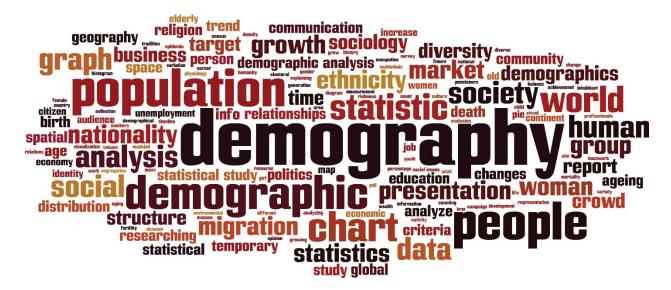


ESRD NETWORK 3 2019 ANNUAL REPORT



Table of ContentsESRD DEMOGRAPIC DATA2ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA9Grievance Quality Improvement Activity10ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA12Long Term Catheter Quality Improvement Activity13Blood-Stream Infection Quality Improvement Activity16Transplant Waitlist Quality Improvement Activity19Home Therapy Quality Improvement Activity22

ESRD DEMOGRAPHIC DATA



ESRD DEMOGRAPHIC DATA

Quality Insights Renal Network 3 (QIRN3) is pleased to present our 2019 Annual Report. QIRN3 serves dialysis and transplant providers and patients in New Jersey, Puerto Rico, and the US Virgin Islands.

In 2009, QIRN3 merged with Quality Insights, based in Charleston, West Virginia. In addition to the ESRD Network 3 contract, in 2019 Quality Insights held the Medicare Quality Improvement Network-Quality Improvement Organization (QIN-QIO) contracts for Delaware, Louisiana, New Jersey, Pennsylvania, and West Virginia as well as ESRD Networks 4 (Pennsylvania and Delaware) and 5 (Maryland, Virginia, West Virginia and Washington DC). QIN-QIOs are organizations that contract with the Centers for Medicare & Medicaid Services (CMS) to improve the quality of care for patients in various settings, including hospitals and nursing homes.

ESRD Network 3

According to the Census Bureau (https://data.census.gov/cedsci/), the 3 geographic areas served by QIRN3 had a combined population of 12.21 million people as of July 1, 2018. While these three areas are geographically small in size, New Jersey (NJ) is the most densely populated state (1,195.5/sq. mi) in the country and, if Puerto Rico (PR) were a state, it would be the second most densely populated (1,162/sq. mi). US territories are often assumed to have small populations, but it is important to note that Puerto Rico had a sizable population (3.2 million) as of July 1, 2018, and had 6,241 patients receiving dialysis as of December 31, 2019. The 6,241 patients receiving dialysis in PR was more than the dialysis patient population of 27 states, including large states such as Kentucky, Oklahoma, Colorado and Arizona.

These dense populations create challenges for providing dialysis to patients, as there is a greater than average number of patients per dialysis unit in these areas. According to the 2019 Annual Facility Survey performed by QIRN3, dialysis units in New Jersey treated an average of 75.4 patients in each dialysis unit in 2019, and PR treated an average of 122.4 patients in each unit, compared to an average of 63.7 nationwide. The US Virgin Islands (USVI) treated an average of 54.8 patients in each of its 4 dialysis units in 2019.

As shown in Figure 1, as of December 31, 2019 there were 19,456 patients receiving treatment in dialysis facilities in the Network 3 service area, and an additional 1,784 patients receiving treatment in their homes. This total of 21,240 patients receiving dialysis, plus an additional 5,620 patients living with a functioning kidney transplant in the Network 3 service area brings the total ESRD patient count for this area to 26,860.

The number of Medicare-Certified ESRD facilities in the Network 3 service area, by treatment modalities offered, is shown in Figure 3. In 2019 there were 4 transplant centers, 136 dialysis centers offering both in-center dialysis and home dialysis support, 107 dialysis centers offering in-center dialysis only, and 9 dialysis centers offering home dialysis support only, for a total of 252 dialysis centers and 256 centers that support ESRD patients.

Figures 3 through 7 illustrate the percentage of national totals of patients and facilities that those in the Network 3 service area constitute.

Figure 1- Number of Patients Treated in the Network 3 Service Area as of December 31, 2019 by Treatment Modality

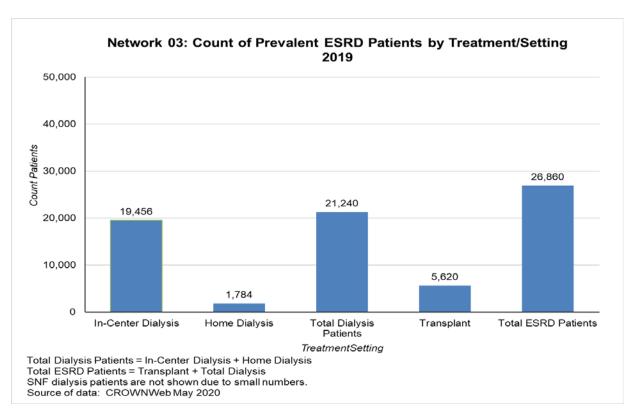


Figure 2- Number of Incident Patients Treated in the Network 3 Service Area for the 2019 calendar year by Treatment Modality

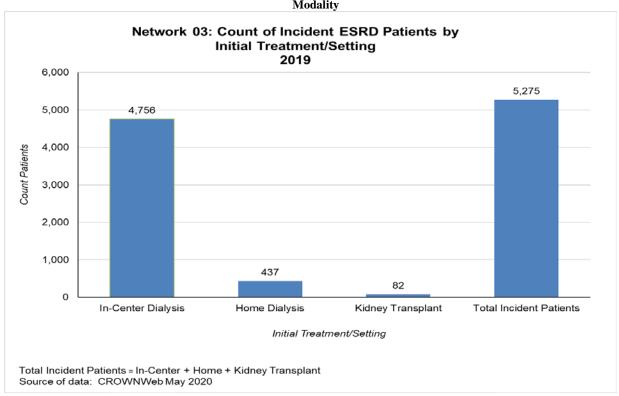


Figure 3 -Number of Medicare-Certified Facilities in the Network 3 Service Area by Modality Offered as of 12/31/2019

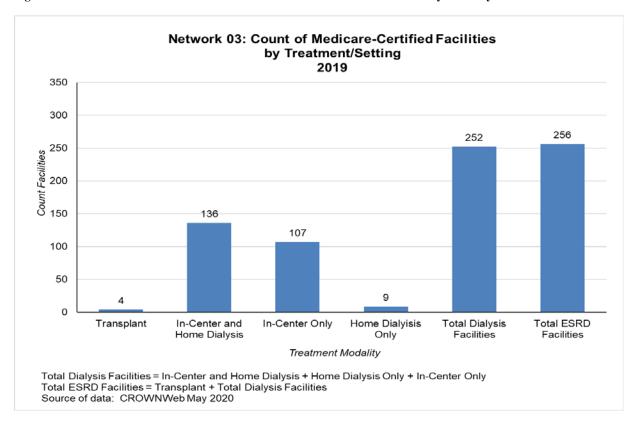


Figure 4 - Percent of National Prevalent Dialysis Patients in each Network Service Area as of 12/31/2019

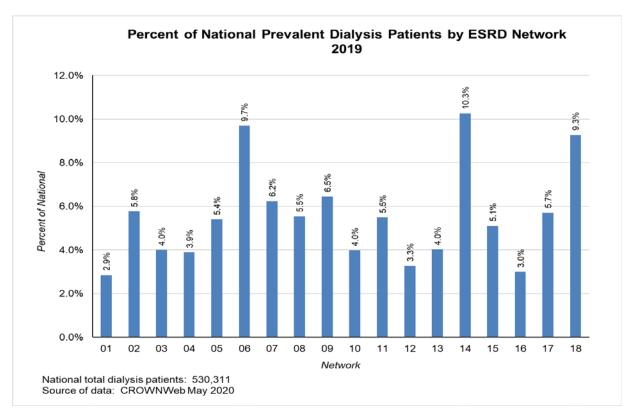


Figure 5 - Percent of Incident Dialysis Patients in each Network Service Area as of 12/31/2019

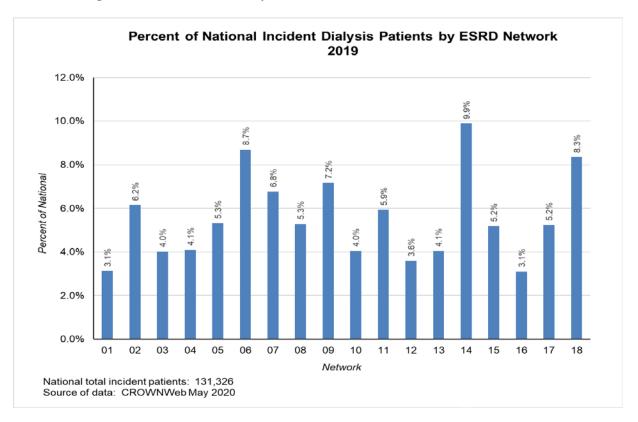


Figure 6 - Percent of Medicare-Certified Dialysis Facilities in each Network Service Area as of 12/31/2019

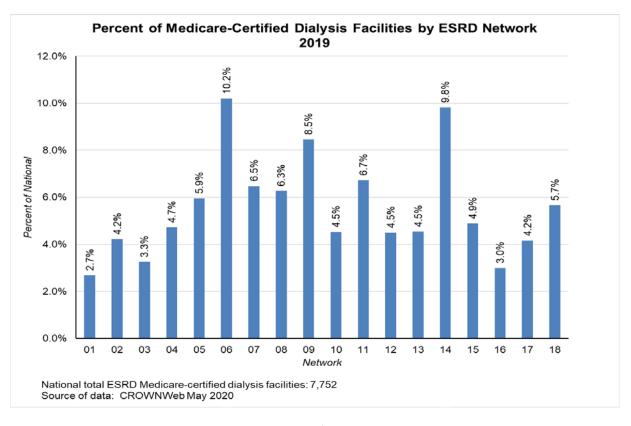


Figure 7 - Percent of National Home Hemodialysis and Peritoneal Dialysis Patients in each Network Service Area as of 12/31/2019

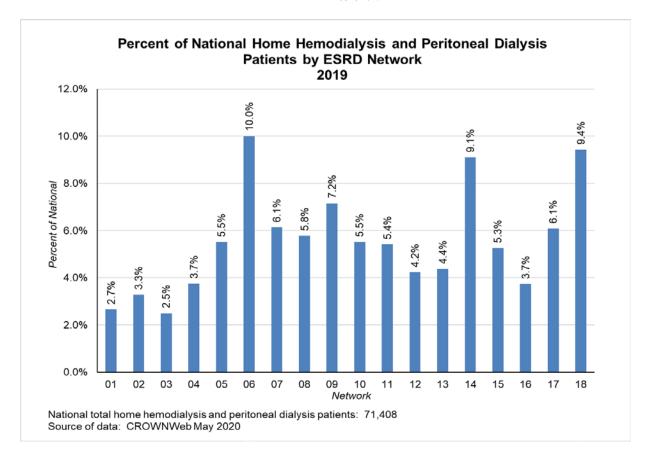


Figure 8 - Percent of National Total Transplants Performed in Each Network Service Area as of 12/31/2019

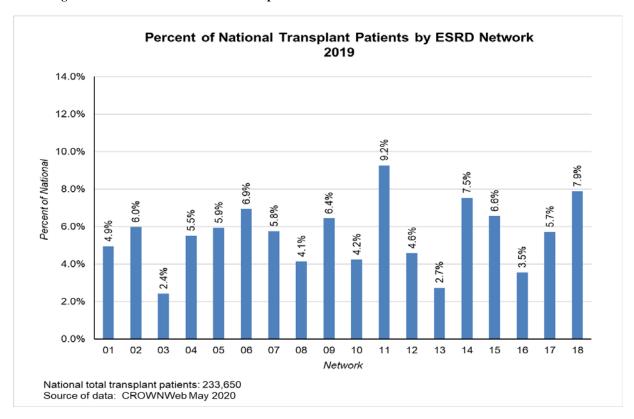
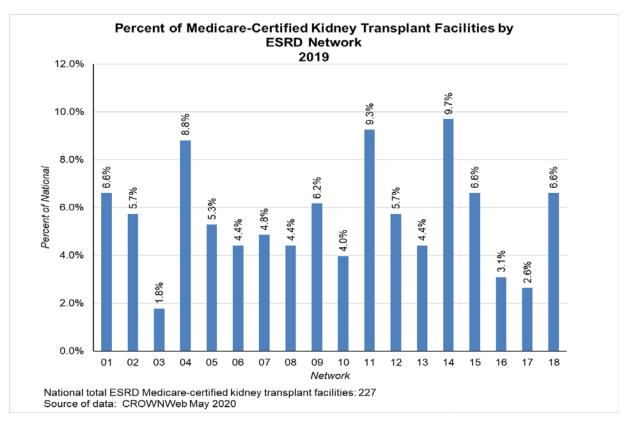


Figure 9 - Percent of Medicare-Certified Kidney Transplant Facilities in Each Network Service Area as of 12/31/2019



ESRD NETWORK GRIEVANCE AND ACCESS TO CARE DATA



Grievance Quality Improvement Activity

The ESRD Network contract indicates the following in Section C.3.22.A. Evaluate and Resolve Grievances:

"The Network's case review responsibilities shall include taking all necessary steps to evaluate and resolve grievances filed by, or on behalf of, one or more ESRD patients. A grievance is defined as a formal or informal written or verbal complaint that is made to any member of the dialysis or transplant center staff by a patient, or the patient's representative, regarding the patient's care or treatment."

QIRN3 ensures that patients are aware of their rights to file a grievance at their dialysis or transplant facility as well as with us. We developed and provided a flyer to all patients that outlined these rights. We mailed these flyers to each dialysis facility in August 2019 and required that a facility staff person attest to distribution to all their patients. This ensured that each dialysis patient was educated in 2019 on their right to file grievances. We also provided information about filing grievances in our Patient Advisory Committee newsletters three times in 2019. These newsletters are also mailed to each facility for distribution to patients.

QIRN3 employs trained social workers and nurses who are adept at managing patient and/or family members' grievances. Based on the many years of experience our staff have as direct care practitioners in the dialysis and transplant settings, we have an understanding of the dynamics of these settings. This experience allows us to investigate the grievances received with the skills necessary to ensure a fair and patient-centered approach to the investigation. We received 28 calls during which we could provide immediate advocacy in 2019. These cases included treatment related/quality of care issues, staff-related issues, and physical environment concerns.

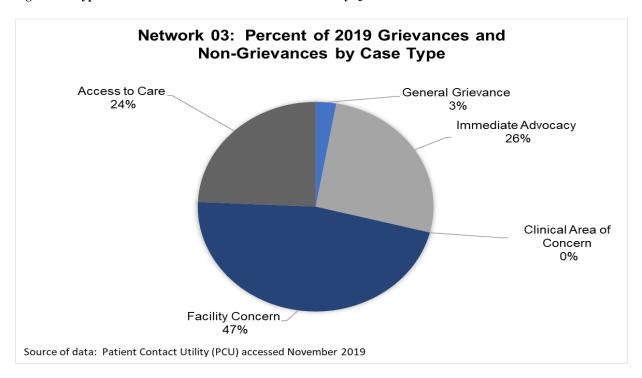
We also investigated one Clinical Quality of Care case filed by a patient in 2019. This case required the review of medical records by a registered nurse. It resulted in recommendations for the staff with regard to appropriate care of the patients. These types of cases are also teaching opportunities for the staff that ultimately impact the well-being of all patients at these facilities.

QIRN3 is also responsible for addressing Access to Care cases with our providers. In 2019 we had 40 contacts from dialysis providers regarding access to care issues that included Involuntary Discharge (IVD) cases, Involuntary Transfer (IVT) cases, as well as patients At-Risk for IVD/IVT. In total, we had 11 IVDs and 15 At-Risk cases. Of the 15 At-Risk cases, 9 were averted and the patients remained at their facilities.

We are also responsible for addressing concerns identified by staff at dialysis facilities involving patients who have exhibited behaviors that are difficult to manage. These patients may eventually end up at-risk for IVD/IVT, and our early intervention helps the facility staff find alternatives that help reduce the need for discharges. In 2019, we fielded 52 Facility Concerns.

The goal of each interaction with patients and staff is to ensure the care provided to and received by patients meets the ESRD Conditions for Coverage. This care cannot be provided if patients are involuntarily discharged from their dialysis provider. Every interaction with facility staff related to problem patient behavior is focused on actions that the staff can take to help patients alter their behaviors to ensure they can remain in their current facility. As evidenced by the relatively low number of IVD/IVT cases in 2019, these interventions have been successful in maintaining at-risk patients in their facilities.

Figure 10 - Types of Grievances and Non-Grievances Received by QIRN3 in 2019



ESRD NETWORK QUALITY IMPROVEMENT ACTIVITY DATA



Long Term Catheter Quality Improvement Activity

Goal of QIA

Catheter reduction was a subproject within the Bloodstream Infection (BSI) Quality Improvement Activity (QIA). Facilities in the BSI QIA with more than 15% of their patients receiving dialysis by way of a catheter for more than 90 consecutive days (called long term catheters or LTC) were to reduce that rate by 2 percentage points. The BSI QIA cohort consisted of 50% of facilities in the Network service area with the highest excess infection rates based on the data reported in the CDC's National Healthcare Safety Network (NHSN).

Results

As shown in Figure 11, at the conclusion of this QIA, participating facilities did not meet the 2 percentage point reduction in their aggregate long term catheter rate. However, the group produced enough improvement to exceed that of Network 3 overall and remained consistent with the change seen on a National level.

Interventions

Thirty-nine facilities in the BSI QIA cohort were selected and participated in the LTC reduction focus group. These facilities were required to assess and improve facility practices for education, referral, and assistance to patients with catheters. Using the Institute for Healthcare Improvement's *Model for Improvement*, organizations completed a root cause analysis for their >15% LTC rate and established an improvement plan. We monitored facilities through feedback received from their monthly Plan, Do, Study, and Act (PDSA) cycles.

We provided education and promoted use of the Fistula First Catheter Last (FFCL) Change Concepts and the Lifeline for a Lifetime resources and developed a packet that facilities could use to address:

- Initiation and Continuity of a Process to remove catheters and begin using a permanent access
- Timely Creation of a Vascular Access Plan
- Designated Vascular Access Manager
- Routine Meetings with the Facility Interdisciplinary Team
- Patient and Staff Education
- Celebrating Success

Facilities were encouraged to engage patients in the vascular access evaluation and placement process by providing them the *My Access Plan*. This tool is included in the Lifeline for a Lifetime's Vascular Access Planning Guide for Patients. It provides an explanation of each step in the process and allows the patient to track completion of each step and thus stay aware of where they stand in the process.

Identified Best Practices

- A Team Approach
- Medical Director Collaboration with Nephrologists
- Timely education and referral for access evaluation
- Designated Expert Cannulators

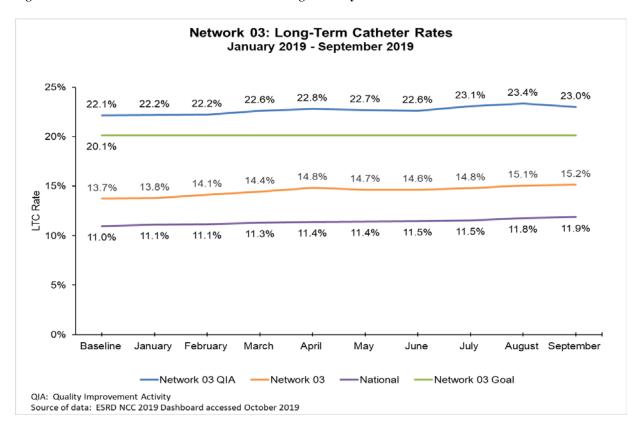
Identified Barriers in New Jersey

- Limited Surgeons in southern New Jersey
- Physician Referral Patterns
- Staff turnover Resulting in Ineffective Tracking and Follow Up

Identified Barriers in Puerto Rico

- Prior Authorizations Requirements/Limitations by Insurance Providers
- Patients Do Not Complete the Process due to Transportation Challenges
- Poor Collaboration and/or Cancellation by Vascular Centers
- Cancellation of Procedure or Appointment by Surgeons

Figure 11 – LTC Rates for Network 3 and National Targeted Dialysis Facilities



Blood-Stream Infection Quality Improvement Activity

Goal of QIA

Reduce Dialysis Event rates, specifically bloodstream infection (BSI) rates, and demonstrate a 20% or greater reduction in the pooled mean at re-measurement (first and second quarter of 2019) compared to the baseline (first and second quarter of 2018). The 48 focus facilities that comprised the 20% focus group were selected from the cohort of the 50% of facilities in the Network service area with the highest excess infection rates based on data reported in the CDC's NHSN.

Results

As shown in Figure 12, at the conclusion of this project, the goal of 20% reduction was achieved. Additionally, as shown in Figure 13, by the end of September 2019, 98.2% of dialysis facilities in the Network 3 service area had at least one person who completed the NHSN Dialysis Event Surveillance Training, exceeding the goal of 90%. To assist the CDC's efforts in capturing all BSIs that occur in dialysis patients, 74.2% of dialysis facilities in this cohort reported that they had gained access to a hospital electronic medical record (EMR) or to a regional or national health information exchange (HIE), as shown in Figure 14. The CDC believes that having this access will allow dialysis facilities to capture infections that are identified during a hospitalization and report them to NHSN.

Interventions

We continued our assessment and response approach toward improvement of current facility processes to identify and address areas of opportunity. We enlisted stakeholders, including facility staff, corporate leadership and QIRN3 Subject Matter Experts (SMEs).

Cohort facilities were educated and supported through the implementation of the CDC Core Interventions and appropriate use of the CDC Prevention Process Measure audit tools. Facilities conducted an assessment of prevention process measures using these audit tools and established plans to improve practices. Facilities were informed of and encouraged to attend CDC-led educational opportunities. We monitored data quality each month and provided feedback on the errors found. Project calls were held to provide updates and share findings. As requested by facilities, we provided assistance in the development of improvement plans. We aimed to provide more facility visits this year. Eighty-three visits were conducted at BSI QIA facilities. Support was provided to facilities with low rates of adherence to CDC recommendations, lack of active participation in QIA and visits were conducted upon request for technical assistance. Facilities were provided a summary of the visit with recommendations and follow up action items.

Identified Best Practices

- Engaging the team and improving adherence to infection prevention practices
- Involving patients in hand hygiene observations
- Use of audit results and findings to reinforce facility policies and procedures
- Incorporation of SMEs for peer-to-peer discussions

Identified Barriers to BSI Rate Reduction

- Hospital-based facilities receive transferred patients with deteriorated health conditions who are at a high risk for non-dialysis related infections
- Insufficient support/adoption of the use of antimicrobial ointment on catheter exit site
- Requirements for reporting BSIs require dialysis facilities to report positive blood cultures that are identified prior to admission

Figure 12 - Number of BSIs to be Reduced Compared to Total Reduced in Network 3 Target Facilities

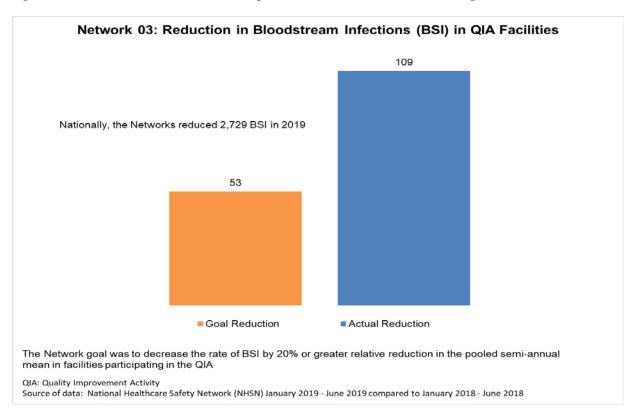


Figure 13 - Percent of Facilities in the Network 3 Service Area That Had One Staff Person Complete NHSN Training

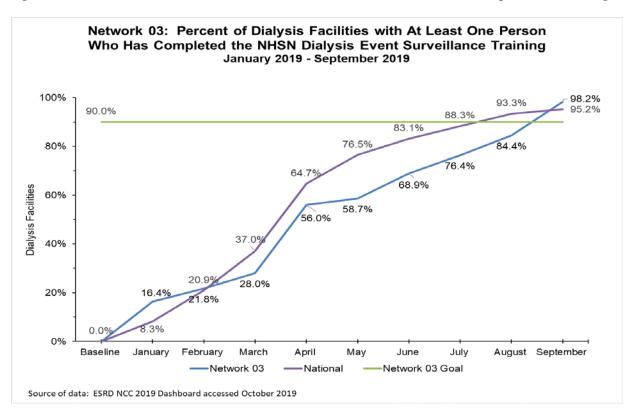
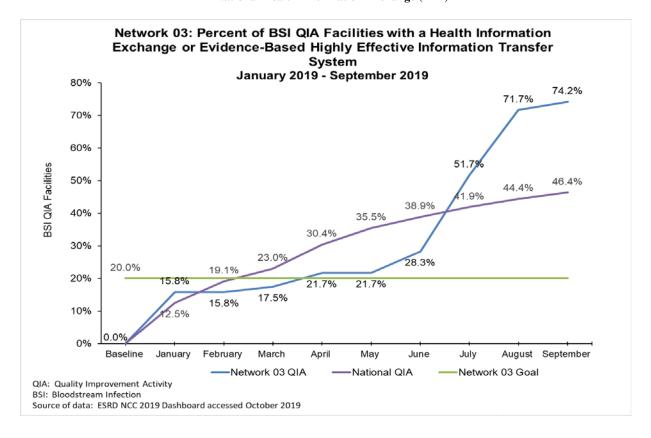


Figure 14 - Percent of Focus Facilities with Access to a Hospital's Electronic Medical Record (EMR) or a Regional or National Health Information Exchange (HIE)



Transplant Waitlist Quality Improvement Activity

Goal of QIA

Demonstrate a 2-percentage point improvement in the natural trend of patients added to the transplant waitlist in 30% of the facilities in the Network service area from January 2019 - September 2019. A long term goal of this QIA is to increase the percentage of ESRD patients on the transplant waitlist to 30% nationally by 2023.

Results

As shown in Figure 15, at the conclusion of this project, facilities participating in this QIA outperformed both the national rate and non-participating facilities in the Network 3 service area. Forty-four percent of the QIA facilities achieved a 2-percentage point improvement.

Interventions

Seventy-two facilities in the Network service area with identified opportunities for improvement participated in the efforts to add patients to a transplant waitlist. The participating facilities were educated and supported via webinars and conference calls. We utilized our QIA webpage to share project-specific educational materials and resources. Tools were created and distributed to assist facilities in meeting their goal. These included a self-assessment tool, a project management tool and a step tracker tool. We were able to revise the Transplant Designee Role and Responsibilities and provide guidelines for sponsoring a transplant designee course. Additionally, we provided a patient level report and user guide to our facilities with a transplant multi-listing decision aid. We also promoted the ESRD NCC Learning and Action Network (LAN) focused on the Transplant QIA and distributed the Kidney Transplant Toolkit developed by the Forum of ESRD Networks.

We enlisted stakeholders, including SMEs, transplant centers, organ procurement organizations, department of health and representatives from dialysis organizations. This partnership resulted in two transplant collaborative meetings, one in New Jersey (NJ) and the other in Puerto Rico (PR). The NJ collaborative meeting aimed to improve communication between dialysis facilities and transplant centers. It resulted in the revision of the transplant designee role and responsibilities to include social workers in addition to registered nurses and the formation of guidelines in sponsoring a transplant surgeon designee course. The PR collaborative meeting aimed to improve communication between dialysis facilities and the transplant center. In addition, we promoted and participated in transplant designee programs and symposiums organized by transplant centers in New Jersey, Delaware, Pennsylvania and Puerto Rico.

We provided education on how to conduct RCA and PDSA cycles. QIA facilities were guided in monitoring and tracking of patient progress through the CMS 6 steps to transplant waitlisting. RCA/PDSA cycles were reviewed monthly to track facility progress and to monitor transplant waitlisting by state/territory and organization. This monthly review allowed us to share facility best practices and provide feedback reports to assist facilities in identifying their needs.

Identified Best Practices

- Assessment of patient beliefs and understanding of transplantation through survey
- Interdisciplinary approach to patient education on transplantation
- Establishment of working relationship with transplant center(s)

- Transplant education to patients and staff through lobby days with transplant center(s) staff, transplanted patient(s) or peer mentor(s)
- Development of transplant patient tracker for referral, evaluation and wait listing
- Provide time for transplant designee/s to work on transplant follow up
- Transplant education policy for new staff/annual staff training

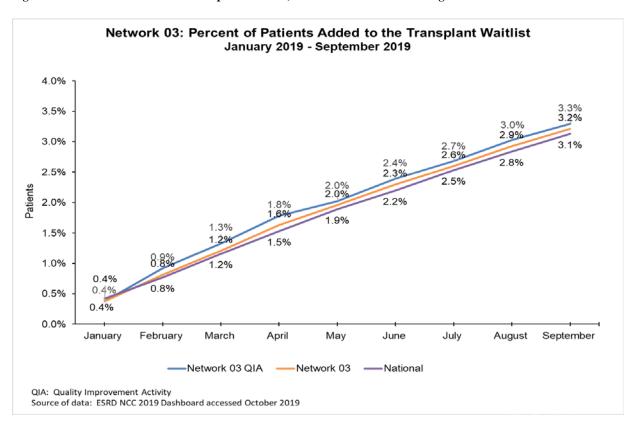
Identified Modifiable Barriers

- Patients' lack of interest
- Patients' missing transplant evaluation appointments
- Facility process challenges such as staffing issue and ineffective tracking system
- Lack of communication between dialysis facility and transplant center

Identified Non-modifiable Barriers

- 70 and older population
- Undocumented patients
- Low socioeconomic grouping
- Lack of resources such as insurance, prescription coverage, transportation
- Skilled nursing facility resident or under hospice care
- Presence of multiple major co-morbidities

Figure 15 - Percent of Patients on Transplant Waitlist, Network 3 and National Target Facilities



Home Therapy Quality Improvement Activity

Goal of QIA

Demonstrate a 2-percentage point increase in the rate of patients utilizing home dialysis in 30% of facilities in the Network service area between January and September 2019. The long-term goal is to increase the utilization of home dialysis from 12% to 16% nationally by 2023.

Results

As seen in Figure 16, at the conclusion of the project, 5.4% of patients being treated in facilities participating in this QIA had started dialyzing at home, outperforming facilities not in the QIA. However, this was only 88% of the goal established for these facilities by CMS.

Interventions

Seventy-two facilities in the Network service area with lower home dialysis rates and home only programs were identified to participate in the efforts to increase the number of patients dialyzing at home. The participating facilities were educated and supported via webinars and conference calls. We utilized our QIA webpage as the repository of reporting links, call schedules and materials, project tools, home dialysis options education resources for dialysis staff and patient education and promotion of ESRD NCC LAN focused on Home QIA. Tools were created and distributed to assist facilities in meeting their goal. These included a self-assessment tool for home dialysis coordination, a project management tool, a step tracker tool, and *Talking about Home Dialysis – A Guide for Patient Care Staff* (English and Spanish).

We provided education on how to conduct a RCA and PDSA cycles. QIA facilities were guided in monitoring and tracking of patient progress through the CMS 7 steps to home dialysis. RCA/PDSA cycles were reviewed monthly to assist facilities with interventions to increase utilization of home therapies through initiation or transition. This monthly review allowed us to share facility best practices and provide feedback reports to assist facilities in identifying their needs.

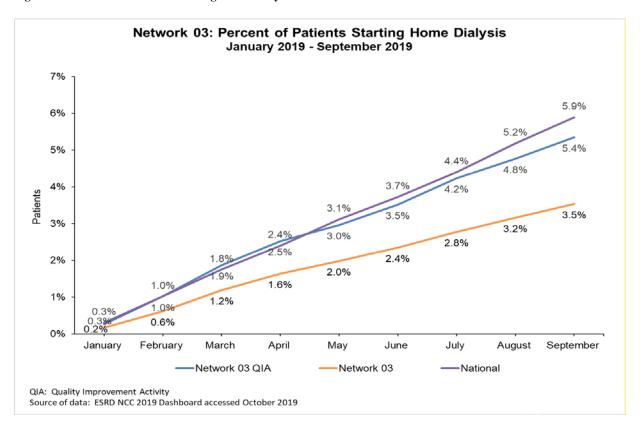
Identified Best Practices

- Development of a standardized approach to new patient/family modality education
- Implementation of a "modality champion" program to support modality education and referrals
- Implementation of "interdisciplinary patient rounding" approach to discuss modality education and referral
- Establishment of a working relationship with the home dialysis program
- Adoption of home dialysis education policy for new staff orientation/annual staff training with specific educational materials
- Home modality education to patients and in center hemodialysis staff by home program nurses and/or home dialysis patient(s)
- Cross training of dialysis staff to home therapies

Identified Barriers

- Patients' lack of interest or deemed not candidates
- Lack of physician engagement to home modality (lack of referrals)
- Inadequate home program staffing
- Lack of patient and staff education on home modalities
- Lack of communication between in center and home program staff

Figure 16 – Percent of Patients Starting Home Dialysis



Population Health Focus Pilot Project Quality Improvement Activity

We chose the Increasing Gainful Employment of ESRD patients for our 2019 Population Health Focused Pilot Quality (PHFPQ) Improvement Activity. CMS required Networks to select facilities that represented 10% of the dialysis facilities in the Network service area, which resulted in 24 facilities selected for participation. Our facility selection focused solely on New Jersey facilities. We included facilities from both Fresenius and DaVita for the 2019 PHFPQ project. CMS required that "The Network shall demonstrate at least a ten (10) percentage point increase in referrals of eligible patients to Employment Networks (ENs) and/or Vocational Rehabilitation (VR) in closed CROWNWeb data by September 30th of the contract year. The Network shall demonstrate at least a five (5) percentage point improvement in the number of referred eligible patients receiving EN and/or VR services in closed CROWNWeb data by September 30th of the contract year." As shown in Figures 17 and 18, by the end of the project, 46.3% of eligible patients had been referred for services, and 6.8% of patients were receiving services.

The intervention group was those patients at least 18 years old and younger than 55 who were either on Social Security Disability Income (SSDI) or Supplemental Security Income (SSI) and not currently employed. During the course of this project, education was provided to both the staff at the selected facilities and the patients. Following a rollout webinar designed to educate facility staff on the project goals, we facilitated a LAN webinar to ensure participating facility staff understood the resources available to patients who were on SSDI/SSI and interested in pursuing DVR or EN services with a goal of attaining employment. These supports are provided by the Social Security Administration to ensure individuals receiving SSDI/SSI have the opportunity to pursue employment without immediately losing their income. This concern was the number one issue identified by patients to their social workers as a barrier to pursuing employment. Helping to allay patients' concerns about lost income was necessary to allow patients to consider a referral to DVRs or an employment network.

Our interventions included providing social workers with information on the Ticket to Work program through Social Security. This program is designed to assist individuals who are interested in working with an employment network to train for returning to the work force. Handouts regarding Ticket to Work webinars were sent to social workers on a monthly basis, and they were encouraged to provide the information to the patients who were identified as potential referral patients. Additionally, information about local and national employment networks was provided to the staff at the participating facilities so they could make contacts and obtain information to assist with the referral process.

One intervention that was particularly successful was an Innovation Challenge. This intervention was implemented in collaboration with Networks 4, 5, 8 and 11. Facility staff members were asked to submit their most innovative intervention. The most innovative idea was selected and subsequently shared with all participating facilities. The second step in this intervention was a multi-Network challenge. The goal of this intervention was the sharing of best practices. Each Network selected its top three submissions for review and voting by all participating facilities in the five Networks. A grand prize was awarded to a Network 3 facility that had created folders with note pads and pens as well as information on vocational rehabilitation and available resources. These folders were available to all patients interested in a referral. These patients were encouraged to take the folder to their initial appointments to create a sense of professionalism as they pursued vocational rehabilitation.

Figure 17 - Percent of Patients Referred for Services, Network 3 and National Target Facilities

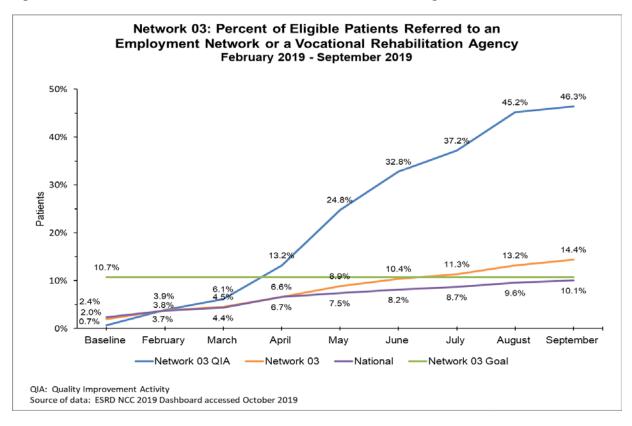
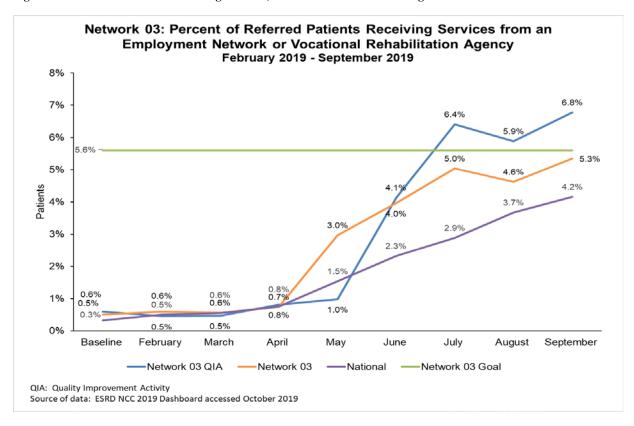
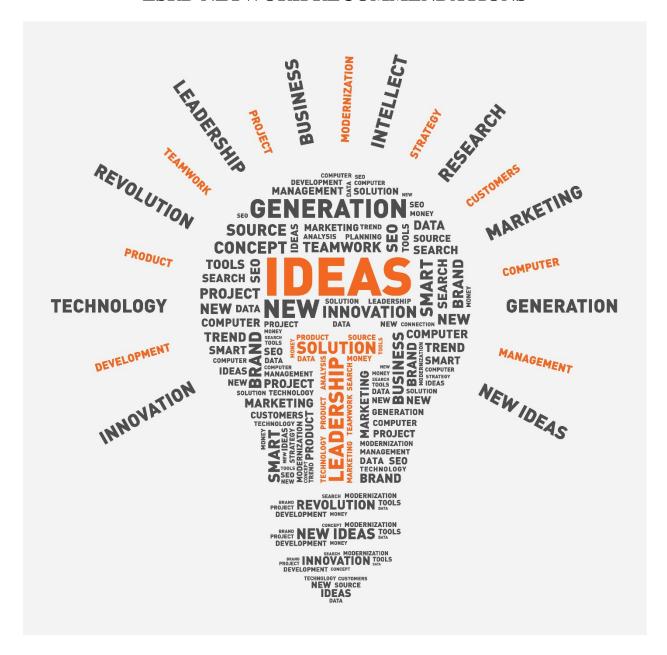


Figure 18 - Percent of Patients Receiving Services, Network 3 and National Target Facilities



ESRD NETWORK RECOMMENDATIONS



Facilities that Consistently Failed to Cooperate with Network Goals

All facilities in the Network 3 geographic area cooperated fully with Network goals and participated in our quality improvement interventions when requested.

Recommendations for Sanctions

We did not recommend sanctions for any facilities in 2019.

Recommendations to CMS for Additional Services or Facilities

We did not recommend any additional services or facilities in 2019. The facilities and services available to patients in the Network 3 geographic area are well distributed and are readily accessible to patients.

ESRD NETWORK SIGNIFICANT EMERGENCY PREPAREDNESS INTERVENTION



QIRN3 focused our efforts during 2019 on building and strengthening partnerships with federal, state and county level partners in our regions. These partnerships included attending meetings and sharing best practices with:

- NJ Group for Access and Integration Needs in Emergencies and Disasters (NJ GAINED)
- NJ Access and Functional Needs County Coordinators group
- NJ Office of Homeland Security and Preparedness (OHSP)
- NJ Office of Emergency Management (OEM)
- Union County OEM
- Middlesex County OEM
- NJ Healthcare and Public Health Collaborative
- Puerto Rico Emergency Preparedness and Response Activities Renal Coalition (PREPARAR-C)
- Kidney Community Emergency Response (KCER)
- HHS Office of the Assistant Secretary for Preparedness and Response (ASPR)

As a result of these partnerships, as well as those with DaVita, DCI, Fresenius, Physicians Dialysis, and independent providers, we hosted the very first Dialysis Active Shooter Conference on October 24, 2019. Rutgers University's OEM worked with our planning committee to provide space to host the conference. We had a total of 217 attendees from all dialysis facilities across New Jersey. Presenters ranged from the NJ OEM, NJ Department of Human Services, Disaster & Terrorism Branch - Division of Mental Health & Addiction Services, and NJ Office of Homeland Security and Preparedness. Agenda topics included Before Shots Fired: Violence Prevention & Pre-incident Preparedness; New Jersey Register Ready; Dialysis Facility Active Shooter: What to Expect and How to Prepare; Shooter Down: Managing the Consequences of an Active Shooter Incident; Active Shooter Panel Discussion.

Timeline of Weather/Natural Events Impacting the Network 3 area

In events with advance warning we sent situational awareness messaging to all facility administrators in the expected state/territory of impact. We shared resources and emphasized the importance of maintaining awareness of the path/impact of the storms/events and monitoring local news and social media for updated briefings.

January 2019 - Winter Storm Harper

A major winter storm brought some of the coldest temperatures of the season. The National Weather Service issued winter storm warnings or advisories for part or all of at least 15 states stretching from southeast Missouri to the northern tip of Maine ahead of the weekend storm. As a result a state of emergency was declared in NJ to take effect at noon on Saturday January 19.

Winter Storm Harper did not have the expected impact as predicted in NJ. Most of the state had rain while some northern parts of the state got up to 4 inches of snow. Although there was a declared state of emergency over the weekend some facilities chose to make adjustments to patient treatment times to allow for safe travel on Saturday.

August 2019 – Hurricane Dorian

On August 28, Hurricane Dorian passed near the US VI and PR as a category 1 Hurricane. Tropical storm conditions were experienced throughout the islands. Both PR and the US VI escaped with no serious damage. There were reports of power outages and flooding in the US VI and Puerto Rico's islands of Vieques and Culebra but power were fully restored within two days. We maintained communication (via

email, text, phone calls) with our partners in those territories. Dialysis facilities in both areas resumed normal operations without any issues by Friday August 30.

September 2019 - Earthquakes and Tropical Storm Karen

At 11:20 pm on September 23, a 6.0 magnitude earthquake struck near Puerto Rico at a shallow depth of 6 miles. Three aftershocks, of 4.7 and 4.6 magnitudes, followed within an hour. There were no reports of significant damages. After Tropical Storm Karen passed certain areas the island continued to experience heavy rain. We maintained communication (via email, text messages, phone calls) with our partners in the US VI and PR as they implemented their contingency plans. All facilities closed on Tuesday September 24 as Tropical Storm Karen impacted both regions. By Wednesday September 25 all facilities resumed operations without issues.

ACRONYM LIST APPENDIX

This appendix contains a link to a list of acronyms created by the KPAC (Kidney Patient Advisory Council) of the National Forum of ESRD Networks. We are grateful to the KPAC for creating this list of acronyms to assist patients and stakeholders in the readability of this annual report. We appreciate the collaboration of the National Forum of ESRD Networks, especially the KPAC. http://esrdnetworks.org/education/acronym-glossary/view

Additional Acronym and Glossary Resources

Fresenius Glossary

https://www.freseniuskidneycare.com/glossary

National Center for Biotechnology Information Acronyms and Abbreviations

http://www.ncbi.nlm.nih.gov/books/NBK84563/

Renal Support Network

http://www.rsnhope.org/programs/kidneytimes-library/article-index/renal-acronyms/