End-Stage Renal Disease Network of New England



2023 Annual Report



Portsmouth, New Hampshire

This report will cover quality improvement efforts led by ESRD Network 1 Task Order Number 75FCMC21F0001 from May 1, 2023 - April 30, 2024

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Table of Contents

ESRD Demographic Data
Transplant Waitlist & Transplanted Quality Improvement Activity May 2023-April 2024 12
Home Therapy (Incident & Transition to Home) Quality Improvement Activity May 2023-April 2024
Influenza Vaccinations (Patient and Staff) May 2023-April 2024 21
COVID-19 Vaccinations (Patients and Staff) May 2023-April 2024 24
Pneumococcal Vaccinations (PCV13 & PPSV23) May 2023-April 2024 27
Data Quality (2728 Forms Over 1 Year, CMS Form 2728, CMS Form 2746) May 2023-April 2024
Hospitalization (Inpatient Admissions, ED Visits, Readmissions) May 2023-April 2024
Nursing Home (Blood Transfusion, Catheter Infection, and Peritonitis) May 2023-April 202439
Telemedicine May 2023-April 202443
Depression Treatment September 2023-April 2024 45
Patient and Family Engagement May 2023-April 202448
Health Equity May 2023-April 202451
Culturally and Linguistically Appropriate Services (CLAS) May 2023-April 2024
Onsite Technical Assistance May 2023-April 2024 54
ESRD Network Grievance and Access to Care Data57
ESRD Network Recommendations 62
ESRD Network COVID-19 Emergency Preparedness Intervention
ESRD Network Significant Emergency Preparedness Intervention
Acronym List Appendix



ESRD Demographic Data

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

Network 1 serves ESRD patients, dialysis providers, and transplant centers in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The role of Network 1 is to improve the quality of care and quality of life for people who require dialysis and/or kidney transplantation. The Network aligns its mission and activities with the U.S. Department of Health and Human Services (HHS) National Quality Strategy (NQS), the Centers for Medicare & Medicaid Services (CMS) goals addressed in the CMS Quality Strategy, and the CMS 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 England's 15.1 million residents are distributed over approximately 72,000 square miles. Its six states differ widely in terms of geography, population density, and socio-economic factors, all of which influence the availability of services, treatment choices, and quality of care for ESRD patients. For example, Maine is the largest New England state but has very few facilities (21 out of 202 dialysis facilities in Network 1, located primarily along the coast) providing service to a population that is spread out across the state. This presents a challenge for ESRD patients who may have to travel long distances to reach the nearest dialysis facility.

Of the total population of New England in 2023, population estimates indicate that 77% resided in the three southernmost states (Connecticut, Massachusetts, and Rhode Island), which also have the greatest number of individuals needing dialysis, and the greatest number of treatment centers. The remaining 23% resided in the three northernmost states (Maine, New Hampshire, and Vermont), which have the fewest dialysis facilities.

Diverse Populations

According to the U.S. Census Bureau estimates for 2023, New England's population of 15.16M increased by 40K from 2022; demographics include 83% White (down from 87% in 2022), 9% Black or African American (up from 6%), 6% Asian (up from 3.8%), and 4% Other race (up from 2.35). The Hispanic or Latino population represented 12% of the population (up from 9.4% in 2022).

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.

In 2023, Network 1, the smallest Network in the country, had an ESRD patient population of 28,424 individuals either on dialysis or living with a kidney transplant. There were 14,603 prevalent dialysis patients (2.8% of the national number of prevalent dialysis patients) and 3,806 incident dialysis patients (3.1% of the national number of incident dialysis patients) reported receiving treatment from dialysis facilities in the Network service area.

Of the individuals living with a kidney transplant, since the start of the ESRD Network Program in 1988, 13,821 received their transplant in the Network service area (4.5% of the national number of living patients with kidney transplants).

As of December 30, 2023, 430,261 individuals in the United States were receiving in-center hemodialysis (ICHD) treatments. This included 12,236 ICHD patients (83.8%) in the Network's region, which comprised 2.4% 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 2,367 home dialysis patients (16.2%) in the Network service area, exceeding the national rate of 15.5% This represents 2.9% of the ESRD population nationally. During the performance period, the rate of transplants in the Network service area (48.6%) exceeded the national rate of 36.7%.

In 2023, there were 7,830 ESRD Medicare-certified dialysis facilities in the United States and 201 dialysis facilities in the Network service area (2.6% of the national number). Three of the facilities were in Veterans Affairs (VA) hospitals. Of the 201 dialysis facilities in the Network service area, 141 (70.1%) 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, 15 centers (6.6% of the national number) offered kidney transplants within the Network's region.

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's calls and events as well as national calls. The PFRs met virtually on a monthly basis as the PRF Alliance group. 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 four-month Plan-Do-Study-Act (PDSA) cycle.

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 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 England.

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.





















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, or ethnicity. The U.S. Department of Health and Human Services' Advancing American Kidney Health (AAKH) initiative has established as one of its goals that 80% of ESRD patients will be treated with either home dialysis or a kidney transplant by 2025. Network 1 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 strategies to support transplant education and patient choice.

The Network's goals for this performance period were to increase the number of patients on the United Network for Organ Sharing (UNOS) waitlist, the national transplant waitlist. by 937 (9%) and increase the number of people receiving a kidney transplant by 715 patients (12%).

Interventions

Interventions deployed in the Network 1 region 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 their 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 to make 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 have known about transplant centers before starting their transplant journey. This application launched in June 2023, and 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. 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 to transplant centers, 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 22 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 issue, the Network shared a resource that emphasized the importance of living donation and of dialysis practitioners having discussions about it with patients The Network compiled and made available on *IPRO Learn*, an updated list of approaches that patients have used to find a donor, including utilizing community programs, printed materials, and social media platforms. Included were also seven unique patient campaign stories about finding a kidney donor This educational program on *IPRO Learn* was completed by 74% of the facilities in the Network service area, and 88% of those facilities indicated that they planned to adopt the intervention into their practice.

High KDPI Kidneys

The Network also encouraged and supported dialysis providers in suggesting that patients consider an expanded donor criteria kidney, or kidneys with a high KDPI. Kidneys with a high KDPI score may not function as well as those with a lower KDPI.

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*, 77% of the facilities in the Network service area completed this activity about KDPI, with 82% of them choosing to adopt the intervention into their practice.

Outcomes

The Network's activities during the performance period contributed to an increase of 774 patients on the transplant waitlist (not exceeding its goal of a 9% increase) and an increase of 801 patients transplanted (exceeding its goal of a 12% increase).

Barriers to Achieving Goals

The Network service area has had unique barriers related to census and demographics. The smallest ESRD Network (by population), the Network 1 region serves just under 15,000 patients on dialysis with fewer than 200 dialysis facilities. Of the 15,000 patients, 56% are ages 65 and older. The advanced age of more than half of the population reduced the number of patients eligible to be accepted on the transplant waitlist. And the older a patient is, the less likely they will be interested in kidney transplant. Of the remaining population under the age of 65, barriers were related to medical comorbidities, lack of access to transplant due to living in a rural area, and insurance status.

Best Practices Spread to Achieve Goals

The Network focused on best practice sharing through 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 registering on the waitlist.





Home Therapy (Incident & Transition to Home) Quality Improvement Activity May 2023-April 2024

Project Overview - Incident

Home dialysis is known to enhance a patient's quality of life on many levels, both mentally and physically. Selection of a renal replacement therapy performed at home offers patients a more flexible schedule, increased independence, a sense of empowerment, and a heightened knowledge of their disease. Home modalities can also provide many physical benefits including better blood pressure control and improved fluid volume status, leading to a decrease in the likelihood of hospitalizations.

These benefits are further enhanced when patients with chronic kidney disease (CKD) begin dialysis on a home therapy as soon as they need renal replacement treatment. Home dialysis helps patients preserve their residual kidney function and has fewer negative effects on the cardiovascular system when compared to in-center hemodialysis. With the numerous mental and physical benefits of home dialysis, the goal for this performance period was to increase the number of newly diagnosed patients starting directly on a home modality by 30% over the baseline year, 2020.

Interventions

The Network worked closely with facilities in its service area to identify barriers encountered with starting patients directly on a home modality. After conducting an analysis of facility incident rates, the Network met with ten facilities that had historically high rates of new patients starting on a home therapy but had a recent decline in their rate. Through these meetings the Network learned that one of the biggest barriers to patients starting therapy at home was lack of treatment modality education for patients with CKD stages 1 - 4.

To overcome this barrier, Network staff met with facility staff as well as successful CKD educators to learn best practices in overcoming barriers for patients starting dialysis directly with a home modality. These practices were shared with facilities that had not increased their rate of home dialysis initiations. The Network also developed a database with contact information for CKD educators throughout the service area. This database was used to help spread best practices to individuals who provide CKD education via a bimonthly Network-developed *CKD Educator* newsletter. This newsletter shared resources for educators to use when providing CKD education and presented the latest innovations in CKD care.

The Network also provided education to dialysis facilities on the benefits of urgent start peritoneal dialysis (PD). This treatment option allows patients to initiate PD soon after PD catheter placement, and well in advance of the standard of practice of a 14-day waiting period after PD catheter placement for patient training. After providing this education, the Network surveyed facilities in its service area to identify barriers in caring for patients with these types of

urgent start procedures. The Network then posted a research article¹that shared mitigation strategies for commonly identified barriers on *IPRO Learn* for all facilities to review

Outcomes

The Network's activities during the performance period contributed to a total of 714 incident patients (17.23%) starting renal replacement therapy on a home modality, exceeding its goal of a 30% increase over the baseline year.

Barriers to Achieving Goals

The Network learned that one of the most common barriers to starting incident patients on a home modality was the lack of early CKD education. While patients are being treated for CKD, education about how to prevent the progression of the disease as well as information about treatment options, should they eventually transition to end stage renal disease, would be invaluable. Providing early and repeated opportunities to learn about their disease and how to manage it is known to help individuals who are coping with a chronic disease diagnosis to assimilate the education and gain comfort in their choices.

Lack of Medicare coverage patients with Acute Kidney Injuries on a home modality is another barrier that continued to surface as a reason for delays in home initiation. Several barriers related to social determinants of health were also identified. These barriers included a lack of programs in rural areas. The Network service area consists of 23 rural counties and 28 urban counties. Additional barriers included lack of a support system to assist with home therapies, and limited health literacy in some areas.

Best Practices Spread to Achieve Goals

The Network shared best practices and resources with its CKD educator stakeholders throughout the performance period. Resources were shared via a bi-monthly CKD newsletter and *IPRO Learn*. Among the resources shared was the American Kidney Foundation course, *Kidney Health Coach*. This resource was shared broadly with facility staff to facilitate an increase in the number of CKD educators and the amount of CKD education offered in the Network region.

The Network invited its CKD educators to ESRD NCC Best Practice sharing calls; and featured a facility from within the IPRO ESRD Network Program that shared how they became a top performing home program by using a unique group training model, innovative staffing, and a relationship-based care model. Network staff also gathered information on strategies for success in initiating home therapy for incident patients from the region's top performing centers; these successful approaches were shared via the Network's technical assistance team's 1:1 calls and email outreach when facilities needed guidance.

¹ Arramreddy R, Zheng S, Saxena AB, Liebman SE, Wong L. Urgent-start peritoneal dialysis: a chance for a new beginning. Am J Kidney Dis. 2014 Mar;63(3):390-5. doi: 10.1053/j.ajkd.2013.09.018. Epub 2013 Nov 15. PMID: 24246221; PMCID: PMC4124939

Project Overview - Transition

The choice of a home modality (peritoneal dialysis or home hemodialysis) is known to enhance quality of life, reduce healthcare costs, offer patients a more flexible schedule, increased independence, and a sense of empowerment. Home modalities can also provide many physical benefits, including better blood pressure control and improved fluid volume status.

During the performance period the Network worked to increase education and awareness about these treatment options and to 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

IPRO Learn is the Network's online education platform, designed to disseminate information and resources to staff at dialysis facilities in the Network service area. One of the educational pieces posted to *IPRO Learn* was a journal article, *Home Dialysis in Older Adults: Challenges and Solutions*². One hundred forty-two (142) facility staff members (73%) completed a survey that followed the article and addressed questions about challenges and solutions related to home modality training and maintaining older adults on home therapies.

Information received from the survey served as the basis for the Network's creation of a resource, *How Old is Too Old for Home Dialysis?* The resource reviews the benefits of home dialysis as well as tips to help patients starting a home therapy make a successful transition. The Network received comments about *How Old is Too Old for Home Dialysis?* from 127 facility staff members who read the resource (68%). Of that group, 95% stated that they would share the resource with patients who were 65 years of age and older.

Outcomes

In the Network service area, 1,013 patients (126%) who had been receiving in-center dialysis treatments transitioned from in-center dialysis to a home therapy during the performance period), exceeding the Network's goal of a 12% increase from the baseline period.

Barriers to Achieving Goals

About 56% of the dialysis population in the Network service area are 65 years of age and older. Data from the End Stage Renal Disease Quality Reporting System indicate the number of patients aged 65 and older transitioning to a home modality is 25% or more than 4% lower than the transition to a home treatment by patients younger than 65 to the younger population. Dialysis facilities have also reported that the primary reason patients choose to remain in center for their treatments is due to their age.

² Wu HHL, Dhaygude AP, Mitra S, Tennankore KK. Home dialysis in older adults: challenges and solutions. Clin Kidney J. 2022 Oct 7;16(3):422-431. doi: 10.1093/ckj/sfac220. PMID: 36865019; PMCID: PMC9972827.

Best Practices Spread to Achieve Goals

Network staff invited facilities in its service area to participate in Learning and Action Network calls hosted by the ESRD National Coordinating Center (NCC), during which best practices were shared by facilities across the country. The Network also invited facilities to participate in Expert Team calls, during which facilities described cases in which they identified a barrier preventing a patient from transitioning to a modality and explained steps they took to mitigate that barrier.





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

Project Overview

Individuals with ESRD are less able to ward off, and more likely to contract, infections than the general public. These individuals have a weakened immune system and are frequently exposed to infections as they receive dialysis. For these reasons, ESRD patients are at a high risk of contracting influenza, leading to an increased likelihood of seasonal patterns of respiratory illness and even death.

While "vaccination rates in the general population have been associated with improved outcomes, ESRD patients have received little attention in determining the potential benefits.³" During the performance period, the Network focused on educating facility staff about the importance of increasing vaccine administration for both patients and staff, with a goal to ensure that at least 90% of patients and healthcare workers in the Network service area were vaccinated for influenza. All individuals were deemed eligible for the influenza vaccine unless they had been given an exemption due to allergies or religious beliefs.

To monitor these metrics, 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

The Network implemented a range of strategies and effective interventions to improve influenza vaccine rates. Using IPRO *Learn*, the Network provided educational courses, training programs, and educational resources both patient- and staff-facing. In addition, technical assistance (TA) was provided whenever it was needed.

Via email, the Network provided 160 facilities with letters detailing their facility's vaccination rates for both patients and staff. The letter requested facilities that required help to increase their rates contact the Network to set up one-to-one phone calls, or to address issues during monthly Network Webex Open Office calls.

Of the 160 facilities that were sent letters, 54% participated in one-to-one calls. From those interactions the Network learned that 27 facilities had problems due to a data glitch within their EMRs; 26 facilities were provided training regarding where to enter the vaccine in the database; and three facilities emailed back requesting further data analysis, as they felt the data were inaccurate. For 31 facilities that opted to join the Open Office Hours webinar, the Network made a presentation demonstrating best practices on data clean-up, batching process reviews, and download locations to improve data records.

³ 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

As an added intervention to help overcome vaccination fatigue for both patients and healthcare workers, the Network introduced the concept of focusing on Healthy Living, with vaccination a component of preventative care in living a healthy life. A bingo game to introduce the concept of healthy living was released as a fun, interactive approach to bring awareness to the importance of maintaining a healthier lifestyle. The focus of the game was to address the three key barriers to vaccination acceptance: health literacy, vaccination fatigue caused by overload of information on vaccines, and lack of information about benefits of the influenza vaccine. Through the game, the Network sought to increase patients' understanding of and engagement with healthy lifestyle initiatives. Of the facilities that reviewed the game, 68% indicated they would add it to their practice using a patient representative from their facility. Many stated they felt that the game offered an opportunity to provide a fun, enjoyable forum for educating staff and patients, and many of the participants said they were looking forward to implementing the game on a regular basis, either on holidays or quarterly.

Outcomes

At the end of the performance period, 11,619 patients (80%) and 1,847 healthcare workers (38%) in the Network service area had received an influenza vaccine; a decrease of 2.34% over the prior year for patients and 11.46% for healthcare workers. Due to this, the 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 denying administration of the vaccine had been identified in all communities; these included the frequency that vaccinations were required, concerns about vaccine side effects, misconceptions of the need to vaccinate, and the lack of trust in the government/healthcare system. Another barrier that impacted the Network's outcomes involved issues with data entry which were based on a lack of understanding about how to document as well as computer glitches that did not batch over information to update the vaccinations records.

Best Practices Spread to Achieve Goals

One of the most important steps the Network took was to offer open discussions 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.





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 2000; 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.

Throughout 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. Data for this measure are based on data reported to the National Healthcare Safety Network (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. Data for this measure are based on data reported to NHSN.

Interventions

To increase the number of ESRD patients receiving COVID-19 vaccinations, the Network provided to each facility a Quick Reference Guide: *Reporting Up-to-Date COVID-19 Vaccination Status Through the COVID-19 Vaccination Modules*. The guide was used to educate facility staff and patients about exactly what it meant to be "up to date." Key takeaways from the guide included examples of how long a person would be considered "current," and when they would be due for a follow up vaccine, proceeding its initial dose and boosters, whether it be a bivalent and/or monovalent vaccine.

The Network also distributed to facilities monthly COVID-19 Vaccination Reports (based on NHSN data) detailing the numbers of patients and staff who were "up to date" with their vaccines. Facilities were asked to review their performance in terms of ensuring that patients and staff were current in their vaccination status and then to compare patients' electronic health records with data in the EQRS. Within the monthly COVID 19 reports, the Network inquired if facilities provided COVID vaccinations to patients and/or staff who were not listed as vaccinated.

In addition, the Network promoted information about the CDC's *Bridge Access Program*, through which free, updated COVID-19 vaccines were made available to adults without health insurance and adults whose health insurance didn't cover all COVID-19 vaccine costs. The program's website gave facility staff the ability to locate participating agencies by zip code.

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 1,416 (16.60%) of patients and 193 (11.35%) facility staff members received the COVID-19 vaccination.

Barriers to Achieving Goals

The Network identified two key barriers preventing patients and staff from being up to date with COVID-19 vaccinations. A prominent barrier was the sense of confusion that many people had about the COVID vaccination, which was caused by several factors including burnout regarding the pandemic, fatigue, mistrust, and misunderstanding. After multiple rounds of COVID-19 vaccinations were required during the pandemic, many individuals no longer felt a sense of urgency to get another vaccine. Many believed that they either did not need the vaccine, or that COVID-19 was no longer a serious health threat. Others who contracted COVID-19, even after having been vaccinated, lost faith in the effectiveness of the vaccine, while many remained confused about what they needed to do to stay up to date with their vaccines, especially with the switch from the bivalent series to a single monovalent dose. These factors interrupted vaccine administration in the fall of 2023, which when combined with a large percentage of the dialysis facilities not offering the new monovalent vaccine on site, led to a lower-than-expected reported rate of COVID-19 vaccinations for both patients and staff.

Best Practices Spread to Achieve Goals

The Network implemented a best practice approach and worked to spread effective and successful strategies to all facilities in the Network service area. Through personalized one-on-one onsite and virtual assistance sessions, the Network facilitated the sharing of best-demonstrated practices with facilities that had attained high vaccination rates. By showcasing these successful approaches, participating facilities gained valuable insights into effective methods for reaching vaccination goals.

Additionally, the Network provided guidance to facilities about recent changes in CMS' Quality Incentive Program (QIP). This included advising facilities about the new requirement to report the vaccine status of healthcare workers as a performance measure linked to their payment. By informing facilities of these regulatory changes, the Network ensured they were equipped to comply and align their practices accordingly.

The Network provided customized advice and guidance on patient education strategies aimed at emphasizing the importance of staying current with vaccinations, particularly those targeting seasonal variants. By empowering clinics with the knowledge and tools to effectively educate their patients, the Network sought to increase vaccination rates and promote better health outcomes within the community.





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 costs⁴." 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 ESRD.

During the performance period the Network had a goal to increase the adult pneumococcal vaccine rate for adults by 20% over the previous year's rate. The Network was committed to implementing quality improvement strategies in its service area that would result in 90% of adult dialysis patients and 85% of dialysis patients ages 65 and older receiving the vaccine.

Interventions

The Network used resources made available through the Centers for Disease Control and Prevention (CDC) to develop a toolkit with information on pneumococcal pneumonia and the pneumococcal vaccine. The toolkit was distributed using *IPRO Learn*, the Network's online education platform to help facilities understand pneumococcal vaccination protocols by age range and vaccination type.

Included in the toolkit were the CDC's *Pneumococcal Vaccine Timing for Adults* (a guide to help clinicians select the correct vaccine at the correct time for their adult ESRD patients) and the CDC's *Pneumococcal Vaccination: Summary of Who and When to Vaccinate* (a resource providing CDC guidance on vaccination options for adults who have previously received a pneumococcal conjugate vaccine).

To evaluate the effectiveness of the materials provided in the toolkit, the Network first sent to 195 facilities monthly performance reports with patients' pneumonia vaccine records and a listing of patients who were due for vaccination. The Network inquired, via the *IPRO Learn* platform, if facilities had a better understanding of the vaccination pathways. Of the facilities that responded 88% agreed to adopt the tool.

The Network offered technical assistance in the form of one-to-one (1:1) direct phone conversations, and participation in Open Office webinars. During the six months that these calls took place, the Network paired high performing facilities with low performing facilities to share

⁴ Laressa Bethishou, P. (n.d.). *Pneumonia vaccines: Current recommendations and advocacy opportunities*. Pharmacy Times. https://www.pharmacytimes.com/view/pneumonia-vaccines-current-recommendations-and-advocacy-opportunities

best practices and strategies in addressing barriers. Approximately 240 facilities attended to receive assistance.

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 pneumococcal vaccine was 8,413 patients vaccinated (62%).

Barriers to Achieving Goals

Barriers to achieving goals were primarily related to two key factors The lack of awareness and confusion about CDC's requirements for being considered up to date on the pneumonia vaccine and/or the steps needed to review data and updating records to records to reflect accuracy based on facilities internal systems versus national databases. Confusion was widespread, especially considering the different vaccines that were available and the varying time ranges for administration.

Best Practices Spread to Achieve Goals

It was noted that those facilities who had staff review and document patients' vaccination history during admission and discharge processes were best performers in capturing pneumococcal vaccine data to use in reviewing patient vaccination history. Using this approach along with the CDC's comprehensive summary of the schedule for adults 65 years or older who are immunocompromised, helped determine if a patient was fully vaccinated or in need of additional vaccinations to be protected was spread widely amongst the community. Also those facilities that ensured they had access to the state's Immunization Information System (IIS) were more likely to capture and document the vaccination history of their patients to ensure vaccine completion.



Data Quality (2728 Forms Over 1 Year, CMS Form 2728, CMS Form 2746) May 2023-April 2024

Project Overview

Network 1 worked with dialysis facilities in its service area to improve the timely submission of Forms to CMS 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 worked to help 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 total number of 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 also 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 total number 2746 Forms submitted in the most recent 12-month period.

Interventions

Network 1 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 frames. 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 37 Forms. Network facilities successfully submitted 58 2728 Forms that were over 1 year past due.

For the 2728 Forms due within 45 days, facilities successfully submitted 2,682 Forms on time, for an 85.44% compliance rate.

For the 2746 Forms due within 14 days, facilities successfully submitted 1,963 Forms on time, for a 68.49% 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 right people didn't receive the Network's communications about EQRS.

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 National Coordinating Center (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's online education platform.

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.







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

Project Overview

Individuals with end-stage renal disease (ESRD) often have comorbidities that may include diabetes, high blood pressure, heart issues, anemia, and/or imbalances in blood chemistry, putting them at high risk for needing urgent medical care requiring a visit to the hospital emergency department (ED). Hemodialysis (HD) patients present to hospital emergency departments 8.5 times more frequently than the general population.⁵ In addition, patients with ESRD have the highest risk for hospitalization among those with chronic medical conditions, including heart failure, pulmonary disease, or cancer⁶.

Because of their weakened immune systems, ESRD patients can easily get infections, so frequent visits to the hospital can put them at elevated risk for infections and can potentially shorten their lifespan. During the performance period, the Network worked with dialysis facilities and patients with ESRD to reduce, by 4% from baseline, emergency department visits, hospitalizations, and rehospitalizations related to specific CMS Primary Diagnosis Codes, within 30 days after being discharged from a hospital stay. Baseline data comprised Medicare claims data between May 2022 and April 2023.

Interventions

The Network conducted a thorough analysis of the most frequently used diagnosis codes for admissions and ED visits, identifying sepsis, hyperkalemia, and fluid overload as the top three. In response, targeted interventions were implemented across the Network service area to educate both facilities and patients on these conditions to reduce hospitalization incidents.

Patient-facing resources were provided to enhance awareness. These included guidelines on high-potassium foods to avoid, CDC resources on sepsis prevention for patients and their families, and information on managing fluid overload.

Collaborative discussions and the sharing of best practices among facilities aimed to foster collective improvement in patient outcomes. Through *IPRO Learn*, the Network's online education platform, the Network facilitated learning and knowledge-sharing, guiding facilities in implementing effective strategies to reduce hospitalizations related to these diagnoses.

A total of 123 facilities participated in this activity, with 91% stating that they found these resources helpful for their patient population. Additionally, each of the 123 facilities provided a

⁵ P. Komenda, N. Tangri, E. Klajncar, *et al*.Patterns of emergency department utilization by patients on chronic dialysis: a population-based study PLoS ONE, 13 (4) (2018), Article e0195323

⁶ Li HL, Tai PH, Hwang YT, Lin SW, Lan LC. Causes of Hospitalization among End-Stage Kidney Disease Cohort before and after Hemodialysis. Int J Environ Res Public Health. 2022 Aug 18;19(16):10253. doi: 10.3390/ijerph191610253. PMID: 36011888; PMCID: PMC9408097.`

success story or best practice they had identified as having been successful in decreasing hospitalizations related to the top three diagnosis codes.

Outcomes

The Network's activities during the performance period resulted in a reduction in inpatient hospitalizations, 30-day readmissions, and emergency department (ED) visits. The Network surpassed the CMS reduction goals of 8.64% for 30-day readmissions and 0.67% for ED visits by reaching a 7.7% readmission rate and .0.64% ED visit rate. The Network's hospitalization rate was reduced to 1.81% with the goal set at 1.67%. Using CDC's Center for Health Statistics calculated average inpatient hospital cost of \$14,101 in 2019⁷ Network 1 saved \$564,040 by reducing 40 hospital stays from the 2022-2023 baseline rate.

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 appear 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 to provide facilities with strategies to reduce these types of hospitalizations.

Best Practices Spread to Achieve Goals

During one of the ESRD National Coordinating Center (NCC) Learning and Action Network calls, Network 1 shared insights about a facility's RCA/PDSA cycle, in which they systematically addressed primary drivers from the ESRD NCC Hospitalization Change Package. They then focused on one secondary driver and identified change ideas for each component. By tailoring interventions to their patient population, they were able to address root causes such as patient non-compliance with fluid management and missed treatments.

Facility staff provided patients with fluid report cards to monitor and reinforce patient education, hosted huddle sessions for the dialysis technicians, conducted staff re-education sessions, and scheduled "makeup" sessions for missed treatments. They also adjusted schedules to accommodate patients by opening more chairs. Additionally, they developed phone scripts for staff to use when patients called to cancel treatments. Through monthly QAPI meetings, they studied clinical quality scores and metrics, which correlated with a decrease in missed treatments for fluid overloaded patients and subsequently led to a reduction in hospitalizations.

⁷ Cost savings projected by using <u>https://www.cdc.gov/nchs/hus/topics/hospitalization.htm</u> <u>average adjusted cost per inpatient stay.</u>







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 end-stage renal disease (ESRD) patients receiving dialysis in the nursing homes in which they resided, with a strong focus on improving the quality of care they received and ultimately improving their 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, 3% decrease in cases of peritonitis, and a 3% reduction in blood transfusion rates for nursing home facilities providing dialysis.

Interventions

During the performance period, the Network implemented targeted interventions to engage with the sole dialysis provider in the Network service area operating in the nursing home setting. The initiative included introducing the goals of the project, gathering insights on the provider's practices, and monitoring protocols for managing infections and transfusions. A key resource shared with the provider was the IPRO Help Desk's *EQRS Nursing Home Patient Address Reporting* guide. This resource was crucial for ensuring proper documentation in the EQRS, particularly focusing on reducing errors in the non-mandatory field of nursing home admission dates. The Network emphasized the importance of accurate patient entry into EQRS to mitigate potential errors.

The Network provided individualized technical assistance to the dialysis provider, including a monthly examination of data for each transfusion and infection incident. Preventable incidents were subjected to a root cause analysis to evaluate the underlying issues. When an incident was deemed preventable, the Network offered specific guidance and education to help prevent future occurrences.

Through these focused efforts, the Network aimed to enhance the quality of care for dialysis patients in nursing homes by improving documentation accuracy and addressing preventable incidents through detailed analysis and targeted interventions.

Outcomes

The Network's activities during the performance period resulted in the facilities' success in: Maintaining a 0.0 rate of hemodialysis catheter infections from baseline to remeasurement Exceeding the 3% rate reduction goal in transfusions; from 7.50 at baseline to 2.20 at remeasurement.

Eliminating peritonitis for the year; with a reduction from a rate of 9.62 at baseline to 0.0 at remeasurement.

Barriers to Achieving Goals

An ongoing barrier in this work was maintaining accurate data in the EQRS on patients' date of admission to the nursing home. Since patients moved frequently in and out of this care setting, it was critical that all dates of admission were updated in a timely manner.

Best Practices Spread to Achieve Goals

The Network identified a best practice resource for documenting patients in EQRS, the IPRO Help Desk's *EQRS Nursing Home Patient Address Reporting* guide. Found to be a valuable tool for ensuring accurate documentation of patients receiving dialysis in nursing homes, the implementation of this practice led to a decrease in inaccuracies in reporting incidents of infections and transfusions.

This guide was distributed to all 198 dialysis providers in the Network service area. The Network communicated this best practice via email and through one-on-one discussions with both facility staff and EQRS leads, ensuring comprehensive understanding and adoption. Through these efforts, the Network aimed to enhance the accuracy of documentation in EQRS, contributing to improved tracking and management of patient care in nursing homes.







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 and a long distance from their care team. During the performance period, the Network focused on increasing by 3% the number of patients living in rural areas who participate in telemedicine visits. 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

Individuals who live in rural areas may have limited access to care, and telehealth can help link them to their dialysis care team. An article from the Telehealth.HHS.gov website was shared with facilities across the Network service area. The article, *Preparing for a Telehealth Appointment with Older Adults*, discusses sensory and motor changes as well as cognitive changes experienced by many older adults, which could make telehealth challenging. The article then offers strategies for providing this population with technology support. When asked if the facilities planned to incorporate into their practice the strategies suggested in the article, of the 68% (132) that completed the intervention, 59% indicated that they would adopt the use of this resource.

A telemedicine toolkit was distributed to facilities via the Network's online education platform, *IPRO Learn*. Resources available through the toolkit included:

- Telehealth visit checklist for patients
- Telehealth visit checklist for providers
- Resources offering internet assistance
- Resources offering assistance with smart devices and laptops.

Outcomes

The Network 1 team exceeded the goal to increase use of telemedicine visits in its service area by 3%, reaching 123% of the goal, for a total of 307 rural telemedicine visits during the performance period.

Barriers to Achieving Goals

The Network continued to work with facilities that had patients who had difficulty accessing technology and/or internet service. Due to the cost of "smart" devices and laptops, some patients were unable to afford them. The telehealth toolkit includes a section that provides assistance to such patients. The toolkit was housed on the Network's *IPRO Learn* online education platform and was available to facilities when they logged in.

Best Practices Spread to Achieve Goals

The Network invited facilities in its service area to share their best practices related to the use of telemedicine with patients on a home therapy. Network staff learned that many facilities had established effective processes and were using telemedicine frequently and successfully. Many of these facilities' interdisciplinary team (IDT) meetings with patients were conducted via telehealth, during which they reviewed lab results and appointments. The Network collected best practices submitted by high-performing facilities and shared them with facilities across the service area via a forum on *IPRO Learn*. One facility stated that they use telemedicine to avoid gaps in care if patients are unable to come to the facility for a scheduled appointment.



Depression Treatment September 2023-April 2024

Project Overview

Dialysis patients encounter both psychosocial and biological changes when faced with end stage renal disease (ESRD). These changes often lead to an increased risk for depression within this population. Patients who are depressed have a diminished quality of life and are at greater risk of mortality due to the negative effects of depression on physical health. Increasing depression screening as well as increasing referrals to treatment for patients who screen positive for depression were the goals of this quality improvement activity. Specifically, the Network's efforts focused on attaining a rate of 80% of ESRD patients being screened for depression and a 10% improvement in 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 remained a top focus for the Network.

Interventions

The Network worked closely with a select group of facilities from within its service area that functioned as a community coalition. These facilities were specifically chosen after a review of facility data indicated improvement was needed. Each facility completed a root cause analysis and a PDSA cycle to identify and overcome barriers in patients seeking treatment for depression. While working closely with the community coalition facilities, the Network was able to better understand common issues preventing patients from seeking treatment for depression. With that understanding, the Network created strategies and resources to assist facilities in mitigating those barriers.

Stigma associated with receiving mental health treatment was found to be one of the most common deterrents preventing patients from seeking treatment. This led the Network to develop a patient facing resource titled *Working Through Feelings of Loss and Sadness*, which acknowledges common feelings that patients experience when being diagnosed with kidney disease. Information on the five stages of grief that patients might encounter due to life changes that can accompany kidney disease was also reviewed. This resource was shared on *IPRO Learn*, the Network's online education platform, and 88% of facilities that reviewed it reported that they would adapt or adopt this handout for use in their practice.

The Network also helped facilities create a culture that helped to promote trust to help patients feel comfortable talking about depression with facility staff. This was done by sharing the ESRD NCC's *Depression Change Package* on *IPRO Learn*. This change package provided facilities with suggestions for strategies their staff could use to build trust and rapport with patients.

Outcomes

The depression treatment rate goal was removed from Network goals this year; however, the Network continued to monitor facilities for their depression screening and treatment rates. Overall, within the Network service area, 99.85% of patients were screened and 16.52% of those patients who screened positive for depression received treatment.

Barriers to Achieving Goals

Through work with individual facilities and community coalition facilities, the Network identified several common barriers that led patients to decide not to receive treatment for depression. These barriers included limited access to services, lack of interest in treatment by patients, and stigma related to mental health issues.

Additional barriers included patients receiving support from other sources (e.g., pastoral care, patient support groups, and/or peer mentors). These treatment options were not tracked, or included in outcomes data since Medicare was not billed for them.

The Network started a post in the Behavioral Health Forum on *IPRO Learn*, inviting facilities to share their success stories related to patients seeking treatment for depression. A total of 54 facilities participated in this forum by sharing success stories and/or learning how other facilities were able to accomplish success in mental health treatment.

Best Practices Spread to Achieve Goals

The Network shared best practices with facilities throughout the performance year. These included:

- Hosting an open office hours call, during which a high performing facility shared with community coalition facilities how they were able to increase the number of their patients who were receiving treatment for depression.
- Inviting a high performing facility within the Network service area to present on an ESRD NCC Learning and Action Call. Titled *How Social Workers Can Impact Facility Culture Through Leadership*, the presentation shared the facility's success in helping patients feel more comfortable addressing mental health issues with their healthcare team by promoting a positive and trusting environment.
- Presenting information on an ESRD NCC Depression Community of Practice call about how a PFR within its service area made a positive impact in fighting the stigma surrounding mental health in their facility.



Patient and Family Engagement May 2023-April 2024

Project Overview

A major focus common to all Centers for Medicare & Medicaid Services' (CMS) quality improvement activities is the engagement of patients, care partners, and family members in the design, delivery, and evaluation of the patient's care. The strategy is based on proactive, clear, appropriate communication, collaborative decision-making, and building relationships with patients that are based on trust and inclusion of individual values, preferences, needs, and beliefs.

In this project, the Network worked to incorporate the patient's voice at the facility level through inclusion of patients in the development of plans of care that include life goals and peer mentorship and in incorporating the patient perspective in quality improvement activities.

The Network focused on achieving four goals throughout this performance period:

- 1.) Increase the number of facilities in which the patients' 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 who volunteer their time to represent the Network in their dialysis or transplant facility and represent the perspective and concerns of their facility to the Network. Throughout the performance period members of the Alliance reviewed and provided input on the quality improvement work conducted by the Network and contributed their perspectives in the creation of resources and patient education materials that were being developed, shared resources and education with patient peers within their facilities and worked within their facilities to improve patient engagement in care.

Release of Education and Interventions via IPRO Learn to Support QAPI

The Network released educational resources and tools on its online education platform, *IPRO Learn* to teach facility staff strategic ways to incorporate the patient perspective in QAPI activities. These resources were based on best practices and addressed topics such as giving the patient options in how they want to be involved in meetings, (e.g., presenting in person, via a written report, or by calling in to the meeting). In addition, the Network shared educational resources with facility staff including *Professional Module: Patient Engagement in QAPI*, a resource that distills QAPI into basic levels for the provider and illustrates opportunities in which patient concerns can contribute to the success of the facility's quality improvement activities.

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 the 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. 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 about 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 National Coordinating Center (NCC), the Network recruited six patients to participate in the N-PFE LAN activities and monitored participation attendance 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 64 facilities in the Network service area integrating the patient perspective in QAPI; a 32.49% increase over the previous performance period.
- 108 new facilities beginning to assist patients in developing a life plan: a 54.82 % increase over the previous performance period
- An additional 74 facilities developing and supporting a patient-to-patient support program; a 37.56% increase over the previous performance period.
- Maintaining an attendance rate for N-PFE LAN activities of 84% of patients throughout the year.

Through collaborative efforts with the PFR Alliance, dialysis facility community coalition work, and on-site technical assistance, the IPRO ESRD Network of New England was also able to expand the PFR Alliance to 58 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. Others reported that barriers to inclusion in QAPI involved 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 partnered with the American Kidney Fund to host a patient symposium for over 30 patients and care partners titled *Living Your Best Life with Kidney Disease*. During this symposium, patients and their care partners heard from others in the kidney community about best practices in health equity and treatment modalities, as well as guidelines for how they can live their best life with kidney disease.

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 the Centers for Medicare & Medicaid Services (CMS), were targeted by the Network based on the association of "food deserts" and high ADI areas⁸. 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.

The Network also used data to further explore specific areas in which barriers were identified in home dialysis. Issues that contributed to low use of home dialysis included limited modality

⁸ Agarwal, S., Fertig, A. R., Trofholz, A. C., Tate, A. D., Robinson, J., & Berge, J. M. (2022). Exploring the associations between neighborhood food environment, household food insecurity and child weight-related outcomes in socioeconomically and racially/ethnically diverse families. Public health nutrition, 25(12), 1–10. Advance online publication. <u>https://doi.org/10.1017/51368980022002130</u>

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

education and barriers related to the lack of social support. The data analysis also showed that patients aged 65 and older were less likely to use home dialysis. The Network worked to directly assist facilities in identifying gaps in their modality education process and then provided educational resources to improve elderly patients' perception about adopting home dialysis. One-on-one support was provided through meetings and resources to work through these barriers. To reinforce these strategies, best practices of high-performing dialysis facilities were also shared via live webinars and the Network's Best Practice call series.

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

To advance health equity and improve the quality of care provided to all their 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 Large Dialysis Organizations (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 names, 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 in ways that CLAS could be integrated into their organizations' current policies and procedures.

The Network developed and distributed monthly training modules via its online education platform, *IPRO Learn*. Each training module focused on a CLAS theme and the corresponding standards and was followed by an assessment to gauge staff members' understanding of the module and improvements from baseline in the staff's knowledge, One-on-one technical assistance was provided to facilities when assessments indicated a lack of understanding of CLAS standards, incorrect implementation of CLAS standards, 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

In this period of performance, the Network conducted on-site visits to dialysis facilities that operated in zip codes that were deemed areas of social deprivation based on social determinants of health (SDOH) such as income, education, and access to care. The goal of these collaborative meetings was to provide on-site education and mitigation strategies to overcome barriers in health equity and improve quality outcomes. The meetings with the facilities focused on exploring the techniques they used to address health equity concerns as well as reviewing the facilities' quality processes.

The goal for Network 1 was to visit 25% of facilities in its service area, or 50 sites in total. The Network collaborated with sites across the six states in the service area to conduct the meetings, which included interviewing a patient and the interdisciplinary staff at each location. The Network staff focused on discussions about facility performance data related to quality metrics, interviews with patients to gauge patient and family engagement, and records regarding participation with Network activities. The Network was able to provide education and support based on the individual needs of each facility.

Interventions

Interventions provided included data sharing, facility-specific coaching, facility-specific resources for quality improvement, community resources and ongoing follow-up support. Some examples of common interventions:

- Providing sites the paper resource and a demonstration of how to use the Network's *Kidney Transplant Compare* application. This application allows staff or patients to search transplant locations in a geographical area by zip code to compare eligibility criteria, success rates and wait times.
- Educating clinic staff about The EveryONE Project's *Neighborhood Navigator*, a search tool that allows the user to enter a zip code that will display all patient resources in that area for food, housing, financial assistance, transportation, and employment aid.
- Referring staff to the *IPRO Learn* helpdesk and providing a demonstration of how to put in a help desk ticket to troubleshoot data reports and request other Network assistance.

Outcomes

The in-person visits provided a unique opportunity to help the facilities feel connected to the Network and therefore more likely to reach out for assistance and engage in quality activities. The Network successfully completed 50 site visits across the Network 1 service area. Examples of measurable improvements after the site visits include: registration of seven new Patient Facility Representative (PFRs), nine facilities with newly engaged patients in quality improvement processes, improved facility engagement with the Network as evidenced by increased participation in Network activities, improved transitions to home therapy in 14 sites, an increase in the number of transplant waitlisted patients in 15 facilities, and improvement in

kidney transplant rates in 14 facilities. The on-site staff also noted that the facilities that had been visited were more likely to contact them directly for questions and coaching.

Barriers to Achieving Goals

Barriers varied depending on factors such as geographic location, population density, and income. The most common across the Network were transportation, staffing shortages, lack of Network engagement, limitations in access to care, and low health literacy. Facilities in rural areas had fewer community services for patients and required travelling greater distances for specialty care. The urban areas reported more struggles with affordable housing and language barriers. One example was a facility in which 10 different languages were spoken; staff had difficulty with general patient communication, and particularly ways to provide education. Network staff were able to find language assistance resources in all the languages needed to help mitigate this communication barrier.

Best Practices Spread to Achieve Goals

Facility visits provided an opportunity to collect and share best practices to help facilities implement efficient processes for sustainable performance improvement. On-site staff provided education about ways to recruit and engage PRFs and how to capture the patient's voice in the quality process. Facilities were encouraged to choose a champion in each of the quality areas who could complete tasks and track progress towards their goals. Guidance was provided about how to use Network resources and tools to update facility contacts, put in helpdesk tickets, interpret data reports, complete annual emergency management surveys, access toolkits and participate in Network quality initiatives.



ESRD Network Grievance and Access to Care Data

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

Grievances

During the performance period the Network received and responded to a total of 230 cases, including nine general grievance cases and seven clinical quality of care (CQoC) cases. For all cases that focused on a clinical component, the Network reviewed the patient's clinical records and participated in care conferences to effectively communicate findings. A review of the grievance cases from this time period reveals the most common reasons for grievances were physical environment, staff-related concerns, mental health issues and other personal conflicts. Other patients displayed signs of a possible mental health diagnosis but refused to undergo a mental health evaluation. The Network also reviewed a total of six (2.6%) immediate advocacy cases that were resolved within 10 calendar days.

With each of these cases, the Network

- advocated for the patient, promoting the patient's right to participate in his or her healthcare and to have a voice in the services provided by the facility.
- provided the patient with information about patients' responsibilities, the Network's role in resolving the grievance, and how the grievance process would be implemented.

The Network encouraged facilities to promote peer-to-peer interventions using the facility's Peer Mentoring Program and to provide intensive social services support for patients who displayed challenging behaviors at the facility.

To resolve grievance issues, the Network implemented interventions that included providing staff with in-service training to improve their communication with patients. The Network provided technical assistance to resolve 136 (59.30%) cases involving facility concerns.

Staffing continued to be an ongoing issue for dialysis clinics in the Network service area, had a serious impact on patient care, and contributed to patients' concerns. Three facilities reported staff shortages.

Staffing roles that were most affected due to shortages included nurses, dialysis technicians, social workers and dietitians. Using a strengths-based approach, the Network created resources and webinars to discuss ways to improve communications, decrease patient-provider conflict, and to familiarize patients and staff with the Network. Network staff continued to provide ongoing support to patients and facilities, while working to identify and leverage resources within the community.

During the performance period, 26 facilities were closed due to weather related events, 14 facilities closed due to emergency events, and 22 facilities altered their schedules. In total, 16 facilities were temporarily closed, and one was closed permanently.

Access to Care and Involuntary Discharge (IVD) Cases

The Network received a total of 65 Access to Care cases related to issues involving patients who were at risk of facing discharge from their outpatient dialysis center, patients who sought dialysis treatments at hospital emergency departments, or patients who contacted the Network for help in obtaining a placement. Of these cases, 37 were considered at-risk, 11 were involuntary discharges, four patients were placed, and 17 were failure-to-place cases. The Network was able to avert discharge from outpatient dialysis facilities for 30 at-risk patients (81%). In each case, the Network provided technical assistance to help facility staff support and protect their patients' access to treatment.

Throughout the performance period, 11 patients were discharged from their respective facilities. The Network provided each of them with education and encouragement to help them become more engaged in their care as a strategy to improve their understanding and management of their condition. The Network continued to provide educational resources to both patients and clinic staff on patients' rights, dialysis patient-provider conflict resolution, and CMS Conditions for Coverage. The Network also promoted its *Second Chance Program*, which assists ESRD patients who have been displaced from outpatient dialysis facilities due to an involuntary discharge (IVD), with a goal to re-establish treatment in an outpatient setting (other than the facility from which they were displaced). The program offers the prospective new facility the ability to accept the patient on a trial basis.

The Network also encouraged clinic staff members to incorporate patients into QAPI meetings to ensure that the patient perspective was represented in the clinic's quality improvement initiatives.

Network Assistance and Quality Improvement

The Network focused efforts on accomplishing the following overarching goals:

- Resolve grievances within required time frames: 10 calendar days for Immediate Advocacy and 60 calendar days for General Grievance and Clinical Quality of Care.
- Support dialysis facility staff, who have limited time, skills, and training in conflict resolution; with a goal to improve their ability to manage and deal with patients who have mental, emotional and/or psychosocial issues. Support provided to staff by releasing educational resources on *IPRO Learn*, the Network's online education platform, as well as during virtual technical assistance via email.
- Increase patients' awareness of the Network and the educational resources it makes available by sharing information during the monthly Patient Facility Representative (PFR) Alliance Meetings.
- Provide educational resources with each grievance resolved.
- Increase use of *IPRO Learn*. The Network used *IPRO Learn* to deliver its resources and tools, including the pre-recorded webinar, *Effective Communication*.

Throughout the performance period the Network promoted the rights of patients to actively participate in their healthcare and emphasized the importance of patients expressing to facility staff their perspectives about their treatment.

The Network provided patients and facilities with the following resources:

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

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

- Ongoing in-service training for staff on topics including emotional intelligence and communication.
- Provision of TA to support clinic staff in using quality improvement tools, including RCA and 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.





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 1 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. Medicare currently covers the cost of caregivers in home health care. Greater support and success in home modalities would exist if Medicare paid for staff-assisted home dialysis for appropriate patients.
- 3. Build services to support the growth of ESRD resources for rural patients; specifically, access to transplant and home dialysis services.



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 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 allowed patients to store their treatment and medication information and preferred emergency contacts. By the end of the performance period, there were 395 users of the ESRD Emergency Hub Mobile Application within the Network service area.

The Network addressed situations arising from the following events, which affected dialysis facilities and patients during the performance period:

- Weather-Related Events 26
- Emergent Events 14
- Altered Schedule 22
- Staff Shortage 3
- Temporary Closures 16
- Permanent Closures 1

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. Many states within the Network service area were impacted by the solar eclipse, with the greatest areas of 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 <u>this link</u>. 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.

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