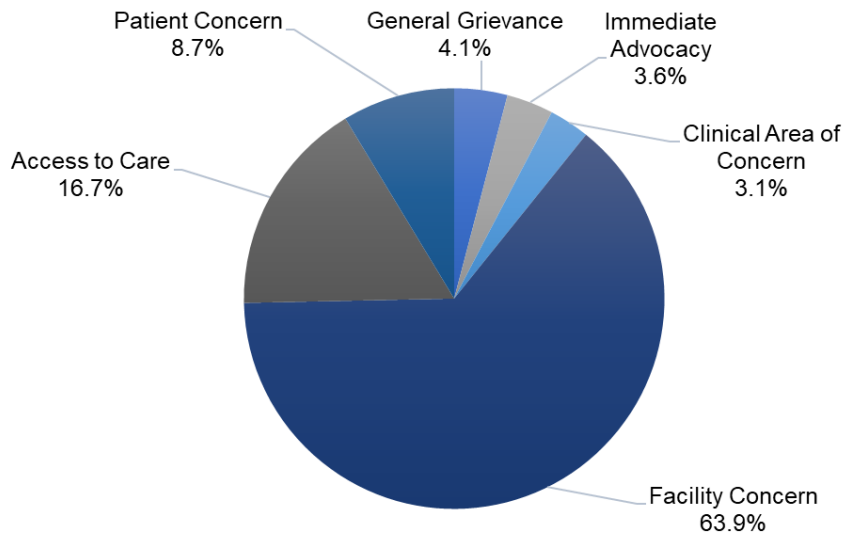
The Network continually promoted an environment of advocacy for all ESRD patients and their care partners. Through advocacy work, the Network provided educational training and resources on patient rights to all staff and patients. The Network also provided mediation to help de-escalate ongoing patient concerns and create an environment of safety and inclusion. Interventions focused on supporting facility staff in implementing de-escalation techniques and adopting effective communication skills, as well as offering guidance in identifying potential barriers that could negatively affect a patient's ability to remain compliant with their treatment plan. These interventions provided facilities with the necessary guidance to improve their patients' overall quality of care. While each intervention focused on a different topic, all Network-implemented interventions incorporated the basic elements of quality improvement:
- An environmental scan/needs assessment of dialysis clinic staff.
- Provision of TA to support clinic staff in using quality improvement tools, including root cause analysis (RCA) and plan-do-study-act cycles (PDSA).
- Ongoing emphasis of the value of establishing professional boundaries with patients.
- Early introduction and ongoing reinforcement of the value of integrating quality improvement methodologies into the culture of the clinic.
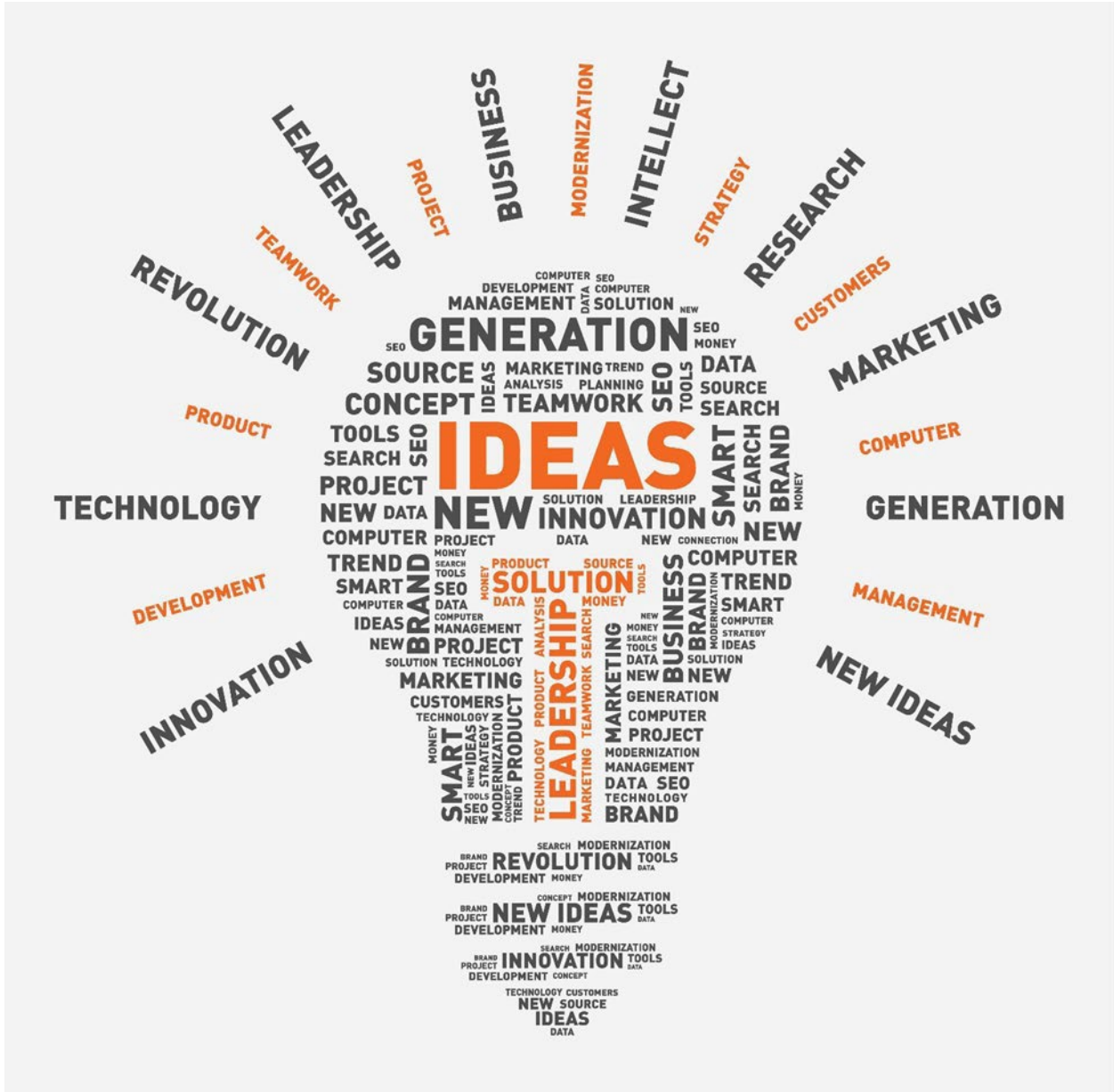
The Network provided patients and/or facilities with the following resources:
- The Network's *Grievance Process Guide: A Guide for Patients and Families*
- *CMS Conditions for Coverage Interpretive Guidance: V766 & V767* to define acceptable reasons for involuntary discharges.
- Grievance preparation worksheets and a poster to create awareness of the educational resources available to dialysis patients.
- *Patients' Rights and Responsibilities*
- A poster and flyers (What *the Network Staff Can and Cannot Do*) that outline for patients clearly defined parameters of the support that the Network is able to provide.
- *Can you ever be discharged from your dialysis clinic?*
- Crisis Prevention Institute's (CPI) *Top 10 De-Escalation Tips resource*.
- *Decreasing Dialysis Patient-Provider Conflict (DPC) Provider Manual and Addendum*
- *The Second Chance Program flier* and brochure to help promote the value of this program.

Network 2: Percent of May 2023-Apr 2024 Grievances and Non-Grievances by Case Type

Patient Concern
8.7%

General Grievance
4.1%

Immediate Advocacy
3.6%

Clinical Area of Concern
3.1%

Access to Care
16.7%

Facility Concern
63.9%

Source of data: Patient Contact Utility (PCU) accessed May 2024

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. The Network did not identify any facilities in its service area that failed to cooperate with activities that support its goals.

Recommendations for Sanctions

Network 2 does not recommend any facility for sanctions.

Recommendations to CMS for Additional Services or Facilities

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

1. Improving the availability of transportation services for dialysis is a consistently requested additional service that facilities cite would improve their process.
2. The incorporation of staff-assisted home dialysis to ensure patient comfort and success on a home modality without relying on a care partner.
3. Build services to support the growth of ESRD resources for rural patients; specifically, access to transplant and home dialysis services.
4. In densely populated areas where home settings may not be conducive to supporting home dialysis, offer support services that would make available self-care facilities. This would provide space for patients to provide their own home therapy.

ESRD Network COVID-19 Emergency Preparedness Intervention

The Centers for Disease Control and Prevention (CDC) declared May 11, 2023, to be the end of the COVID-19 pandemic. As COVID-19 infection numbers decreased, the Network continued to communicate information and support dialysis facilities in maintaining adherence to safe health practices, with the ultimate goal of preventing the occurrence and transmission of COVID-19 among patients and staff.

ESRD Network Significant Emergency Preparedness Intervention

During the performance period, the Network documented all effects on facility operations due to emergency events using its *Emergency Operational Status Report*. This information was combined with data from the EQRS, Critical Asset Annual Survey data, and information provided by the dialysis organizations. The combined data sets were provided to the Kidney Community Emergency Response (KCER) coalition.

The Network continued to use the ESRD Emergency Hub Mobile Application, developed by IPRO in 2022, to enable patients and their caregivers to subscribe to alerts regarding emergencies in their geographic area. The application also allows patients to store their treatment and medication information and preferred emergency contacts. By the end of the performance period, there were 205 users of the ESRD Emergency Hub Mobile Application within the Network's service area.

The Network addressed situations arising from the following events, which affected dialysis facilities and patients during the performance period:
- Weather-Related Events – 36
- Emergent Events – 19
- Altered Schedule – 49
- Staff Shortage – 35
- Temporary Closures – 40
- Permanent Closures – 4

There were 4 closures of facilities reported in the Network's service area and 35 reports of staffing shortages during the performance period. A review of the data provided to the Network revealed that most of the closures were due to staffing constraints. Because of the reduced number of staff members at outpatient dialysis clinics, facilities relied on all staff members being present for successful daily operations. There were incidents in which a nurse or patient care technician could not report to work, and patients had to be rerouted to a nearby clinic for safe treatment. The Network contacted facilities struggling with staff shortages, encouraging them to utilize travel staffing agencies or reroute patients to sister clinics.

Significant Weather Event
On April 8, 2024, a total solar eclipse moved across North America, passing over Mexico, the United States, and Canada. A total solar eclipse happens when the moon passes between the sun and earth, completely blocking the face of the sun. Parts of New York State were impacted by the solar eclipse, with the greatest concern being the movement of large crowds of people to the path of totality, temporarily ballooning the populations of small towns and rural areas and causing closures of facilities and infrastructures, other social conditions, staffing concerns, and transportation delays. In preparation for the solar eclipse, the Network provided 1:1 technical assistance to facilities in the service area that requested a review of their preparation plan. The Network also collaborated with the Medicare Quality Innovation Network – Quality

Improvement Organization to develop resources for patients and providers that encouraged preparation, including altering of treatment schedules.

Acronym List Appendix

The Kidney Patient Advisory Council (KPAC) of the National Forum of ESRD Networks has created a list of Frequently Used Acronym available through this link. We are grateful to the KPAC for creating this list 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.