End-Stage Renal Disease
Network of the South Atlantic

Blue Ridge Mountains, North Carolina

This report will cover quality improvement efforts led by the ESRD Network from January 1, 2021 – May 31, 2021 and the Base Year of Task Order Number 75FCMC21F0003, June 1, 2021 – April 30, 2022

July 2022
Prepared by:
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http://esrd.ipro.org

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IPRO End-Stage Renal Disease (ESRD) Network of the South Atlantic (Network 6) 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 6 service area, IPRO manages the ESRD Network of New England (Network 1), ESRD Network of New York (Network 2), and ESRD Network of the Ohio River Valley (Network 9), collectively known as the IPRO ESRD Network Program. IPRO is fully committed to the goals and vision of the ESRD Network Program and supports the renal community in ensuring safe, effective, patient-centered care for the more than 194,000 ESRD patients in the four Network areas it manages.

Network 6 serves ESRD patients, dialysis providers, and transplant centers in the states of Georgia, North Carolina, and South Carolina. The role of the Network is to improve the quality of care for people who require dialysis and/or kidney transplantation. The Network aligns its mission and activities with the National Quality Strategy’s three broad aims and the Centers for Medicare & Medicaid Services’ (CMS) priorities for the ESRD Network Program. Our goals, our methodology for attaining them, and our achievements are described throughout this report.

Racial minority populations have a disproportionately high risk of kidney failure: Black individuals have a 3.4 times greater risk, as compared to people who are white. This disproportionate difference, combined with the demographics of the Network service area, led to an exceptionally high level of patients needing kidney care in the Network 6 region. The states that comprise the Network service area have more than twice the national rate of Black or African American residents (13.4% or 44.5 million). Georgia has the second highest rate of Black or African American residents in the nation (32.6% or 3.5 million), followed by South Carolina (27% or 1.4 million) and North Carolina (22.2% or 2.3 million). The population of each state grew between 0.8% and 1.4% in 2021, while the national population growth rate was a sluggish 0.1%.

Though each state’s rate of ‘high-school graduate or higher’ was comparable to the national rate of 88.5%, the rate of ‘persons in poverty’ was (significantly) higher than the national rate of 11.4%, with Georgia’s rate of 14%, North Carolina’s rate of 12.9%, and South Carolina’s rate of 13.8%. The combination of a high level of poverty within a growing minority population was a constant focus for the work done within Network 6 to ensure health equity remained a top priority.

According to ESRD National Coordinating Center (NCC) end-of-year data, the ESRD patient population in the Network 6 region was 68,862 as of December 31, 2021.

The Network’s 2021 activities supported more than 50,158 dialysis patients reported as receiving treatment across 812 dialysis facilities, 10 transplant centers and 8 Veteran Affairs (VA) hospitals. The number of patients receiving in-center dialysis treatment totaled 42,454, and 7,704 patients received dialysis treatment at home. The Network service area (NSA)
contains the largest home dialysis population in the country, with 9.7% of the region’s dialysis patients receiving treatment using a home modality.

In 2021, nine Medicare-certified dialysis facilities opened in the NSA, increasing the total number of dialysis facilities to 812. Within the NSA, 81% of the dialysis facilities are owned or managed by a large dialysis organization (LDO), 14% are owned or managed by medium or small dialysis organizations; and 4% are independently owned.

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

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

The Network has established strong partnerships across the three states in its service area to assist with creating and implementing interventions designed to meet the goals outlined in the ESRD Network Statement of Work (SOW). Through our collaboration with the Network Council, Medical Review Board, Patient Facility Representative (PFR) Alliance, Advisory Committees, community coalitions the Southeastern Kidney Transplant Coalition, state departments of health, and regional healthcare coalitions, the Network was able to respond to CMS priorities quickly and effectively. The Network deployed interventions and strategies 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 6: Count of Prevalent ESRD Patients by Treatment/Setting
2021

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

Network 6: Count of Incident ESRD Patients by
Initial Treatment/Setting
2021

Total Incident Patients = In-Center + Home + Kidney Transplant
Source of data: EQRS May 2022
Network 6: Count of Medicare-Certified Facilities by Treatment/Setting
2021

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

Percent of National Prevalent Dialysis Patients by ESRD Network 2021

National total dialysis patients: 516,929
Source of data: EQRS May 2022
Percent of National Home Hemodialysis and Peritoneal Dialysis Patients by ESRD Network 2021

Percent of National

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

Percent of National Transplant Patients by ESRD Network 2021

Percent of National

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National total transplant patients: 269,424
Source of data: EQRS May 2022
Percent of Medicare-Certified Kidney Transplant Facilities by ESRD Network 2021

National total ESRD Medicare-certified kidney transplant facilities: 227
Source of data: EQRS May 2022
ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA

The Network responds to grievances filed by or on behalf of ESRD patients in North Carolina, South Carolina and Georgia, with a goal to address and mitigate concerns.

Grievances
In 2021 Network staff supported 286 facility concern cases, providing technical assistance and support, as well as education and resources to dialysis facility staff. The Network used these interactions as educational opportunities for training on topics to support staff in being proactive about addressing patient concerns. Training topics included de-escalation strategies, identifying and responding to challenging patients, sourcing community health resources, engaging families, and expanding interdisciplinary team approaches. The Network also provided education and technical assistance on “loss to follow up” and discharge procedure, when appropriate.

An analysis of the data revealed the most reported areas of concern were related to staff professionalism and interpersonal related conflicts (clinical competency, communication, physician relations), facility’s physical environment (infestation, sanitary conditions, noise, temperature control), and clinical quality of care (physician orders, infection control and patient safety).

To resolve reported grievances, the Network developed and implemented interventions that included mediation, initiation and participation in interdisciplinary care conferences, a review of patient medical records, education on communication techniques, and promoting the improvement of the facility’s professional culture.

Access to Care and Involuntary Discharge (IVD) Cases
The Network received 167 access to care cases in 2021. In each case the worked closely with facility staff to ensure that patients had adequate access to care. The Network advocated for all patients to have a right to receive dialysis in an outpatient setting, meaning that no patient should be involuntarily discharged. Of the identified 167 at-risk cases, 75 patients were discharged, and 96 discharges were averted. In the Network’s review of involuntary discharges, the most prevalent issues leading to involuntary discharge (IVD) were “immediate severe threat” (23 cases) followed by “threatening and violent behaviors” (11 cases) that continued even after several attempts by the facility to resolve. Despite non-adherence being an unacceptable reason for involuntary discharge, as identified in the Conditions for Coverage, it remained the second highest reason for physicians and clinics to terminate their relationship with patients. Oftentimes, the dialysis clinic was unable to locate an accepting physician within its clinic or even within the entire nephrology practice because the patient had been rejected by local nephrology providers. Several of these cases resulted in the patient not being admitted to an alternate outpatient facility (failure to place) and required that the patient rely on emergent dialysis therapy through hospital emergency departments, rather than receiving dialysis at another outpatient center.
The Network’s response to lack of access to care was to assess barriers to compliance and address challenging behaviors. The Network advocated for the patient to engage in mental health services, with a goal to identify coping skills and ways to improve future challenges. The Network provided additional support in addressing barriers to compliance, including investigating adequate transportation, ensuring the patient had access to renal diet-approved foods and safe, secure housing. In each case, the patient’s physician and case manager assisted in the process to ensure the patient was successful in the outpatient placement. The Network also met with the patient’s accepting facility to develop a safety plan and encouraged staff to receive de-escalation training to meet the patient’s unique needs. Additionally, the Network advised facilities about the importance of identifying patient strengths, incorporating a peer mentor program if none existed, and identifying external factors that may have inhibited a patient’s ability to be compliant with their overall treatment plan.

**Network Assistance and Quality Improvement**

The Network continuously promoted an environment of advocacy for all ESRD patients and their caregivers. This included promoting the rights of patients to participate in their healthcare and to have a voice about the services provided by the facility. The Network also provided mediation to help de-escalate ongoing patient concerns and create an environment of safety and inclusion. Interventions focused on supporting facility staff in exercising de-escalation and effective communication skills, as well as offering guidance in identifying potential barriers that could negatively affect a patient’s ability to remain compliant with their treatment plan. These interventions provided facilities with the necessary guidance to improve their patients’ overall quality of care.

Although the topics of the QIAs varied, each of the project plans employed the basic elements of quality improvement:

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

The Network provided patients and facilities with the following resources:

- The *Dialysis Patient Grievance Toolkit* created by the Forum of ESRD Networks’ Kidney Patient Advisory Council (KPAC),
- Grievance preparation worksheets that focus on improving communication among patients and staff early in the grievance process,
- A poster and flyers (*What the Network Staff Can and Cannot Do*) outline clearly defined parameters of the support that the Network is able to provide,
**Network 6: Percent of Jan-May 2021 Grievances and Non-Grievances by Case Type**

- Access to Care: 29%
- General Grievance: 12%
- Immediate Advocacy: 9%
- Clinical Area of Concern: 0%
- Facility Concern: 50%

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

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**Network 6: Percent of Jun 2021-Apr 2022 Grievances and Non-Grievances by Case Type**

- Access to Care: 27%
- Patient Concern: 2%
- General Grievance: 11%
- Immediate Advocacy: 7%
- Clinical Area of Concern: 2%
- Facility Concern: 51%

Source of data: Patient Contact Utility (PCU) accessed May 2022
ESRD QUALITY IMPROVEMENT ACTIVITIES

Transplant Waitlist Quality Improvement Activity through May 2021

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

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

Interventions
The Network provided individual technical assistance to overcome issues with courier and lab availability that jeopardized processing of the required annual blood samples for waitlisted patients. To assist transplant patients the Network intervened to ensure ongoing access to necessary post-transplant medications in the face of pandemic shortages. The Network worked to provide patients with information on alternate pharmacy options and generic versus brand name product choices via mailings and the Provider Insider and Patient Speaks publications. The Network also placed a heavy focus on infection prevention interventions for our high-risk population. The Network focused on developing educational material so transplant patients were made aware of their increased risk of infection, serious illness, and death, while informing them about precautionary steps to protect their health. This was accomplished by sharing a Network created poster that patients were encouraged to place at the entrance to their homes to alert and advise visitors of the risk status of the homeowner. The Network also worked to share guides on how to keep safe in the pandemic for patients who live in a multi-generational household.

Barriers to achieving goals
Inconsistent communication between transplant centers and transplant recipients was a major barrier. Due to limited availability of staff, many patients were unable to maintain communications with their transplant centers. Due to the evolving nature of issues surrounding the pandemic, such as medication shortages and high risk of infection, it was challenging to keep Network recommendations current. COVID-19 vaccine hesitancy also proved to be a barrier, as vaccination is required for patients to maintain an active status on the waitlist.
**Best practices spread to achieve goals**

Best practices such as the use of telemedicine to complete office visits, limiting travel when possible, and reducing social exposure were provided as educational topics for this at-risk group via live webinars and QIA-specific mailings. The Network’s continued collaboration with the transplant centers throughout this time-period was essential to resolving many challenges due to limited communications and medication shortages. The Network encouraged information sharing amongst the different transplant programs in the region to create a community of practice to more effectively mitigate the issues caused by the pandemic and protect the health of patients on the transplant list.

![Network 6: Percent of Patients Added to the Transplant Waitlist](image)

**Network 6: Percent of Patients Added to the Transplant Waitlist**  
*January 2021 - April 2021*

- **Network Rate**
- **National Rate**

QIA: Quality Improvement Activity  
Source of data: ESRD NCC TXQIA accessed May 2021
Transplant Waitlist & Transplanted Quality Improvement Activity June - April 2022

Project Overview

The Network implemented quality improvement activities to achieve the Advancing American Kidney Health (AAKH) initiative’s long-range goal to improve kidney health by having 80% of new ESRD patients either receive dialysis at home or receive a transplant by the year 2025. The Network’s goal was to increase the number of patients on the United Network for Organ Sharing (UNOS) waitlist and increase the number of transplants in the Network service area by at least 2%.

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

The Network’s activities resulted in 2,559 patients being added to the transplant waitlist as of April 30, 2022, a 9% increase compared to 2020 baseline data, and 1,685 patients transplanted as of April 30, 2022, an increase of 2%.

Interventions

The Network worked closely with the Southeastern Kidney Transplant Coalition (SEKTx), which comprises a group of experts from transplant centers and organ procurement organizations, as well as dialysis staff, transplant patients and representatives from other kidney focused organizations including the National Kidney Foundation (NKF) and American Association of Kidney Patients (AAKP). The continuation of this collaboration aided the Network in the retrieval and dissemination of pertinent information and data to promote waitlist and transplants in the patient population across the Network.

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

Each month, via IPRO Learn, facilities were assigned activities that aligned with coalition PDSA cycles to support individual facility efforts toward increasing the number of their patients on the transplant waitlist and the number of patients receiving transplants.

The Network worked diligently to promote use of IPRO Learn since its launch in September 2021. As of the end of the reporting period, more than 50% of the facilities in the Network’s service area were using the platform on a consistent, monthly basis.

Network staff worked to provide facilities and patients with a collection of tools and resources to support dialysis staff, led activities aimed at improving communication between transplant
centers and dialysis facility staff, and provided resources to guide patients through the five steps to become listed on the transplant waitlist.

The Network also collaborated with coalition members, transplant centers, and dialysis facilities to develop compelling content to help move patients and facility staff toward consideration of transplant as a treatment option. Content consisted of educational videos, frequently asked question guides, and knowledge assessment activities that were shared via email and through IPRO Learn.

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

**Barriers to achieving goals**
The pandemic resurgence and the resulting increase in staff shortages and turnover of staff in dialysis and transplant facilities negatively affected Network strategies to increase rates of waitlisting and transplant. High rates of staff turnover resulted in the hiring of facility senior staff members who were not familiar with the work of the Network, who lacked the knowledge and awareness of the importance of presenting transplant as a treatment option, lacked the knowledge of social work relative to dialysis patients gained only through experience, were not knowledgeable about CMS goals and initiatives, and lacked understanding of best treatment choices, such as transplantation.

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

**Best practices spread to achieve goals**
Despite the obstacles faced in 2021, the Network’s efforts resulted in 2,559 patients being added to the transplant waitlist, and 1,685 patients receiving a kidney transplant. This success was due to the Network’s continued collaboration with highly engaged and motivated stakeholders in the region. The Network also benefited greatly from the opening of a new transplant center, which quickly started receiving referrals and getting patients waitlisted. Further success was aided by Transplant Referral EXchange (TREX), an electronic bi-directional referral system that streamlines communication between dialysis facilities and transplant centers and was fully adopted in the Network.
Network 6: Patients Added to a Kidney Transplant Waiting List
July 2021 - April 2022

Source of data: ESRD NCC accessed May 2022

Network 6: Patients Receiving a Kidney Transplant
July 2021 - April 2022

Source of data: ESRD NCC accessed May 2022
Home Therapy Quality Improvement Activity through May 2021

Due to the COVID-19 pandemic limiting provider staffing and procedures, along with contract goal adjustments, the Network worked toward the goals of this quality improvement activity but was not evaluated on results through May 2021.

Project Overview
The Network continued to work with providers in the region to support home modalities growth and initiations. Along with the concerns of the pandemic came an opportunity to highlight the safety benefits afforded by dialyzing in the home setting and the value of telemedicine to prevent additional exposure to COVID-19. This approach supported a continued high incidence of new patients starting a home modality setting and maintained the Network standing as having the highest percent of patients dialyzing at home in the nation, for the fourth consecutive year.

Interventions
The Network released weekly COVID-19 communications to the ESRD provider community and patients during the first three months of the pandemic, communications decreased in frequency to monthly in the fourth month. These communications focused on issues pertinent to growing and maintaining the home patient census, providing telemedicine visit checklists, assisting facilities with home delivery, and mitigating issues around supply shortages. Communications also included educational offerings related to chronic kidney disease to promote home modalities and frequently asked questions (FAQ) on the reasons home therapy was a safer option than in-center dialysis during the pandemic.

Barriers to achieving goals
The reduction of the home program infrastructure due to staffing shortages and home staff being deployed to assist with COVID-19 process support was the major barrier to increasing prevalent patient home growth. Most home program leads in facilities were assigned other responsibilities during the public health emergency, so education and communication to support referral to home slowed, and training schedules were delayed. The Network worked with facilities to strategize ways to maintain home program staffing in light of conflicting operational demands. One alternative solution that proved successful involved provision of education and resources to chairside staff and built on a team approach to engage them in communicating with patients the benefits of home modalities as a treatment option.

Best practices spread to achieve goals
One regional dialysis provider funneled all home referrals to one center in which staffing was maintained to offer seamless training and support. By consolidating and supporting this one center they kept home referrals moving forward for the surrounding centers. This practice was shared widely across the Network region and encouraged as a method to secure ongoing home placement. The use of programs like Feel the Difference as well as transitional care units were promoted since they provided the training and support to increase referrals to the home treatment model.
Network 6: Percent of Patients Starting Home Dialysis
January 2021 - April 2021

QI#: Quality Improvement Activity
Source of data: ESRD NCC HTGIA accessed May 2021
Home Therapy Quality Improvement Activity June-April 2022

Project Overview
In the Network 6 service area, home modalities have historically been a popular choice among the incident population. In 2021-2022, the Network recorded the highest number of incident patients starting on a home modality in the nation, but the number of patients transitioning to a home modality was relatively stagnant for the same time-period. This was largely due to the difficulties experienced throughout the pandemic especially during the resurgence of COVID-19 in the late fall of 2021 through March 2022, when the cases of COVID-19 spiked in the Network states. The ongoing effects of the pandemic coupled with healthcare staffing shortages undermined the infrastructure of home programs throughout the region. Network 6 staff worked closely with facilities to emphasize a “pro home” culture, and to encourage the use of telemedicine, and promote strategies to rebuild a strong infrastructure to encourage and support home modalities.

Interventions
To build a “pro home” culture, Network 6 offered a free continuing education course to teach all chairside staff the importance of home modality education and promotion. The Network worked with facilities to spread best practices in education and support for home growth. Regional speakers shared successful approaches used by their facilities. Presentations included how to build a pro home culture with top-down education processes, the use of Feel the Difference programs to promote home modalities, and home programs that fully operationalized the use of telemedicine. The Network shared monthly performance reports with each facility to track their initiation of both prevalent and incident home patients and initiated the use of IPRO Learn. This provided dialysis facilities with comprehensive toolkits that feature proven tools and educational resources to grow and support home modality referrals by assigning key interventions for all facilities to review each month.

Barriers to achieving goals
With the declining rates of COVID-19, facility staff returned to dialysis facilities to support the home program infrastructure. However, continued staff shortages of nephrology nurses and other staff members essential to providing training continued to present a barrier to efforts to rebuild and grow home programs. An increasing number of patients were not interested in moving to a home modality after the pandemic. Root cause analysis data show that the public health emergency left patients tired and frustrated with all the changes and the volume of rules and health routines they required to stay safe, leading to a sense of being too overwhelmed to consider switching over to a home modality.

Best practices spread to achieve goals
The Network encouraged the use of patient advocates to promote and grow the use of home modalities, and Network staff began working to increase the number of PFRs who educate and share information about being on a home program, as well as peer mentors who would work to train and advocate for home modalities.
Network 6: Incident Patients Starting Dialysis Using a Home Modality
July 2021 - April 2022

Network 6: Prevalent Patients Moving to a Home Modality
July 2021 - April 2022

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
**Project Overview**
The ESRD population is immunocompromised and at risk of contracting influenza and other vaccine-preventable illnesses. According to the Centers for Disease Control and Prevention (CDC), 1,000 people on dialysis die each year from influenza. The Network worked to increase the vaccination rate for influenza to 85% of the eligible patient population during the period. Data were reported by facilities in the End Stage Renal Disease Quality Reporting System (EQRS). Allowable exclusions were patients with medical contraindication or those with a history of severe allergic reaction. The Network achieved a patient vaccination rate of 78%.

**Interventions**
The Network worked with facilities to improve their ability to accurately document influenza vaccines in the required database, EQRS. Many facilities needed technical assistance with this process throughout the year.

As an on demand resource Network staff created a toolkit that was featured in IPRO Learn. The toolkit includes a variety of educational resources for providers, including the tool: *Understanding Influenza Vaccine Hesitancy and Strategies to Overcome It*. Of those who completed the program, 85% indicated that they would use the tool to educate their teams about strategies to overcome vaccine hesitancy.

The Network sent to each facility a monthly influenza vaccine progress report which provided details of patients who had either not received an influenza vaccination or whose vaccinations were not documented in EQRS. This report allowed facilities to investigate the UPI of patients to determine what appropriate action to take, which allowed them to focus on the barriers to vaccination with those patients hesitant or unsure of receiving a vaccine. The Network provided resources to mitigate the barriers of hesitancy and fear of receiving multiple vaccines at once.

**Barriers to achieving goals**
Low adult vaccination rates occurred for a variety of reasons, including lack of patient awareness of vaccines recommended for them, and in some cases, lack of a provider recommendation or offer for vaccination, and inconsistent patient vaccination history available to providers. Lower facility participation due to staffing shortages and turnover along with staff member acceptance of a “no” response from patients when offered a vaccine, were significant barriers for facilities.

**Best practices spread to achieve goals**
Best practices for increasing vaccination rates included interventions that directly focused on identified barriers to vaccination as reported by facilities. The Network used information gathered via its environmental scan, which made it possible to conduct rapid cycle improvement and to distribute a frequently asked questions document aimed at combating misinformation uncovered through the scan. Providing resources such as the CDC’s *Vaccinating*
*Dialysis Patients and Healthcare Personnel* offered factual information related to the importance of vaccines and their benefits to the ESRD population.

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Network 6: Percent of Patients Receiving an Influenza Vaccination

*July 2021 - April 2022*

![Network 6: Percent of Patients Receiving an Influenza Vaccination](image)

**QIA:** Quality Improvement Activity

**Source of data:** ESRD NCC accessed May 2022
COVID-19 Vaccinations Patients and Staff June - April 2022

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

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

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

The Network’s efforts resulted in a 70% COVID-19 vaccination rate among patients at time of remeasurement (April 2022, data source NHSN). The rate of COVID-19 vaccine declination was 14% of patients.

CMS mandated dialysis facilities to document staff COVID-19 vaccination rates in NHSN. The documentation and reporting of staff vaccination rates lagged behind the measurement date (April 2022) due to the failure of facilities and dialysis organizations to report. On April 14, 2022, a federal mandate was issued requiring that all healthcare providers that receive Medicare and Medicaid funding for services have 100% of eligible staff vaccinated. Dialysis personnel who did not have medical or religious exclusions were not eligible for employment after the effective date. As of the publication date of this Annual Report, all dialysis facilities and transplant centers are required to show documentation of employees’ vaccination status and proof of processes and policies in place to sustain a 100% vaccination rate of eligible employees. This documentation is now required for dialysis and transplant facilities to maintain certification and licensure.

Interventions
The Network used IPRO Learn to provide on-demand educational opportunities and to share resources including CMS and CDC vaccination guidelines as they evolved. The Network worked with facilities with low COVID-19 vaccination rates, focusing on identified barriers related to patient vaccination hesitancy, staff vaccination hesitancy and community spread to build a pro-vaccination culture. Among the educational materials used, the Network distributed the John Hopkins hesitancy materials to help facilities recognize the reasons for their patients’ vaccine hesitancy which in turn would help them respond to patient concerns.
Barriers to achieving goals
When concerns were communicated to facility staff, patient hesitancy, along with general mistrust in the healthcare system were two major factors that created roadblocks. Staffing shortages and high levels of turnover made it difficult for facilities to focus on achieving goals and resulted in lower than usual facility participation. Additional barriers included lack of leadership commitment to improvement initiatives and lack of communication from leadership about the importance of vaccines.

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

- Senior staff at facilities taking time to connect with staff and patients; some facilities did one on one coaching to increase uptake of vaccinations
- Enlisting staff to be Pro Vaccine Champions also helped to encourage vaccinations and identifying a PFR as a patient advocate was also effective
- Medical directors that led the vaccine initiative were essential in the process
- Addressing community-specific concerns and misinformation, such as vaccine side effects or risk helped facilitate better communication
- Communicating to staff their high risk of exposure to COVID-19 and the importance of the vaccine to protect their family, friends, and their fellow co-workers from the virus.
- Promoting the instructional video: *Grief Management for the Caregiver During the Pandemic* to facility staff helped to relieve the stress related to the pandemic and loss of ESRD patients and staff; it also proved to be effective in promoting the benefits of vaccines during the height of the pandemic.
Network 6: COVID Vaccination Rate (Dialysis Patients)
July 2021 - April 2022

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

Network 6: Percent of Fully Vaccinated Dialysis Patients Receiving
COVID Vaccination Booster
December 2021 - April 2022

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed April 2022
Network 6: COVID Vaccination Rate (Dialysis Facility Staff)
July 2021 - April 2022

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

Network 6: Percent of Fully Vaccinated Dialysis Facility Staff Receiving COVID Vaccination Booster
December 2021 - April 2022

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

The Network sought to attain the following goals:

- Achieve a 2% relative improvement in the rate of patient admission records from dialysis facilities entered within five days
- Achieve a 2% relative improvement in the rate of initial CMS-2728 forms submitted from dialysis facilities within 45 days
- Achieve a 2% relative improvement in the rate of CMS-2746 forms submitted from dialysis facilities within 14 days of the date of death

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

<table>
<thead>
<tr>
<th>Measure</th>
<th>Baseline January 2020 - December 2020</th>
<th>Goal (+2%)</th>
<th>Remeasure July 2021 - April 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions within 5 business days</td>
<td>74.49%</td>
<td>75.98%</td>
<td>71.21%</td>
</tr>
<tr>
<td>2728 Forms Within 45 days</td>
<td>80.56%</td>
<td>82.17%</td>
<td>78.30%</td>
</tr>
<tr>
<td>2746 Forms Within 14 days</td>
<td>63.49%</td>
<td>64.76%</td>
<td>61.39%</td>
</tr>
</tbody>
</table>

Interventions

The Network sent reports of missing data to facility leadership, including the nurse manager, medical director, and administrator. This included, but was not limited to, reports on 1) Missing 2728 and 2746 forms 2) First event, not new to ESRD 3) System discharges 4) Misaligned treatment and training and 5) Gap reports. In addition, the Network sent compliance reports to facilities based on their data submission compliance related to admissions, 2728 and 2746 forms. The Network maintained contact information for all facilities, including email addresses of key personnel, in the IPRO ESRD Contact Management System. The Network used this information to communicate with all facilities in its service area, and shared facility specific information with all leadership staff of a facility in one email, using Adobe Mail Merge. This process allowed the Network to send emails within a few hours of receiving data from the ESRD NCC.

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

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

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

Teamwork & Communication
- Encourage facilities to have their whole team responsible for compliance and submission of 2728/2746 Forms.
- Promoting good communication across facilities and corporations between the people that directly conduct the work needed to meet EQRS compliance: nursing staff inputting information into the computer, and staff that works with doctors on signing the 2728 Forms.
- Assigning a capable and responsible person to complete the task is important, as well as having a back-up person to perform the tasks whenever the primary person is unavailable.
- Defining the responsibilities involved in the Forms completion process and holding the staff member accountable for the tasks.
- Ensuring the contact person at the doctors’ offices knows about the requirement for the doctor to sign the 2728 Forms.
- Reaching out to hospitals as soon as possible to get COD (Cause of Death), or using ‘99 Unknown’ if that information is not available, whenever the facility finds out that a patient has died.

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

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

Network Staff also provided suggestions for Best Practices
• At least two staff members per 50 patients should have access to EQRS.
• Reminders that only 2728 Form needs signature; 2746 Form does not need any signatures.
• Reviewing reports sent by the Network that show missing 2728 and 2746 Forms.
• Running the Patient Roster Report regularly to see which patients need to be admitted.
Network 6: Admission Data Entered within 5 Days
July 2021 - April 2022

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

Network 6: CMS-2728 Forms Submitted within 45 Days
July 2021 - April 2022

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
Network 6: CMS-2746 Forms Submitted within 14 Days of Death
July 2021 - April 2022

GIA: Quality Improvement Activity
Source of data: ESRD NPS accessed May 2022
Hospitalization (Inpatient Admissions, ED Visits, Readmissions and COVID-19 Admissions) June- April 2022

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

The baseline data for this project were collected from Medicare Claims for the period of January- December 2020. The Network reduced hospitalizations from 10,324 at baseline (BL) to 7,028 over the 11-month remeasurement period (June 2021- April 2022). The Network reduced readmissions from 1,041 at BL to 674 instances at remeasurement, and emergency room visits from 6,616 at BL to 4,309 instances at remeasurement. The Network achieved a greater than 2% reduction in all measures and performed better than the national average benchmark for hospitalization and unplanned readmissions.

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

The Network’s approach to reduce COVID-19-related hospitalization was to promote vaccination among the immunocompromised ESRD community. The number of admissions at BL was 4,193. At time of remeasurement the Network reduced admissions to 2,199 – 946 fewer admissions than the allowable upper limit - and met a 25% relative reduction goal.

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

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

The Network incorporated facility input and used a “what's in it for me” approach to tailor interventions to specific facility needs. When the facilities identified missed treatments as a root cause of hospital admissions, the Network rapidly produced a patient facing FAQ document titled, *Don't Miss A Minute* to educate patients about the dangers of missed therapy. Additionally, facilities were provided education and strategies to decrease hospitalizations of super-utilizer patients. Tools and education on preventing infection in the dialysis unit were also distributed to facilities, with special focus on reducing bloodstream and access infections, rated as the number one and two diagnoses that lead to hospitalization in the Network 6 population.

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

The Network created a dual purpose, patient-facing FAQ document to educate rural patients on the benefits of having a primary care physician and selecting hospitals that could provide dialysis services to avoid any delay in treatment during the transfer process to another care facility. This FAQ was essential during the COVID-19 surge during which some patients experienced delays of transfer to providers offering dialysis services due to bed shortages.

**Barriers to achieving goals**

The Network identified rural facilities in each of the three states that had increased utilization of the emergency room for provision of non-acute care issues. In many cases, these hospitals did not provide dialysis services, which caused access to care issues for those ESRD patients.

Facilities reported low primary care physician rates in the same rural regions of the Network, which increased the use of the emergency room to provide non-acute health care. Georgia has a history of overusing the emergency rooms in large urban areas, including Atlanta and Macon.

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

**Best practices spread to achieve goals**

The Network learned best practices from facilities with high COVID-19 vaccination rates and low COVID-19 hospitalization rates and shared these practices with the community. These high performing facilities incorporated the medical directors in education on vaccination, held
vaccine clinic days, and shared *Why I Got the Vaccine* statements from fellow patients and staff on a visual display to encourage the hesitant patients to obtain vaccinations. In addition, *Wallet Cards To Reduce Hospitalization* were distributed to patients to improve communication between dialysis facilities and hospital staff. When carried by patients, these cards provided a streamlined process to communicate dialysis plans of care to the hospital staff.

### Network 6: Rate of ESRD-Related Hospital Admissions per 100 Patient-months (lower rates are better)

*August 2021 - April 2022*

- **Network**
- **Upper Limit**

<table>
<thead>
<tr>
<th>Month</th>
<th>Per 100 patient-months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug-21</td>
<td>2.28</td>
</tr>
<tr>
<td>Sep-21</td>
<td>2.12</td>
</tr>
<tr>
<td>Oct-21</td>
<td>2.19</td>
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<tr>
<td>Nov-21</td>
<td>2.37</td>
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<tr>
<td>Dec-21</td>
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<tr>
<td>Jan-22</td>
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<tr>
<td>Feb-22</td>
<td>2.61</td>
</tr>
<tr>
<td>Mar-22</td>
<td>2.64</td>
</tr>
<tr>
<td>Apr-22</td>
<td>2.64</td>
</tr>
</tbody>
</table>

**QIA:** Quality Improvement Activity

**Source of data:** ESRD NCC accessed May 2022
Network 6: COVID-19 Hospitalizations (lower values are better)
August 2021 - April 2022

Number of Patients

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
Depression June-April 2022

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

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

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

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

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

Facilities integrated best practices into their screening process, including the use of educational resources for patients on depression screenings, discussing the difference between symptoms
of depression and symptoms of chronic illness, and incorporating wellness screenings into patient education.
Nursing Home June -April 2022

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

**Project Overview**

Networks were tasked with achieving a 4% reduction in hemodialysis catheter infection rates in dialysis patients receiving home dialysis within nursing homes, a 2% decrease in the incidence of peritonitis in dialysis patients receiving home dialysis within nursing homes, and a 2% decrease in the rate of nursing home dialysis patients receiving a blood transfusion.

**Interventions**

The Network surveyed skilled nursing facilities (SNFs) to determine which ones had a home modality. Network identified and included three facilities under one CMS Certification Number (CCN) providing three times/week dialysis treatment for ESRD patients receiving dialysis care within a NH dialysis facility. The Network provided technical assistance for developing a process for the three facilities to self-report data, track and review claims data.

Each facility experienced fluctuating census as most patients were in SNFs with an average length of stay of 21 days. There were also instances of “0” census. Facilities participated in weekly technical assistance, and although they completed training, they had not been actively using EQRS and NHSN to report data due to staffing shortages and turnover. These facilities did not meet the CMS goal for reducing blood transfusions, but did meet the goal to reduce long term catheter infections.

The Network developed an EQRS job aid in **IPRO Learn** to collect data on facilities providing home dialysis in a NH, and collected data on all patients receiving dialysis care in a NH.

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

**Barriers to achieving goals**

The primary barrier was a lack of NHSN, EQRS, and Claims data from Coalition facilities, resulting in the need to deploy a generalized approach in addressing project expectations. With “0” LTC infections and “0” transfusions reported by the coalition facilities, education was focused on increasing knowledge on the care of the frail elderly patients. The Network collaborated with the ESRD NCC to clarify data definitions to educate facilities on the baseline and remeasurement reports.

**Best practices spread to achieve goals**

The use of non-vetted data allowed for improved dialogue and communication on practices within the various clinics. The Network educated facilities quality of care during staff shortages, CMS requirements related to data collection for different initiatives (QIP, Compare, CC), and the value of accurate reporting to enable recognition and spread of quality practices.
Network 6: Rate of Blood Transfusions in ESRD Patients Receiving Dialysis in Nursing Home (lower values are better)
February 2022 - April 2022

Network 6: Hemodialysis Catheter Infections in Home Dialysis Patients within Nursing Homes (lower values are better)
February 2022 - April 2022

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
Network 6: Peritonitis Events in Home Dialysis Patients within Nursing Homes (lower values are better)
February 2022 - April 2022

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
Due to contract goal adjustments, the Network worked toward the goals of this quality improvement activity.

**Project Overview**
Using telemedicine became an accepted way for patients to have clinician visits during the pandemic, and the Network observed increased usage patterns within home programs and with rural patients. This usage pattern started to drop off once COVID-19 transmission rates decreased and more patients returned to clinics for visits. Some of this was due to patient preference of returning to the in-person setting, but Network staff learned that this was also due to home programs not fully operationalizing the use of telehealth visits or abandoning its use completely. The Network worked on educating patients and providers about the importance of maintaining use of telemedicine, especially as it related to increasing rural patients’ access to home modalities.

**Interventions**
Telemedicine toolkits for patients and providers were created to help support and integrate the use of telemedicine. The Network offered educational sessions on the advantages of telemedicine, checklists on how to effectively conduct a telemedicine clinic visit, and educational flyers on why telemedicine was an important addition in receiving and providing care. A facility specific performance report was distributed to all home programs that provided care for patients in rural ZIP Codes to help those clinics identify rural patients that may have improved access to care with the use of telemedicine.

**Barriers to achieving goals**
One barrier noted was that providers verbalized they were discontinuing the use of telemedicine since the phone-only option was no longer being reimbursed at the same level as a video meeting. These providers experienced challenges with using a video platform, and as a result, had not integrated telemedicine into their practice, opting to step away from the use of it entirely. The Network identified free telemedicine platforms that were easy for patients to use based on discussion with best practice clinics. An FAQ for patients and providers was distributed to review the importance of the continued use of telemedicine and to provide clinicians with information on recommended systems.

**Best practices spread to achieve goals**
As identified above, working with best practice clinics in the Network’s service area allowed staff to identify and share information about preferential telemedicine platforms that were easy for patients to use and free to providers. The Network also shared the success stories of local programs that had fully integrated the use of telemedicine as a method to complete clinic visits during a snow event in North Carolina.
Network 6: Number of Rural ESRD Patients Using Telemedicine
December 2021 - April 2022

Number of Patients

Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22
---|---|---|---|---
645 | 630 | 710 | 803 | 797

Goal

QIA: Quality Improvement Activity
Source of data: ESRD NCIL accessed May 2022
Vaccinations Pneumococcal-23 and Staff Influenza June–April 2022

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

Project Overview

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

CDC guidelines for vaccination in the ESRD community changed as of April 1, 2022. Current guidelines for renal patients are: one PSV 13 vaccine, followed a year later by PPSV 23. The first PPSV vaccine should be followed by second and third vaccines, at five-year intervals for patients to receive a total of three PPSV 23 vaccines in a lifetime. The Network implemented strategies to increase the number of PCV 13 and PPSV 23 vaccines for patients with ESRD, with a focus on vaccine uptake for patients 65 years and older, and worked with facilities to increase the rate of influenza vaccines for facility staff to 90%.

Interventions

The Network focused its approach on providing education to patients that highlighted the importance of pneumococcal vaccination, emphasizing that vaccines are the best way to help prevent pneumococcal disease. Patients were provided with PCV13 and PPSV23 Vaccination Algorithm for Individuals with Chronic Renal Failure or Nephrotic Syndrome per CDC and ACIP Guidelines, as well as a booklet to document vaccinations provided at the dialysis facility and by outside providers.

Barriers to achieving goals

The inability to monitor and track the uptake of vaccines in the community was a large barrier. The change in CDC guidelines for pneumococcal vaccine administration in the ESRD population changed in the baseline year. This presented a challenge with staff being unfamiliar with the change and interpreting the guidelines. Capturing vaccination information from alternate sites (hospitals and outpatient clinics and pharmacies) was an ongoing challenge for the dialysis facilities. The Network identified confusion among facility staff regarding how vaccine administration dates should be recorded in EQRS. During the baseline year, patients and staff were asked to receive multiple vaccines, and many patients and staff were resistant to getting multiple vaccines. While documentation healthcare personnel vaccinations is required in NHSN, many facilities did not have access to NHSN and/or lacked knowledge of the process.

Best practices spread to achieve goals

The Network leveraged IPRO Learn to promote information on the importance of all necessary vaccinations for the ESRD patient and offered continuing education credits to encourage facility staff to view the module. The newly formatted IPRO Learn Increasing Vaccination Rates toolkit
allowed facilities to use the resources provided to increase vaccination rates by helping communicate with both patients and staff factual and up-to-date information.

**Network 6: ESRD Patients Receiving Pneumococcal Conjugate Vaccination (PCV 13)
December 2021 - April 2022**

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-21</td>
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<tr>
<td>Jan-22</td>
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<td>23,893</td>
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<td>Mar-22</td>
<td>23,875</td>
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<td>Apr-22</td>
<td>24,053</td>
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Goal: 26,267

QIA: Quality Improvement Activity
Source of data: ESRD NCC accessed May 2022
Network 6: Percent of Staff Receiving an Influenza Vaccination
2021/2022

Color Key:
- Network
- National

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

Facilities that Consistently Failed to Cooperate with Network Goals

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

Recommendations for Sanctions

The ESRD Network does not recommend any facility for sanctions.

Recommendations to CMS for Additional Services or Facilities

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

1. Organization of a national education effort to increase nephrology education for all disciplines and promote increased interest in this professional path: Creation of a national program to recruit and build nephrology physicians, nurses, social workers, registered dietitians, and technicians, which can support increased chronic kidney disease (CKD) efforts, maintain ESRD care and advance QI initiatives in CKD and ESRD.

2. Enhance surveillance of Nursing Home - Home Dialysis Providers by better CCN delineation to capture location of services and increased offering of this service line in the Network.

3. Growth of Home Support staffing to offer training and increase the number of patients receiving treatment in their homes: Free up regulations to allow nursing oversight of training, but only nursing to conduct training.

4. Add transportation, dental, and social support network services to overcome barriers in transplantation.
ESRD NETWORK COVID-19 EMERGENCY PREPAREDNESS INTERVENTION

As part of its responsibility to respond to emergency events, the Network monitored the COVID-19 virus for potential impact, and strategized support needs for the ESRD community by coordinating activities with CMS, the Kidney Community Emergency Response (KCER) coalition, and the Georgia, North Carolina, and South Carolina state departments of public health.

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

To ensure that our community had the tools, information and supplies needed to sustain operation during the pandemic, the Network logged and tracked all calls and communications from facilities, the department of public health (DPH), and Office of Emergency Management (OEM) to assess reductions in staff, availability of personal protective equipment (PPE), implementation of infection prevention measures, and to promote CDC guidance. The Network actively worked to prevent access to care issues related to lack of transportation, secondary to COVID-19 and non-COVID-19 problems. By conducting environmental scans via focused communications with facility social worker/facility administrators, contacts at the states’ OEMs and other transportation companies, Network staff were able to understand and appropriately address transportation concerns.
For individuals who have been diagnosed with ESRD, missed dialysis treatments can have serious adverse health effects. This makes the ESRD patient population especially vulnerable during emergencies and disasters. The Network relies on longstanding partnerships with state health departments, offices of emergency management, and large dialysis organization emergency management teams to ensure safety and continuity of care for ESRD patients in Georgia, North Carolina, and South Carolina.

**Staffing Shortage**

The Network assembled Advisory Committee (AC) members to guide work within the service area, and established community coalitions focused on each Objective and Key Result (OKR). As the Network initiated this work AC members shared challenges caused by the healthcare staffing crisis that existed due to resignations and other staffing losses. As the Network reached out to perform technical assistance, the number one barrier encountered was a lack of the necessary personnel or qualified personnel to perform the quality improvement work. The Network worked to help facilities mitigate barriers by suggesting alternate means and methods to offer education and support for quality improvement activities advocating for a team approach to help move projects forward, and to continue to involve engaged patients in assisting the interdisciplinary team. The Network focused efforts on reaching out to all chairside staff members to be part of the solution by offering educational resources and interventions that all staff and patients could both support. These efforts were beginning to gain traction until October - November 2021 when COVID-19 case counts increased significantly.

The resurgence of the pandemic again required that the primary quality improvement effort be directed at disease transmission prevention and caused a secondary effect of further reducing the number of available staff. The Network worked to maintain a balance of moving quality improvement efforts forward, where possible, while providing technical assistance to support facilities with COVID-19 outbreaks throughout this period. In this regard, Network efforts focused on highlighting education and outreach on the need for vaccinations and booster shots. Most facilities struggled with these issues into the new year. In February – March 2022, when cases started waning, the Network was again able to fully engage facilities in the new work. Many facilities are still running with open positions, but the Network received notice that some of the key positions are being filled, and staff are being trained to fill the void in the community. As resources stabilize, the Network continued to strive to link new leads to the projects and maintain ongoing education and communication focused on reaching each OKR.
ACRONYM LIST APPENDIX

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